

bill S. 2657, supra; which was ordered to lie on the table.

SA 1478. Mr. LANKFORD submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, supra; which was ordered to lie on the table.

SA 1479. Mr. ROMNEY submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, supra; which was ordered to lie on the table.

#### TEXT OF AMENDMENTS

**SA 1345.** Mr. COONS (for himself, Mr. MORAN, Ms. ERNST, Mr. CRAPO, Mr. KING, and Ms. SINEMA) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### TITLE IV—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986

##### SEC. 4001. GREEN ENERGY PUBLICLY TRADED PARTNERSHIPS.

(a) IN GENERAL.—Section 7704(d)(1)(E) of the Internal Revenue Code of 1986 is amended—

(1) by striking “income and gains derived from the exploration” and inserting “income and gains derived from—

“(i) the exploration”,

(2) by inserting “or” before “industrial source”,

(3) by striking “, or the transportation or storage” and all that follows and inserting the following:

“(ii) the generation of electric power or thermal energy exclusively using any qualified energy resource (as defined in section 45(c)(1)),

“(iii) the operation of energy property (as defined in section 48(a)(3), determined without regard to any date by which the construction of the facility is required to begin),

“(iv) in the case of a facility described in paragraph (3) or (7) of section 45(d) (determined without regard to any placed in service date or date by which construction of the facility is required to begin), the accepting or processing of open-loop biomass or municipal solid waste,

“(v) the storage of electric power or thermal energy exclusively using energy property that is energy storage property (as defined in section 48(c)(5)),

“(vi) the generation, storage, or distribution of electric power or thermal energy exclusively using energy property that is combined heat and power system property (as defined in section 48(c)(3), determined without regard to subparagraph (B)(iii) thereof and without regard to any date by which the construction of the facility is required to begin),

“(vii) the transportation or storage of any fuel described in subsection (b), (c), (d), or (e) of section 6426,

“(viii) the conversion of renewable biomass (as defined in subparagraph (I) of section 211(o)(1) of the Clean Air Act (as in effect on the date of the enactment of this clause)) into renewable fuel (as defined in subparagraph (J) of such section as so in effect), or the storage or transportation of such fuel,

“(ix) the production, storage, or transportation of any fuel which—

“(I) uses as its primary feedstock carbon oxides captured from an anthropogenic source or the atmosphere,

“(II) does not use as its primary feedstock carbon oxide which is deliberately released from naturally occurring subsurface springs, and

“(III) is determined by the Secretary, after consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, to achieve a reduction of not less than a 60 percent in lifecycle greenhouse gas emissions (as defined in section 211(o)(1)(H) of the Clean Air Act, as in effect on the date of the enactment of this clause) compared to baseline lifecycle greenhouse gas emissions (as defined in section 211(o)(1)(C) of such Act, as so in effect),

“(x) the generation of electric power from, a qualifying gasification project (as defined in section 48B(c)(1) without regard to subparagraph (C)) that is described in section 48(d)(1)(B), or

“(xi) in the case of a qualified facility (as defined in section 45Q(d), without regard to any date by which construction of the facility is required to begin) not less than 50 percent (30 percent in the case of a facility placed in service before January 1, 2020) of the total carbon oxide production of which is qualified carbon oxide (as defined in section 45Q(c))—

“(I) the generation, availability for such generation, or storage of electric power at such facility, or

“(II) the capture of carbon dioxide by such facility.”.

(b) EFFECTIVE DATE.—The amendments made by this section apply to taxable years beginning after December 31, 2019.

**SA 1346.** Mr. BLUMENTHAL (for himself and Mr. BURR) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### TITLE IV—MISCELLANEOUS

##### SEC. 4001. RATES AND CHARGES FOR NATURAL GAS.

(a) HEARING ON CHANGED RATES OR CHARGES.—Section 4(e) of the Natural Gas Act (15 U.S.C. 717c(e)) is amended by striking the third and fourth sentences and inserting the following: “Where changes in rates or charges are thus made effective, the Commission may, by order, require the natural-gas company to furnish a bond, to be approved by the Commission, to refund any amounts ordered by the Commission, to keep accurate accounts in detail of all amounts received by reason of those changes, specifying by whom and in whose behalf those amounts were paid, and, on completion of the hearing and decision, to order the natural-gas company to refund, with interest, the portion of those rates or charges by its decision found not justified. At any hearing involving a rate or charge sought to be changed, the burden of proof to show that the changed rate or charge is just and reasonable shall be on the natural-gas company, and the Commission shall give to the hearing and decision of such questions preference over other questions pending before the Commission and decide the same as speedily as possible.”.

(b) REFUNDS.—Section 5 of the Natural Gas Act (15 U.S.C. 717d) is amended—

(1) by redesignating subsection (b) as subsection (d); and

(2) inserting after subsection (a) the following:

“(b) REFUNDS.—

“(1) IN GENERAL.—At the conclusion of any hearing under this section in which refunds

of amounts that have been paid are required, the Commission shall order the natural-gas company to make those refunds for the period beginning on the refund effective date established under paragraph (3) and ending on the date on which the new rate established by the Commission under subsection (a) takes effect in amounts in excess of those amounts that would have been paid under the just and reasonable rate, charge, classification, rule, regulation, practice, or contract that the Commission orders to be observed and in force.

“(2) REQUIREMENT.—The refunds required under paragraph (1) shall be made, with interest, to the persons who have paid the rates or charges that are the subject of the hearing.

“(3) EFFECTIVE DATE.—

“(A) IN GENERAL.—The Commission shall establish the refund effective date in accordance with this paragraph.

“(B) HEARINGS INITIATED ON COMPLAINT.—In the case of a hearing initiated on a complaint, the refund effective date shall be—

“(i) not earlier than the date on which the complaint was filed; and

“(ii) not later than 150 days after that date.

“(C) HEARING INITIATED ON MOTION OF COMMISSION.—In the case of a hearing initiated by the Commission on its own motion, the refund effective date shall be—

“(i) not earlier than the date on which the Commission publishes notice of the intent to initiate the hearing; and

“(ii) not later than 150 days after that date.

“(c) NO FINAL DECISION.—If the Commission has not rendered a final decision for a hearing under this section by the end of the 180-day period beginning on the date on which the hearing is initiated, the Commission shall state—

“(1) the reasons why the Commission has failed to render a decision; and

“(2) the best estimate of the Commission as to when the Commission reasonably expects to render the decision.”.

(c) EFFECT.—

(1) IN GENERAL.—The amendments made by subsections (a) and (b) shall not apply to any proceeding under the Natural Gas Act (15 U.S.C. 717 et seq.) commenced before the date of enactment of this Act.

(2) REFILING WITHOUT PREJUDICE.—A proceeding under the Natural Gas Act (15 U.S.C. 717 et seq.) commenced before the date of enactment of this Act may be withdrawn and refiled without prejudice.

(d) STUDY.—

(1) IN GENERAL.—Not earlier than 3 years and not later than 4 years after the date of enactment of this Act, the Federal Energy Regulatory Commission shall conduct a study on the effect of the amendments made by subsections (a) and (b).

(2) REQUIREMENTS.—The study under paragraph (1) shall include an analysis of—

(A) the impact, if any, of the amendments made by subsections (a) and (b) on the cost of capital paid by natural-gas companies (as defined in section 2 of the Natural Gas Act (15 U.S.C. 717a));

(B) any change in the average time taken to resolve proceedings under sections 4 and 5 of the Natural Gas Act (15 U.S.C. 717c, 717d); and

(C) such other matters as the Federal Energy Regulatory Commission may determine to be appropriate and in the public interest.

(3) REPORT.—On completion of the study under paragraph (1), the Federal Energy Regulatory Commission shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy

and Commerce of the House of Representatives a report describing the results of the study.

**SA 1347.** Mr. BLUMENTHAL submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

Strike section 1041.

**SA 1348.** Mr. WHITEHOUSE submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ . EXPORT CONTROLS ON ELECTRONIC WASTE.**

(a) DEFINITIONS.—In this section:

(1) COUNTERFEIT MILITARY GOOD.—The term “counterfeit military good” means a counterfeit good that—

(A) is falsely identified or labeled as meeting military specifications; or

(B) is intended for use in a military, intelligence, or national security application.

(2) COUNTERFEIT GOOD.—The term “counterfeit good” means any good on which, or in connection with which, a counterfeit mark is used.

(3) COUNTERFEIT MARK.—The term “counterfeit mark” has the meaning given that term in section 2320 of title 18, United States Code.

(4) ELECTRONIC WASTE.—

(A) IN GENERAL.—The term “electronic waste” means any of the following used items containing electronic components, or fragments thereof, including parts or sub-components of such items:

(i) Computers and related equipment.

(ii) Data center equipment (including servers, network equipment, firewalls, battery backup systems, and power distribution units).

(iii) Mobile computers (including notebooks, netbooks, tablets, and e-book readers).

(iv) Televisions (including portable televisions and portable DVD players).

(v) Video display devices (including monitors, digital picture frames, and portable video devices).

(vi) Digital imaging devices (including printers, copiers, facsimile machines, image scanners, and multifunction machines).

(vii) Consumer electronics—

(I) including digital cameras, projectors, digital audio players, cellular phones and wireless Internet communication devices, audio equipment, video cassette recorders, DVD players, video game systems (including portable systems), video game controllers, signal converter boxes, and cable and satellite receivers; and

(II) not including appliances that have electronic features.

(viii) Portable global positioning system navigation devices.

(ix) Other used electronic items that the Secretary determines to be necessary to carry out this section.

(B) EXEMPT ITEMS.—The term “electronic waste” does not include—

(i) exempted electronic waste items;

(ii) electronic parts of a motor vehicle; or

(iii) electronic components, or items containing electronic components, that are exported or reexported to an entity under the ownership or control of the person exporting

or reexporting the components or items, with the intent that the components or items be used for the purpose for which the components or items were used in the United States.

(5) EXEMPTED ELECTRONIC WASTE ITEMS.—The term “exempted electronic waste items” means the following:

(A) Tested, working used electronics.

(B) Low-risk counterfeit electronics.

(C) Recalled electronics.

(6) EXPORT ADMINISTRATION REGULATIONS.—The term “Export Administration Regulations” means the regulations set forth in subchapter C of chapter VII of title 15, Code of Federal Regulations, or successor regulations.

(7) EXPORT; REEXPORT.—The terms “export” and “reexport” have the meanings given those terms in section 1742 of the Export Control Reform Act of 2018 (50 U.S.C. 4801).

(8) FEEDSTOCK.—The term “feedstock” means any raw material constituting the principal input for an industrial process.

(9) LOW-RISK COUNTERFEIT ELECTRONICS.—The term “low-risk counterfeit electronics” means any electronic components or items that—

(A) have been subjected to destruction processes that render the items unusable for their original purpose; and

(B) are exported as a feedstock, with no additional mechanical or hand separation required, in a reclamation process to render the electronic components or items recycled consistent with the laws of the foreign country performing the reclamation process.

(10) PERSON.—The term “person” means an individual or entity.

(11) RECALLED ELECTRONICS.—The term “recalled electronics” means any electronic items that—

(A) because of a defect in the design or manufacture of the items—

(i) are subject to a recall notice issued by the Consumer Product Safety Commission or other pertinent Federal authority and have been received by the manufacturer or its agent and repaired by the manufacturer or its agent to cure the defect; or

(ii) have been recalled by the manufacturer as a condition of the validity of the warranty on the items and have been repaired by the manufacturer or its agent to cure the defect; and

(B) are exported by the manufacturer of the items.

(12) SECRETARY.—The term “Secretary” means the Secretary of Commerce.

(13) TESTED, WORKING USED ELECTRONICS.—The term “tested, working used electronics” means any used electronic items that—

(A) are determined, through testing methodologies established by the Secretary, to be—

(i) fully functional for the purpose for which the items were designed; or

(ii) in the case of multifunction devices, fully functional for at least one of the primary purposes for which the items were designed;

(B) are exported with the intent to reuse the products as functional products; and

(C) are appropriately packaged for shipment to prevent the items from losing functionality as a result of damage during shipment.

(14) USED.—The term “used”, with respect to an item, means the item has been operated or employed.

(b) PROHIBITION.—Except as provided in subsections (c) and (d), no person may export or reexport electronic waste or exempted electronic waste items.

(c) EXPORT PROHIBITION EXEMPTIONS.—A person may export or reexport exempted

electronic waste items if the following requirements are met:

(1) REGISTRATION.—The person is listed on a publicly available registry maintained by the Secretary of persons authorized to export or reexport exempted electronic waste.

(2) PURPOSE.—The exempted electronic waste items are being exported or reexported for reclamation, recall, or reuse.

(3) FILING OF EXPORT INFORMATION.—For each export transaction, the person files in the Automated Export System, in accordance with part 758 of the Export Administration Regulations (or any corresponding similar regulation or ruling), electronic export information that contains, at a minimum, the following information:

(A) A description of the type and total quantity of exempted electronic waste items exported.

(B) The name of each country that will receive the exempted electronic waste items for reuse, recall, or recycling.

(C)(i) The name of the ultimate consignee that will receive the exempted electronic waste items for reclamation, recall, or reuse; and

(ii) documentation and a declaration that such consignee has the necessary permits, resources, and competence to manage the exempted electronic waste items as reusable products or recyclable feedstock and prevent the release of such items as counterfeit goods or counterfeit military goods.

(4) COMPLIANCE WITH EXISTING LAWS.—The export or reexport of the exempted electronic waste items otherwise complies with applicable international agreements to which the United States is a party and with other trade and export control laws of the United States.

(5) EXPORT DECLARATIONS AND REQUIREMENTS.—The exempted electronic waste items are accompanied by—

(A) documentation of the registration of the exporter required under paragraph (1);

(B) a declaration signed by an officer or designated representative of the exporter asserting that the exempted electronic waste items meet the applicable requirements for exempted electronic waste items under this section;

(C) a description of the contents and condition of the exempted electronic waste items in the shipment;

(D) for tested, working used electronics, a description of the testing methodologies and test results for each item;

(E) the name of the ultimate consignee and declaration of the consignee’s applicable permits, resources, and competence to process or use the items as intended; and

(F) with respect to low-risk counterfeit electronics only and when required by the country to which the electronics are being exported or reexported, the written consent of the competent authority of the country to allow the entry of the electronics into the country.

(d) EXCEPTION FOR PERSONAL USE.—The Secretary may provide for an exception to the requirements of this section, subject to such recordkeeping requirements as the Secretary may impose, for the export or reexport of 5 or fewer items that are or contain electronic components intended for personal use.

(e) PENALTIES FOR VIOLATIONS.—Any person who violates this section or the regulations issued under subsection (f)(2) shall be subject to the same penalties as those that apply to any person violating any other provision of the Export Administration Regulations.

(f) EFFECTIVE DATE.—

(1) IN GENERAL.—Subject to paragraph (2), this section shall take effect upon the expiration of the 1-year period beginning on the date of the enactment of this Act.

(2) MODIFICATION OF EAR.—The Secretary shall, not later than the effective date under paragraph (1), ensure that the Export Administration Regulations are modified to carry out this section.

**SA 1349.** Mr. REED submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in subtitle A of title I, insert the following:

**SEC. 1. STUDY ON EMISSIONS REDUCTION PATHWAYS FROM HOME HEATING.**

(a) STUDY.—The Secretary shall conduct a study evaluating pathways to reduce greenhouse gas emissions from home heating and cooling systems in residential and small commercial buildings by increasing energy efficiency and electrification, and the use of alternative fuels, including through the use of—

(1) alternative fuels to supply heat to residential buildings using existing infrastructure;

(2) a district heating and cooling system;

(3) advanced biofuels (as defined in section 9001 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101)), advanced biofuel blends, and energy efficient furnaces and boilers, including necessary retrofits to allow for the use of those fuels;

(4) electric heat pumps, including geothermal and air-source heat pumps;

(5) alternative low-emission refrigerants; and

(6) opportunities for reducing installation and maintenance costs through workforce development and training.

(b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate and the Committee on Energy and Commerce and the Committee on Appropriations of the House of Representatives a report on the study conducted under subsection (a), including—

(1) an evaluation of potential greenhouse gas emissions reductions from the pathways described in subsection (a);

(2) an evaluation of the impact of adopting technologies described in subsection (a) on consumers, the electric grid, and pipeline systems;

(3) an identification of barriers to reducing greenhouse gas emissions from the heating and cooling sector; and

(4) recommendations relating to the issues described in paragraphs (1) through (3).

**SA 1350.** Mr. REED (for himself, Mr. INHOFE, Mr. JONES, Mr. MORAN, and Mrs. HYDE-SMITH) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle H of title I, add the following:

**SEC. 18. ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH.**

Section 2203(b) of the Energy Policy Act of 1992 (42 U.S.C. 13503(b)) is amended by striking paragraph (3) and inserting the following:

“(3) ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH.—

“(A) DEFINITIONS.—In this paragraph:

“(i) ELIGIBLE ENTITY.—The term ‘eligible entity’ means an institution of higher education located in an eligible jurisdiction.

“(ii) ELIGIBLE JURISDICTION.—The term ‘eligible jurisdiction’ means a State that, as determined by the Secretary—

“(I)(aa) historically has received relatively little Federal research and development funding; and

“(bb) has demonstrated a commitment—

“(AA) to develop the research bases in the State; and

“(BB) to improve science and engineering research and education programs at institutions of higher education in the State; and

“(II) is an eligible jurisdiction under the criteria used by the Secretary to make awards under this paragraph on the day before the date of enactment of the American Energy Innovation Act of 2020.

“(iii) EPSCoR.—The term ‘EPSCoR’ means the Established Program to Stimulate Competitive Research operated under subparagraph (B).

“(iv) NATIONAL LABORATORY.—The term ‘National Laboratory’ has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

“(v) STATE.—The term ‘State’ means—

“(I) a State;

“(II) the District of Columbia;

“(III) the Commonwealth of Puerto Rico;

“(IV) Guam; and

“(V) the United States Virgin Islands.

“(B) PROGRAM OPERATION.—The Secretary shall operate an Established Program to Stimulate Competitive Research.

“(C) OBJECTIVES.—The objectives of EPSCoR shall be—

“(i) to increase the number of researchers at institutions of higher education in eligible jurisdictions capable of performing nationally competitive science and engineering research in support of the mission of the Department of Energy in the areas of applied energy research, environmental management, and basic science;

“(ii) to enhance the capabilities of institutions of higher education in eligible jurisdictions to develop, plan, and execute research that is competitive in the peer-review process; and

“(iii) to increase the probability of long-term growth of competitive funding to institutions of higher education in eligible jurisdictions.

“(D) GRANTS IN AREAS OF APPLIED ENERGY RESEARCH, ENVIRONMENTAL MANAGEMENT, AND BASIC SCIENCE.—

“(i) IN GENERAL.—EPSCoR shall make grants to eligible entities to carry out and support applied energy research and research in all areas of environmental management and basic science sponsored by the Department of Energy, including—

“(I) energy efficiency, fossil energy, renewable energy, and other applied energy research;

“(II) electricity delivery research;

“(III) cybersecurity, energy security, and emergency response;

“(IV) environmental management; and

“(V) basic science research.

“(ii) ACTIVITIES.—EPSCoR may make grants under this subparagraph for any activities consistent with the objectives described in subparagraph (C) in the areas of applied energy research, environmental management, and basic science described in clause (i), including—

“(I) to support research at eligible entities that is carried out in partnership with the National Laboratories;

“(II) to provide for graduate traineeships;

“(III) to support research by early career faculty; and

“(IV) to improve research capabilities at eligible entities through biennial implementation grants.

“(iii) NO COST SHARING.—EPSCoR shall not impose any cost-sharing requirement with respect to a grant made under this subparagraph.

“(E) OTHER ACTIVITIES.—EPSCoR may carry out such activities as may be necessary to meet the objectives described in subparagraph (C) in the areas of applied energy research, environmental management, and basic science described in subparagraph (D)(i).

“(F) PROGRAM IMPLEMENTATION.—

“(i) IN GENERAL.—Not later than 270 days after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall submit to the Committees on Energy and Natural Resources and Appropriations of the Senate and the Committees on Energy and Commerce and Appropriations of the House of Representatives a plan describing how the Secretary shall implement EPSCoR.

“(ii) CONTENTS OF PLAN.—The plan described in clause (i) shall include a description of—

“(I) the management structure of EPSCoR, which shall ensure that all research areas and activities described in this paragraph are incorporated into EPSCoR;

“(II) efforts to conduct outreach to inform eligible entities and faculty of changes to, and opportunities under, EPSCoR;

“(III) how EPSCoR plans to increase engagement with eligible entities, faculty, and State committees, including by holding regular workshops, to increase participation in EPSCoR; and

“(IV) any other issues relating to EPSCoR that the Secretary determines appropriate.

“(G) PROGRAM EVALUATION.—

“(i) IN GENERAL.—Not later than 5 years after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall contract with a federally funded research and development center, the National Academy of Sciences, or a similar organization to carry out an assessment of the effectiveness of EPSCoR, including an assessment of—

“(I) the tangible progress made towards achieving the objectives described in subparagraph (C);

“(II) the impact of research supported by EPSCoR on the mission of the Department of Energy; and

“(III) any other issues relating to EPSCoR that the Secretary determines appropriate.

“(ii) LIMITATION.—The organization with which the Secretary contracts under clause (i) shall not be a National Laboratory.

“(iii) REPORT.—Not later than 6 years after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall submit to the Committees on Energy and Natural Resources and Appropriations of the Senate and the Committees on Energy and Commerce and Appropriations of the House of Representatives a report describing the results of the assessment carried out under clause (i), including recommendations for improvements that would enable the Secretary to achieve the objectives described in subparagraph (C).”.

**SA 1351.** Mr. MENENDEZ (for himself, Mr. RUBIO, and Mr. BLUMENTHAL) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ . DISCLOSURE BY PROFESSIONAL PERSONS SEEKING APPROVAL OF COMPENSATION UNDER SECTION 316 OR 317 OF PROMESA.**

**(a) REQUIRED DISCLOSURE.—**

(1) IN GENERAL.—In a voluntary case commenced under section 304 of PROMESA (48 U.S.C. 2164), no attorney, accountant, appraiser, auctioneer, agent, consultant, or other professional person may be compensated under section 316 or 317 of that Act (48 U.S.C. 2176, 2177) unless prior to making a request for compensation, the professional person has submitted a verified statement conforming to the disclosure requirements of rule 2014(a) of the Federal Rules of Bankruptcy Procedure setting forth the connection of the professional person with—

(A) the debtor;

(B) any creditor;

(C) any other party in interest, including any attorney or accountant;

(D) the Financial Oversight and Management Board established in accordance with section 101 of PROMESA (48 U.S.C. 2121); and

(E) any person employed by the Oversight Board described in subparagraph (D).

(2) OTHER REQUIREMENTS.—A professional person that submits a statement under paragraph (1) shall—

(A) supplement the statement with any additional relevant information that becomes known to the person; and

(B) file annually a notice confirming the accuracy of the statement.

**(b) REVIEW.—**

(1) IN GENERAL.—The United States Trustee shall review each verified statement submitted pursuant to subsection (a) and may file with the court comments on such verified statements before the professionals filing such statements seek compensation under section 316 or 317 of PROMESA (48 U.S.C. 2176, 2177).

(2) OBJECTION.—The United States Trustee may object to compensation applications filed under section 316 or 317 of PROMESA (48 U.S.C. 2176, 2177) that fail to satisfy the requirements of subsection (e).

(3) RIGHT TO BE HEARD.—Each person described in section 1109 of title 11, United States Code, may appear and be heard on any issue in a case under this section.

(c) JURISDICTION.—The district courts of the United States shall have jurisdiction of all cases under this section.

**(d) RETROACTIVITY.—**

(1) IN GENERAL.—If a court has entered an order approving compensation under a case commenced under section 304 of PROMESA (48 U.S.C. 2164), each professional person subject to the order shall file a verified statement in accordance with subsection (a) not later than 60 days after the date of enactment of this Act.

(2) NO DELAY.—A court may not delay any proceeding in connection with a case commenced under section 304 of PROMESA (48 U.S.C. 2164) pending the filing of a verified statement under paragraph (1).

**(e) LIMITATION ON COMPENSATION.—**

(1) IN GENERAL.—In a voluntary case commenced under section 304 of PROMESA (48 U.S.C. 2164), in connection with the review and approval of professional compensation under section 316 or 317 of PROMESA (48 U.S.C. 2176, 2177), the court may deny allowance of compensation for services and reimbursement of expenses, accruing after the date of the enactment of this Act of a professional person if the professional person—

(A) has failed to file statements of connections required by subsection (a) or has filed inadequate statements of connections;

(B) except as provided in paragraph (3), is on or after the date of enactment of this Act

not a disinterested person, as defined in section 101 of title 11, United States Code; or

(C) except as provided in paragraph (3), represents, or holds an interest adverse to, the interest of the estate with respect to the matter on which such professional person is employed.

(2) CONSIDERATIONS.—In making a determination under paragraph (1), the court may take into consideration whether the services and expenses are in the best interests of creditors and the estate.

(3) COMMITTEE PROFESSIONAL STANDARDS.—An attorney or accountant described in section 1103(b) of title 11, United States Code, shall be deemed to have violated paragraph (1) if the attorney or accountant violates section 1103(b) of title 11, United States Code.

**SA 1352.** Ms. MCSALLY submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle B of title I, add the following:

**SEC. 12 \_\_\_\_ . WESTERN AREA POWER ADMINISTRATION PILOT PROJECT.**

(a) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, the Administrator of the Western Area Power Administration (referred to in this section as the “Administrator”) shall—

(1) establish a pilot project, as part of the continuous process improvement program and to provide increased transparency for customers—

(A) to make available a database of information relating to the Western Area Power Administration in accordance with paragraph (2); and

(B) to provide annual updates to the database in accordance with subsection (b); and

(2) publish on a publicly available website of the Western Area Power Administration, a database of the following information, beginning with fiscal year 2008, relating to the Western Area Power Administration:

(A) By power system and in a consistent format, rates charged to customers for power and transmission service.

(B) By power system, the amount of capacity or energy sold.

(C) By region, an accounting, at the task level, budget activity level, organizational code level, and object class level, of all expenditures, including—

(i) indirect costs, including overhead costs;

(ii) direct charges and direct allocations;

(iii) costs related to contract staff;

(iv) costs related to independent consultants;

(v) the number of full-time equivalents;

(vi) charges to the region from the headquarters office of the Western Area Power Administration for all annual and capital costs; and

(vii) expenses incurred on behalf of other Federal agencies or programs or third parties for the administration of programs not related to the marketing, transmission, or wheeling of Federal hydropower resources within the Western Area Power Administration marketing area, including—

(I) indirect costs, including overhead costs;

(II) direct charges and allocations;

(III) costs related to contract staff; and

(IV) the number of full-time equivalents.

(D) For the headquarters office of the Western Area Power Administration, an accounting, at the task level, budget activity level, organizational code level, and object class level, of all expenditures, including—

(i) indirect costs, including overhead costs;

(ii) direct charges and direct allocations;

(iii) costs related to contract staff;

(iv) costs related to independent consultants;

(v) the number of full-time equivalents;

(vi) a summary of any expenditures described in this paragraph, with the total amount paid by each region and power system; and

(vii) expenses incurred on behalf of other Federal agencies or programs or third parties for the administration of programs not related to the marketing, transmission, or wheeling of Federal hydropower resources within the Western Area Power Administration marketing area, including—

(I) indirect costs, including overhead costs;

(II) direct charges and allocations;

(III) costs related to contract staff; and

(IV) the number of full-time equivalents.

(E) Capital expenditures for each project, including—

(i) capital investments delineated by the year in which each investment is placed into service; and

(ii) the sources of capital for each investment.

**(b) ANNUAL SUMMARY.—**

(1) IN GENERAL.—Not later than 120 days after the end of each fiscal year in which the pilot project is being carried out under this section, the Administrator shall make available on a publicly available website—

(A) updates to documents made available on the date of the initial publication of the information on the website under subsection (a)(2);

(B) an identification of the annual changes in the information published on the website under subsection (a)(2);

(C) the reasons for the changes identified under subparagraph (B);

(D) subject to paragraph (2), the total amount of the unobligated balances retained by the Western Area Power Administration at the end of the prior fiscal year within each project and headquarters by—

(i) purpose or function;

(ii) source of funding;

(iii) anticipated program allotment; and

(iv) underlying authority for each source of funding; and

(E) the anticipated level of unobligated balances that the Western Area Power Administration expects to retain at the end of the fiscal year in which the annual summary is published, as delineated by each of the categories described in clauses (i) through (iv) of subparagraph (D).

(2) LIMITATION.—Amounts in the Upper Colorado River Basin Fund established by section 5(a) of the Act of April 11, 1956 (commonly known as the “Colorado River Storage Project Act”) (43 U.S.C. 620d(a)), shall not be considered to be an unobligated balance retained by the Western Area Power Administration for purposes of paragraph (1)(D).

(c) TERMINATION.—The pilot project under this section shall terminate on the date that is 7 years after the date of enactment of this Act.

**SA 1353.** Ms. MCSALLY submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

**TITLE IV—MISCELLANEOUS**

**SEC. 4001. CONVEYANCE OF LOWELL OBSERVATORY.**

(a) DEFINITIONS.—In this section:

(1) OBSERVATORY.—The term “Observatory” means the Lowell Observatory in Flagstaff, Arizona.

(2) SECRETARY.—The term “Secretary” means the Secretary of Agriculture, acting through the Chief of the Forest Service.

(b) RELEASE OF REVERSIONARY AND REVERSED INTERESTS.—

(1) IN GENERAL.—Subject to valid existing rights, if the Observatory makes a written request to the Secretary for conveyance of the parcel of land described in paragraph (2) not later than 180 days after the date of enactment of this Act, the Secretary shall convey to the Observatory, without consideration and by quitclaim deed, all right, title, and interest of the United States in and to that parcel of land.

(2) LAND DESCRIBED.—The parcel of land to be conveyed under paragraph (1) is the National Forest System land—

(A) conveyed by the United States to Percival Lowell and his heirs by the Act entitled “An Act granting certain lands in the Coconino National Forest, in Arizona, for observatory purposes”, approved May 30, 1910 (36 Stat. 452; chapter 261); and

(B) described as sec. 17, T. 21 N., R. 7 E., of the Gila and Salt River base and meridian in Coconino County, Arizona.

**SA 1354.** Ms. MCSALLY submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### TITLE IV—MISCELLANEOUS

##### SEC. 4001. WATER SUPPLY INFRASTRUCTURE REHABILITATION AND UTILIZATION.

(a) AGING INFRASTRUCTURE ACCOUNT.—Section 9603 of the Omnibus Public Land Management Act of 2009 (43 U.S.C. 510b) is amended by adding at the end the following:

“(d) AGING INFRASTRUCTURE ACCOUNT.—

“(1) ESTABLISHMENT.—There is established in the general fund of the Treasury a special account, to be known as the ‘Aging Infrastructure Account’ (referred to in this subsection as the ‘Account’), to provide funds to, and provide for the extended repayment of the funds by, a transferred works operating entity or project beneficiary responsible for repayment of reimbursable costs for the conduct of extraordinary operation and maintenance work at a project facility, which shall consist of—

“(A) any amounts that are specifically appropriated to the Account under section 9605; and

“(B) any amounts deposited in the Account under paragraph (3)(B).

“(2) EXPENDITURES.—Subject to appropriations and paragraph (3), the Secretary may expend amounts in the Account to fund and provide for extended repayment of the funds for eligible projects identified in a report submitted under paragraph (5)(A).

“(3) REPAYMENT CONTRACT.—

“(A) IN GENERAL.—The Secretary may not expend amounts under paragraph (2) with respect to an eligible project described in that paragraph unless the transferred works operating entity or project beneficiary responsible for repayment of reimbursable costs has entered into a contract to repay the amounts under subsection (b)(2).

“(B) DEPOSIT OF REPAYED FUNDS.—Amounts repaid by a transferred works operating entity or project beneficiary responsible for repayment of reimbursable costs receiving funds under a repayment contract entered into under this subsection shall be deposited in the Account and shall be available to the

Secretary for expenditure in accordance with this subsection without further appropriation.

“(4) APPLICATION FOR FUNDING.—

“(A) IN GENERAL.—Not less than once per fiscal year, the Secretary shall accept, during an application period established by the Secretary, applications from transferred works operating entities or project beneficiaries responsible for payment of reimbursable costs for funds and extended repayment for eligible projects.

“(B) ELIGIBLE PROJECT.—A project eligible for funding and extended repayment under this subsection is a project that—

“(i) qualifies as an extraordinary operation and maintenance work under this section;

“(ii) is for the major, non-recurring maintenance of a mission-critical asset; and

“(iii) is not eligible to be carried out or funded under the repayment provisions of section 4(c) of the Reclamation Safety of Dams Act of 1978 (43 U.S.C. 508(c)).

“(C) GUIDELINES FOR APPLICATIONS.—Not later than 60 days after the date of enactment of this subsection, the Secretary shall issue guidelines describing the information required to be provided in an application for funding and extended repayment under this subsection that require, at a minimum—

“(i) a description of the project for which the funds are requested;

“(ii) the amount of funds requested;

“(iii) the repayment period requested by the transferred works operating entity or project beneficiary responsible for repayment of reimbursable costs;

“(iv) alternative non-Federal funding options that have been evaluated;

“(v) the financial justification for requesting an extended repayment period; and

“(vi) the financial records of the transferred works operating entity or project beneficiary responsible for repayment of reimbursable costs.

“(D) REVIEW BY THE SECRETARY.—The Secretary shall review each application submitted under subparagraph (A)—

“(i) to determine whether the project is eligible for funds and an extended repayment period under this subsection;

“(ii) to determine if the project has been identified by the Bureau of Reclamation as part of the major rehabilitation and replacement of a project facility; and

“(iii) to conduct a financial analysis of—

“(I) the project; and

“(II) the transferred works operating entity or project beneficiary responsible for repayment of reimbursable costs.

“(5) REPORT.—Not later than 90 days after the date on which an application period closes under paragraph (4)(A), the Secretary shall submit to the Committees on Energy and Natural Resources and Appropriations of the Senate and the Committees on Natural Resources and Appropriations of the House of Representatives a report that—

“(A) identifies each project eligible for funding and extended repayment under this subsection;

“(B) with respect to each eligible project identified under subparagraph (A), includes—

“(i) a description of—

“(I) the eligible project;

“(II) the anticipated cost and duration of the eligible project; and

“(III) any remaining engineering or environmental compliance that is required before the eligible project commences;

“(ii) an analysis of—

“(I) the repayment period proposed in the application; and

“(II) if the Secretary recommends a minimum necessary repayment period that is different than the repayment period proposed in the application, the minimum nec-

essary repayment period recommended by the Secretary; and

“(iii) an analysis of alternative non-Federal funding options; and

“(C) describes the balance of funds in the Account as of the date of the report.

“(6) EFFECT OF SUBSECTION.—Nothing in this subsection affects—

“(A) any funding provided, or contracts entered into, under subsection (a) before the date of enactment of this subsection; or

“(B) the use of funds otherwise made available to the Secretary to carry out subsection (a).”.

(b) AUTHORIZATION OF APPROPRIATIONS FOR THE RECLAMATION SAFETY OF DAMS ACT OF 1978.—Section 5 of the Reclamation Safety of Dams Act of 1978 (43 U.S.C. 509) is amended, in the first sentence, by inserting “, and, effective October 1, 2019, not to exceed an additional \$550,000,000 (October 1, 2019, price levels)” before “, plus or minus”.

(c) REVIEW OF FLOOD CONTROL RULE CURVES PILOT PROJECT.—

(1) DEFINITIONS.—In this subsection:

(A) BUREAU.—The term “Bureau” means the Bureau of Reclamation.

(B) ELIGIBLE WORKS.—

(i) IN GENERAL.—The term “eligible works” means a reserved works, or a transferred works for which—

(I) the flood control rule curve has not been substantially adjusted during the 10-year period ending on the date of enactment of this Act; and

(II) the Secretary receives a request in accordance with paragraph (3)(A)(i).

(ii) EXCLUSIONS.—The term “eligible works” does not include—

(I) any project authorized by the Boulder Canyon Project Act (43 U.S.C. 617 et seq.);

(II) any project authorized by the Act of April 11, 1956 (commonly known as the “Colorado River Storage Project Act”) (43 U.S.C. 620 et seq.); or

(III) any project of the Pick-Sloan Missouri River Basin Program (authorized by section 9 of the Act of December 22, 1944 (commonly known as the “Flood Control Act of 1944”) (58 Stat. 891, chapter 665)).

(C) PILOT PROJECT.—The term “pilot project” means the pilot project established under paragraph (2).

(D) RESPONSIBLE PARTY.—The term “responsible party” means—

(i) with respect to a reserved works—

(I) a non-Federal water user or power contractor that has an active repayment, water service, or power service contract with the Bureau;

(II) a power contractor that has an active contract with a Federal power marketing administration for energy, capacity, or energy and capacity, from a hydropower facility owned by the Bureau; or

(III) a non-Federal operating entity, including a joint powers authority or board of control, that has assumed responsibility on behalf of multiple water users, through a contract with the Bureau, for the operation and maintenance of the reserved works; and

(ii) with respect to a transferred works, the operating entity of the transferred works.

(E) SECRETARY.—The term “Secretary” means Secretary of the Interior.

(2) ESTABLISHMENT OF PILOT PROJECT.—The Secretary, in consultation with the Secretary of the Army, shall establish within the Bureau a pilot project to adjust flood control rule curves in accordance with paragraph (4).

(3) SELECTION OF ELIGIBLE WORKS.—

(A) REQUEST.—

(i) IN GENERAL.—In order for an eligible works to be selected for inclusion in the pilot project, a responsible party shall submit a written request to the Secretary seeking a flood control rule curve adjustment.

(ii) NOTICE.—Not later than 30 days after the date on which the Secretary receives a request under clause (i), the Secretary shall notify—

(I) each responsible party of that request, using lists maintained by the Bureau; and

(II) if applicable, the appropriate Federal power marketing administration.

(B) SELECTION.—Each year, the Secretary shall—

(i) select 1 or more eligible works for inclusion in the pilot project; and

(ii) submit a list of those eligible works to—

(I) the Secretary of the Army;

(II) the Committee on Natural Resources of the House of Representatives; and

(III) the Committee on Energy and Natural Resources of the Senate.

(C) EXCLUSION.—The Secretary shall not select an eligible works for inclusion in the pilot project under subparagraph (B)(i) if, not later than 60 days after the date on which the notice is provided to each responsible party under subparagraph (A)(ii)(I), a majority of the responsible parties submit to the Secretary an objection to the inclusion of the eligible works in the pilot project.

(4) ADJUSTMENT OF A FLOOD CONTROL RULE.—

(A) IN GENERAL.—The flood control rule curve of an eligible works shall be adjusted pursuant to section 7 of the Act of December 22, 1944 (33 U.S.C. 709), if the Secretary of the Army determines that the adjustment would enhance the authorized purposes of the eligible works.

(B) CONSIDERATIONS.—In the adjustment of a flood control rule curve under subparagraph (A), the following factors shall be considered:

(i) Forecast-informed reservoir operations.

(ii) Improved hydrologic forecasting for—

(I) precipitation;

(II) snowpack;

(III) runoff; and

(IV) soil moisture conditions.

(iii) Any new watershed data, including data provided by a responsible party for the eligible works.

(C) CONSULTATION.—In the adjustment of a flood control rule curve under subparagraph (A), the following entities shall be consulted:

(i) Each responsible party for the eligible works.

(ii) In the case of an eligible works that produces power marketed by the Federal Government, the Federal power marketing administration that markets the power.

(iii) The Secretary.

(5) CONSULTATION.—The Secretary shall consult with the Secretary of the Army with respect to any action taken by the Secretary of the Army—

(A) pursuant to section 7 of the Act of December 22, 1944 (33 U.S.C. 709); and

(B) that relates to the pilot project.

(6) FUNDING.—The Secretary or the Secretary of the Army, as appropriate, may accept amounts from responsible parties for eligible works to fund all or a portion of the cost of carrying out an adjustment of a flood control rule under paragraph (4), including a review or revision of operational documents (including water control plans, water control manuals, water control diagrams, release schedules, rule curves, operational agreements with non-Federal entities, and any associated environmental documentation).

(7) EFFECT.—Nothing in this subsection—

(A) affects or modifies any existing authority to review or modify—

(i) reservoir operations, including any existing forecast-informed reservoir operations at a facility of the Corps of Engineers, such as Coyote Dam; and

(ii) flood control operations; or

(B) affects or modifies any authorized purpose of any project carried out by the Secretary.

(8) TERMINATION.—

(A) IN GENERAL.—The pilot project shall terminate on the date that is 15 years after the date of enactment of this Act.

(B) EFFECT.—Termination of the pilot project under subparagraph (A) shall not affect any flood control rule curve developed as part of the pilot project.

**SA 1355.** Ms. MCSALLY submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle B of title I, add the following:

**SEC. 12. PUBLIC LAND RENEWABLE ENERGY DEVELOPMENT.**

(a) DEFINITIONS.—In this section:

(1) COVERED LAND.—The term “covered land” means land that is—

(A) public land; and

(B) not excluded from the development of geothermal, solar, or wind energy under—

(i) a land use plan established under the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.); or

(ii) other Federal law.

(2) EXCLUSION AREA.—The term “exclusion area” means covered land that is identified by the Bureau of Land Management as not suitable for development of renewable energy projects.

(3) FEDERAL LAND.—The term “Federal land” means—

(A) National Forest System land; and

(B) public land.

(4) FUND.—The term “Fund” means the Renewable Energy Resource Conservation Fund established by subsection (h)(3)(A).

(5) NATIONAL FOREST SYSTEM.—The term “National Forest System” has the meaning given the term in section 11(a) of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1609(a)).

(6) PRIORITY AREA.—The term “priority area” means covered land identified by the land use planning process of the Bureau of Land Management as being a preferred location for a renewable energy project, including a designated leasing area (as defined in section 2801.5(b) of title 43, Code of Federal Regulations (or a successor regulation)) that is identified under the rule of the Bureau of Land Management entitled “Competitive Processes, Terms, and Conditions for Leasing Public Lands for Solar and Wind Energy Development and Technical Changes and Corrections” (81 Fed. Reg. 92122 (December 19, 2016)) (or a successor regulation).

(7) PUBLIC LAND.—The term “public land” has the meaning given the term “public lands” in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702).

(8) RENEWABLE ENERGY PROJECT.—The term “renewable energy project” means a project carried out on covered land that uses wind, solar, or geothermal energy to generate energy.

(9) SECRETARY.—The term “Secretary” means the Secretary of the Interior.

(10) VARIANCE AREA.—The term “variance area” means covered land that—

(A) is not an exclusion area; and

(B) is not a priority area.

(b) LAND USE PLANNING; SUPPLEMENTS TO PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENTS.—

(1) PRIORITY AREAS.—

(A) IN GENERAL.—The Secretary, in consultation with the Secretary of Energy, shall

establish priority areas on covered land for geothermal, solar, and wind energy projects.

(B) DEADLINE.—

(i) GEOTHERMAL ENERGY.—For geothermal energy, the Secretary shall establish priority areas as soon as practicable, but not later than 5 years, after the date of enactment of this Act.

(ii) SOLAR ENERGY.—For solar energy, the Secretary shall establish additional priority areas as soon as practicable, but not later than 3 years, after the date of enactment of this Act.

(iii) WIND ENERGY.—For wind energy, the Secretary shall establish priority areas as soon as practicable, but not later than 3 years, after the date of enactment of this Act.

(2) VARIANCE AREAS.—To the maximum extent practicable, variance areas shall be considered for renewable energy project development, consistent with the principles of multiple use (as defined in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702)).

(3) REVIEW AND MODIFICATION.—Not less frequently than once every 5 years, the Secretary shall—

(A) review the adequacy of land allocations for geothermal, solar, and wind energy priority and variance areas for the purpose of encouraging new renewable energy development opportunities; and

(B) based on the review carried out under subparagraph (A), add, modify, or eliminate priority, variance, and exclusion areas.

(4) COMPLIANCE WITH THE NATIONAL ENVIRONMENTAL POLICY ACT.—For purposes of this subsection, compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) shall be accomplished—

(A) for geothermal energy, by supplementing the October 2008 final programmatic environmental impact statement for geothermal leasing in the Western United States, including by incorporating any additional regional analyses that were completed by Federal agencies after the date on which the programmatic environmental impact statement was finalized;

(B) for solar energy, by supplementing the July 2012 final programmatic environmental impact statement for the Solar Energy Program of the Bureau of Land Management, including by incorporating any additional regional analyses that were completed by Federal agencies after the date on which the programmatic environmental impact statement was finalized; and

(C) for wind energy, by supplementing the July 2005 final programmatic environmental impact statement for wind energy development, including by incorporating any additional regional analyses that were completed by Federal agencies after the date on which the programmatic environmental impact statement was finalized.

(5) NO EFFECT ON PROCESSING APPLICATIONS.—A requirement to prepare a supplement to a programmatic environmental impact statement under this subsection shall not result in any delay in processing an application for a renewable energy project.

(6) COORDINATION.—In developing a supplement required by this subsection, the Secretary shall coordinate, on an ongoing basis, with appropriate State, Tribal, and local governments, transmission infrastructure owners and operators, developers, and other appropriate entities to ensure that priority areas identified by the Secretary are—

(A) economically viable (including having access to existing or planned transmission capacity);

(B) likely to avoid or minimize conflict with habitat for animals and plants, recreation, cultural resources, and other uses of covered land; and



(C) consistent with section 202 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1712), including subsection (c)(9) of that section (43 U.S.C. 1712(c)(9)).

(C) ENVIRONMENTAL REVIEW ON COVERED LAND.—

(1) IN GENERAL.—If the Secretary determines that a proposed renewable energy project has been sufficiently analyzed by a programmatic environmental impact statement conducted under subsection (b)(4), the Secretary shall not require any additional review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(2) ADDITIONAL ENVIRONMENTAL REVIEW.—If the Secretary determines that additional environmental review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) is necessary for a proposed renewable energy project, the Secretary shall rely on the analysis in the programmatic environmental impact statement conducted under subsection (b)(4) to the maximum extent practicable when analyzing the potential impacts of the project.

(3) RELATIONSHIP TO OTHER LAW.—Nothing in this subsection modifies or supersedes any requirement under applicable law.

(D) PROGRAM TO IMPROVE RENEWABLE ENERGY PROJECT PERMIT COORDINATION.—

(1) ESTABLISHMENT.—

(A) IN GENERAL.—The Secretary shall establish and implement, through the offices established under subparagraph (B), a program to improve Federal permit coordination with respect to renewable energy projects on covered land.

(B) ESTABLISHMENT OF OFFICES.—To establish and implement the program described in subparagraph (A), and to carry out other necessary activities, as determined by the Secretary, the Secretary shall establish—

(i) an office to serve as the National Renewable Energy Coordination Office; and

(ii) State, district, or field Renewable Energy Coordination Offices, for such time as the Secretary determines to be appropriate.

(2) MEMORANDUM OF UNDERSTANDING.—

(A) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary shall enter into a memorandum of understanding for purposes of this subsection, including to specifically expedite the environmental analysis of applications for projects proposed in a variance area or a priority area, with—

(i) the Secretary of Defense; and

(ii) the Secretary of Agriculture.

(B) STATE PARTICIPATION.—The Secretary may request the Governor of any interested State to be a signatory to the memorandum of understanding under subparagraph (A).

(3) DESIGNATION OF QUALIFIED STAFF.—

(A) IN GENERAL.—Not later than 30 days after the date on which the memorandum of understanding under paragraph (2) is executed, all Federal signatories, as appropriate, shall identify for the National Renewable Energy Coordination Office established under paragraph (1)(B)(i) and each Renewable Energy Coordination Office established under paragraph (1)(B)(ii) 1 or more employees who have expertise in the regulatory issues relating to the office in which the employee is employed, including, as applicable, particular expertise in—

(i) consultation regarding, and preparation of, biological opinions under section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1536);

(ii) permits under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(iii) regulatory matters under the Clean Air Act (42 U.S.C. 7401 et seq.);

(iv) the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.);

(v) the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.);

(vi) the preparation of analyses under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);

(vii) implementation of the requirements of section 306108 of title 54, United States Code (formerly known as section 106 of the National Historic Preservation Act);

(viii) planning under section 14 of the National Forest Management Act of 1976 (16 U.S.C. 472a); and

(ix) the Act of June 8, 1940 (54 Stat. 250, chapter 278; 16 U.S.C. 668 et seq.) (commonly known as the “Bald Eagle Protection Act”).

(B) DUTIES.—Each employee assigned under subparagraph (A) shall—

(i) be responsible for addressing all issues relating to the jurisdiction of the home office or agency of the employee; and

(ii) participate as part of the team of personnel working on proposed energy projects, planning, monitoring, inspection, enforcement, and environmental analyses.

(4) CLARIFICATION OF EXISTING AUTHORITY.—Section 307 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1737) is amended by adding at the end the following:

“(8) DONATIONS.—The Secretary, in accordance with subsection (c), may accept donations from renewable energy companies working on public lands, including donations to help cover the costs of environmental reviews.”.

(5) REPORT TO CONGRESS.—

(A) IN GENERAL.—Not later than February 1 of the first fiscal year beginning after the date of enactment of this Act, and each February 1 thereafter, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives a report describing the progress made under the program established under paragraph (1)(A) during the preceding year.

(B) INCLUSIONS.—Each report under subparagraph (A) shall include—

(i) projections for renewable energy production and capacity installations; and

(ii) a description of any problems relating to leasing, permitting, siting, or production.

(E) INCREASING ECONOMIC CERTAINTY.—

(1) IN GENERAL.—The Secretary shall consider the total amount paid in acreage rental rates, capacity fees, and other recurring annual fees in evaluating existing rates paid by renewable energy projects for the use of Federal land.

(2) INCREASES IN BASE RENTAL RATES.—After a base rental rate is established on an issuance of a right-of-way authorization, for the entire term of the right-of-way authorization, any increase in the base rental rate shall be limited to the Implicit Price Deflator-Gross Domestic Product Index published by the Bureau of Economic Analysis of the Department of Commerce on the date of issuance of the right-of-way authorization.

(3) REDUCTIONS IN BASE RENTAL RATES.—The Secretary may reduce acreage rental rates and capacity fees for existing and new wind and solar authorizations if the Secretary determines—

(A) that the existing rates—

(i) exceed fair market value;

(ii) impose economic hardships;

(iii) limit commercial interest in a competitive lease sale or right-of-way grant; or

(iv) are not competitively priced compared to other available land; or

(B) that a reduced rental rate or capacity fee is necessary to promote the greatest use of wind and solar energy resources, especially inside priority areas.

(F) LIMITED GRANDFATHERING.—

(1) DEFINITION OF PROJECT.—In this subsection, the term “project” means a system described in section 2801.9(a)(4) of title 43, Code of Federal Regulations (as in effect on the date of enactment of this Act).

(2) REQUIREMENT TO PAY RENTS AND FEES.—The owner of a project that applied for a right-of-way under section 501 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761) on or before December 19, 2016, shall be obligated to pay with respect to the right-of-way all rents and fees in effect before the effective date of the rule of the Bureau of Land Management entitled “Competitive Processes, Terms, and Conditions for Leasing Public Lands for Solar and Wind Energy Development and Technical Changes and Corrections” (81 Fed. Reg. 92122 (December 19, 2016)).

(g) RENEWABLE ENERGY GOAL.—The Secretary and the Secretary of Agriculture, through management of public land and administration of Federal laws, shall seek to issue permits that, in total, authorize production of not less than 25 gigawatts of electricity from wind, solar, and geothermal energy projects by not later than December 31, 2025.

(h) DISPOSITION OF REVENUES.—

(1) DISPOSITION OF REVENUES.—Without further appropriation or fiscal year limitation, of the amounts collected as bonus bids, rentals, fees, or other payments under a right-of-way, permit, lease, or other authorization (other than under section 504(g) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1764(g))) for the development of wind or solar energy on covered land or National Forest System land—

(A) for the period beginning on January 1, 2021, and ending on December 31, 2040—

(i) 25 percent shall be paid by the Secretary of the Treasury to the State within the boundaries of which the revenue is derived;

(ii) 25 percent shall be paid by the Secretary of the Treasury to the 1 or more counties within the boundaries of which the revenue is derived, to be allocated among the counties based on the percentage of land from which the revenue is derived;

(iii) 15 percent shall be deposited in the Treasury and be made available to the Secretary to carry out the program established under subsection (d)(1), including the transfer of the funds by the Bureau of Land Management to other Federal agencies and State agencies to facilitate the processing of renewable energy permits on Federal land, with priority given to using the amounts, to the maximum extent practicable without detrimental impacts to emerging markets, to expediting the issuance of permits required for the development of renewable energy projects in the States from which the revenues are derived; and

(iv) 35 percent shall be deposited in the Fund; and

(B) beginning on January 1, 2041—

(i) 25 percent shall be paid by the Secretary of the Treasury to the State within the boundaries of which the revenue is derived;

(ii) 25 percent shall be paid by the Secretary of the Treasury to the 1 or more counties within the boundaries of which the revenue is derived, to be allocated among the counties based on the percentage of land from which the revenue is derived;

(iii) 10 percent shall be deposited in the Treasury and be made available to the Secretary to carry out the program established under subsection (d)(1), including the transfer of the funds by the Bureau of Land Management to other Federal agencies and State agencies to facilitate the processing of renewable energy permits on Federal land, with priority given to using the amounts, to the maximum extent practicable without detrimental impacts to emerging markets,

to expediting the issuance of permits required for the development of renewable energy projects in the States from which the revenues are derived; and

(iv) 40 percent shall be deposited in the Fund.

(2) PAYMENTS TO STATES AND COUNTIES.—

(A) IN GENERAL.—Amounts paid to States and counties under paragraph (1) shall be used consistent with section 35 of the Mineral Leasing Act (30 U.S.C. 191).

(B) PAYMENTS IN LIEU OF TAXES.—A payment to a county under subparagraph (A) shall be in addition to a payment in lieu of taxes received by the county under chapter 69 of title 31, United States Code.

(3) RENEWABLE ENERGY RESOURCE CONSERVATION FUND.—

(A) IN GENERAL.—There is established in the Treasury a fund, to be known as the “Renewable Energy Resource Conservation Fund”, which shall be administered by the Secretary, in consultation with the Secretary of Agriculture.

(B) USE OF FUNDS.—The Secretary may make amounts in the Fund available to Federal, State, local, and Tribal agencies to be distributed in regions in which renewable energy projects are located on Federal land, for the purposes of—

(i) restoring and protecting—

(I) fish and wildlife habitat for affected species;

(II) fish and wildlife corridors for affected species; and

(III) water resources in areas affected by wind, geothermal, or solar energy development; and

(ii) preserving and improving recreational access to Federal land and water in an affected region through an easement, right-of-way, or other instrument from willing landowners for the purpose of enhancing public access to existing Federal land and water that is inaccessible or restricted.

(C) PARTNERSHIPS.—The Secretary may enter into cooperative agreements with State, local, and Tribal agencies, nonprofit organizations, and other appropriate entities to carry out the activities described in clauses (i) and (ii) of subparagraph (B).

(D) INVESTMENT OF FUND.—

(i) IN GENERAL.—Any amounts deposited in the Fund shall earn interest in an amount determined by the Secretary of the Treasury on the basis of the current average market yield on outstanding marketable obligations of the United States of comparable maturities.

(ii) USE.—Any interest earned under clause (i) may be expended in accordance with this paragraph.

(E) REPORT TO CONGRESS.—At the end of each fiscal year, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives a report identifying—

(i) the amounts described in paragraph (1) that were collected during that fiscal year, organized by source;

(ii) the amount and purpose of payments made to each Federal, State, local, and Tribal agency under subparagraph (B) during that fiscal year; and

(iii) the amount remaining in the Fund at the end of the fiscal year.

(F) INTENT OF CONGRESS.—It is the intent of Congress that the revenues deposited and used in the Fund shall supplement (and not supplant) annual appropriations for activities described in clauses (i) and (ii) of subparagraph (B).

(i) PROMOTING AND ENHANCING DEVELOPMENT OF GEOTHERMAL ENERGY.—

(1) IN GENERAL.—Section 234(a) of the Energy Policy Act of 2005 (42 U.S.C. 15873(a)) is amended by striking “in the first 5 fiscal

years beginning after the date of enactment of this Act” and inserting “through fiscal year 2023”.

(2) AUTHORIZATION.—Section 234(b) of the Energy Policy Act of 2005 (42 U.S.C. 15873(b)) is amended—

(A) by striking “Amounts” and inserting the following:

“(1) IN GENERAL.—Amounts”; and

(B) by adding at the end the following:

“(2) AUTHORIZATION.—Effective for fiscal year 2021 and each fiscal year thereafter, amounts deposited under subsection (a) shall be available to the Secretary of the Interior for expenditure, without further appropriation or fiscal year limitation, to implement the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) and this Act.”.

(j) FACILITATION OF COPRODUCTION OF GEOTHERMAL ENERGY ON OIL AND GAS LEASES.—Section 4 of the Geothermal Steam Act of 1970 (30 U.S.C. 1003) is amended—

(1) in subsection (c), by striking “The Secretary” and inserting the following:

“(1) IN GENERAL.—The Secretary”;

(2) in subsection (b), by redesignating paragraph (3) as paragraph (2) and moving the paragraph so as to appear after paragraph (1) of subsection (c) (as designated by paragraph (1)); and

(3) in subsection (c) (as amended by paragraphs (1) and (2)), by adding at the end the following:

“(3) LAND SUBJECT TO OIL AND GAS LEASE.—

“(A) DEFINITION OF LAND.—In this paragraph, the term ‘land’ means land that—

“(i) is under an oil and gas lease issued pursuant to the Mineral Leasing Act (30 U.S.C. 181 et seq.) or the Mineral Leasing Act for Acquired Lands (30 U.S.C. 351 et seq.);

“(ii) is subject to an approved application for permit to drill; and

“(iii) from which oil and gas production is occurring.

“(B) GEOTHERMAL ENERGY.—Land may be available for noncompetitive leasing under this section to the holder of an oil and gas lease described in subparagraph (A)(i)—

“(i) if the Secretary determines that geothermal energy will be produced from a well that is producing or is capable of producing oil and gas; and

“(ii) to provide for the coproduction of geothermal energy with oil and gas.”.

(k) NONCOMPETITIVE LEASING OF ADJOINING AREAS FOR DEVELOPMENT OF GEOTHERMAL RESOURCES.—Section 4(c) of the Geothermal Steam Act of 1970 (30 U.S.C. 1003(c)) (as amended by subsection (j)) is amended by adding at the end the following:

“(4) ADJOINING LAND.—

“(A) DEFINITIONS.—In this paragraph:

“(i) FAIR MARKET VALUE PER ACRE.—The term ‘fair market value per acre’ means a dollar amount per acre that—

“(I) subject to subclause (II), is equal to the market value per acre, as determined by the Secretary—

“(aa) under regulations promulgated under this paragraph;

“(bb) taking into account the data described in subparagraph (B)(iii) regarding a valid discovery under subclause (I) of that subparagraph; and

“(cc) not later than 180 days after the date on which the Secretary receives an application for a lease under this paragraph; and

“(II) shall be not less than the greater of—

“(aa) 4 times the median amount paid per acre for all land leased under this Act during the preceding year; or

“(bb) \$50.

“(ii) INDUSTRY STANDARDS.—The term ‘industry standards’ means the standards by which a qualified geothermal professional assesses whether downhole or flowing temperature measurements with indications of permeability are sufficient to produce energy

from geothermal resources, as determined through flow or injection testing or measurement of lost circulation while drilling.

“(iii) QUALIFIED FEDERAL LAND.—The term ‘qualified Federal land’ means land that is available for leasing under this Act.

“(iv) QUALIFIED GEOTHERMAL PROFESSIONAL.—The term ‘qualified geothermal professional’ means an individual who is an engineer or geoscientist in good professional standing with at least 5 years of experience in geothermal exploration, development, or project assessment.

“(v) QUALIFIED LESSEE.—The term ‘qualified lessee’ means a person that is eligible to hold a geothermal lease under this Act (including applicable regulations).

“(vi) VALID DISCOVERY.—The term ‘valid discovery’ means a discovery, by a new or existing slim hole or production well, of a geothermal resource that exhibits downhole or flowing temperature measurements with indications of permeability that are sufficient to meet industry standards.

“(B) AUTHORITY.—An area of qualified Federal land that adjoins other land for which a qualified lessee holds a legal right to develop geothermal resources may be available for a noncompetitive lease under this section to the qualified lessee at the fair market value per acre, if—

“(i) the area of qualified Federal land—

“(I) consists of not less than 1 acre and not more than 640 acres; and

“(II) is not already leased under this Act or nominated to be leased under subsection (a);

“(ii) the qualified lessee has not previously received a noncompetitive lease under this paragraph in connection with the valid discovery for which data has been submitted under clause (iii)(I); and

“(iii) sufficient geological and other technical data prepared by a qualified geothermal professional has been submitted by the qualified lessee to the applicable Federal land management agency that would lead individuals who are experienced in the subject matter to believe that—

“(I) there is a valid discovery of geothermal resources on the land for which the qualified lessee holds the legal right to develop geothermal resources; and

“(II) those geothermal resources extend into the adjoining areas.

“(C) REGULATIONS FOR DETERMINING FAIR MARKET VALUE.—The Secretary shall promulgate regulations establishing a procedure to determine fair market value per acre under subparagraph (A)(i)(I) for purposes of this paragraph.

“(D) ADMINISTRATION.—

“(i) IN GENERAL.—The Secretary shall—

“(I) publish a notice of any request to lease land under this paragraph;

“(II) provide to a qualified lessee and publish, with an opportunity for public comment for a period of 30 days, any proposed determination under this paragraph of the fair market value per acre of an area that the qualified lessee seeks to lease under this paragraph; and

“(III) provide to the qualified lessee and any adversely affected party the opportunity to appeal the final determination of the fair market value per acre of the area in an administrative proceeding before the applicable Federal land management agency, in accordance with applicable law (including regulations).

“(ii) LIMITATION ON NOMINATION.—After publication of a notice of request to lease land under this paragraph, the Secretary may not accept any nomination to lease that land under subsection (a) unless the request has been denied or withdrawn.

“(iii) ANNUAL RENTAL.—For purposes of section 5(a)(3), a lease awarded under this



paragraph shall be considered a lease awarded in a competitive lease sale.

“(E) REGULATIONS.—Not later than 270 days after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall issue regulations to carry out this paragraph.”.

(I) SAVINGS CLAUSE.—Notwithstanding any other provision of this section, the Secretary shall continue to manage public land under the principles of multiple use and sustained yield in accordance with title I of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.), including due consideration of mineral and nonrenewable energy-related projects and other nonrenewable energy uses, for the purposes of land use planning, permit processing, and conducting environmental reviews.

**SA 1356.** Mrs. FEINSTEIN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in subtitle G of title I, insert the following:

**SEC. 17. ADVANCED TECHNOLOGY VEHICLES MANUFACTURING INCENTIVE PROGRAM.**

Section 136 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17013) is amended—

(1) in subsection (a)—  
(A) in paragraph (1)—  
(i) by redesignating subparagraphs (A) through (C) as clauses (i) through (iii), respectively, and indenting appropriately;

(ii) by striking the paragraph designation and heading and all that follows through “meets—” and inserting the following:

“(1) ADVANCED TECHNOLOGY VEHICLE.—The term ‘advanced technology vehicle’ means—  
“(A) an ultra efficient vehicle;  
“(B) a light duty vehicle that meets—”;  
(iii) in subparagraph (B)(iii) (as so redesignated), by striking the period at the end and inserting “; or”; and

(iv) by adding at the end the following:  
“(C) a medium-duty or heavy-duty vehicle that—

“(i) is subject to regulations established by the Secretary of Transportation under parts 523, 534, and 535 of title 49, Code of Federal Regulations (or successor regulations); or

“(II) is included in a vehicle type or class that offers opportunities to substantially reduce consumption of conventional motor fuel, as determined by the Secretary by rule; and

“(ii) reduces consumption of conventional motor fuel by 10 percent or greater as compared to model year 2010 medium- and heavy-duty vehicles of a similar vehicle type or class, unless the Secretary determines by rule that—

“(I) the percentage is not achievable for a specific vehicle type or class; and

“(II) an alternative percentage for that vehicle type or class will result in substantial reductions in motor fuel consumption within the United States.”; and

(B) by striking paragraph (4) and inserting the following:

“(4) QUALIFYING COMPONENTS.—The term ‘qualifying components’ means components, systems, or groups of subsystems that the Secretary determines—

“(A) to be designed to improve fuel economy or otherwise substantially reduce consumption of conventional motor fuel; or

“(B) to contribute measurably to the overall improved fuel use of an advanced technology vehicle.”;

(2) in subsection (b), in the matter preceding paragraph (1), by inserting “or other vehicle” after “ultra efficient vehicle”; and

(3) in subsection (h)(1)(B), by striking “automobiles, or components of automobiles” and inserting “automobiles or other vehicles, or components of automobiles or other vehicles”.

**SA 1357.** Mrs. FEINSTEIN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ . REPORT ON WIRELESS PHONE SERVICE RESILIENCE.**

(a) IN GENERAL.—The Federal Communications Commission shall study, and publish a report on, actions the Federal Government, telecommunications providers, and State emergency officials should take to improve the resilience of wireless phone service during natural disasters, including wildfires.

(b) CONTENTS.—In the report published under subsection (a), the Federal Communications Commission shall—

(1) specify the type of pre-planned coordination agreements between telecommunications providers, such as roaming and peering agreements and mutual aid arrangements, that should take effect during natural disasters; and

(2) assess the feasibility of expanding the one-call notification system programs under chapter 61 and section 60114 of title 49, United States Code, to cover wireless phone service.

**SA 1358.** Mrs. FEINSTEIN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title I, insert the following:

**SEC. \_\_\_\_ . REPORT ON ENERGY USAGE OF NETWORK-ENABLED APPLIANCES AND DEVICES.**

(a) DEFINITIONS.—In this section:

(1) NETWORK-ENABLED APPLIANCE.—The term “network-enabled appliance” means any product described in paragraphs (1) through (20) of section 322(a) of the Energy Policy and Conservation Act (42 U.S.C. 6292(a)) capable of interacting and communicating with other electronic devices by using wireless internet or other wireless protocols, interactively or autonomously.

(2) NETWORK-ENABLED DEVICE.—The term “network-enabled device” means an electronic device capable of computation and communication with other electronic devices by using wireless internet or other wireless protocols, such as an electronic tablet, smart speaker, and smart thermostat.

(b) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to Congress a report that describes—

(1) the energy usage of network-enabled appliances and network-enabled devices during standby and active modes; and

(2) recommendations for updating appliance efficiency standards to ensure maximum energy efficiency of network-enabled appliances and network-enabled devices.

**SA 1359.** Mrs. FEINSTEIN submitted an amendment intended to be proposed

by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ . STUDY ON THE IMPLEMENTATION OF MICROGRIDS IN WILDFIRE RISK AREAS.**

Not later than 180 days after the date of enactment of this Act, the Secretary shall—

(1) conduct a study relating to the implementation of microgrids in wildfire risk areas, including assessments of—

(A) the means by which utilities can better plan for that implementation;

(B) any permitting changes at the local, State, or Federal level that are necessary for that implementation; and

(C) any other barriers to that implementation; and

(2) make publicly available the results of the study conducted under paragraph (1).

**SA 1360.** Mrs. FEINSTEIN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle E of title I, insert the following:

**SEC. 15. INTERIM STORAGE PILOT PROGRAM.**

(a) DEFINITIONS.—In this section:

(1) AFFECTED INDIAN TRIBE.—The term “affected Indian tribe” has the meaning given the term in section 2 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101).

(2) HIGH-LEVEL RADIOACTIVE WASTE.—The term “high-level radioactive waste” has the meaning given the term in section 2 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101).

(3) NUCLEAR WASTE FUND.—The term “Nuclear Waste Fund” means the Nuclear Waste Fund established under section 302(c) of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10222(c)).

(4) PILOT PROGRAM.—The term “pilot program” means the pilot program carried out under subsection (b).

(5) SPENT NUCLEAR FUEL.—The term “spent nuclear fuel” has the meaning given the term in section 2 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101).

(b) PILOT PROGRAM.—Notwithstanding any provision of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101 et seq.), the Secretary shall carry out a pilot program to license, construct, and operate 1 or more Federal consolidated storage facilities to provide interim storage, as needed, for spent nuclear fuel and high-level radioactive waste located on sites without an operating nuclear reactor.

(c) REQUESTS FOR PROPOSALS.—Not later than 120 days after the date of enactment of this Act, the Secretary shall issue a request for proposals for cooperative agreements—

(1) to obtain any license necessary from the Nuclear Regulatory Commission for the construction of 1 or more consolidated storage facilities;

(2) to demonstrate the safe transportation of spent nuclear fuel and high-level radioactive waste, as applicable; and

(3) to demonstrate the safe storage of spent nuclear fuel and high-level radioactive waste, as applicable, at the 1 or more consolidated storage facilities, pending the construction and operation of deep geologic disposal capacity for the permanent disposal of the spent nuclear fuel or high-level radioactive waste.

(d) **CONSENT-BASED APPROVAL.**—Prior to siting a consolidated storage facility pursuant to this section, the Secretary shall enter into an agreement to host the facility with—

- (1) the Governor of the State;
- (2) each unit of local government within the jurisdiction of which the facility is proposed to be located; and
- (3) each affected Indian tribe.

(e) **APPLICABILITY.**—In carrying out this section, the Secretary shall comply with—

- (1) all licensing requirements and regulations of the Nuclear Regulatory Commission; and
- (2) all other applicable laws (including regulations).

(f) **PILOT PROGRAM PLAN.**—Not later than 120 days after the date on which the Secretary issues the request for proposals under subsection (c), the Secretary shall submit to Congress a plan to carry out this section that includes—

- (1) an estimate of the cost of licensing, constructing, and operating a consolidated storage facility, including the transportation costs, on an annual basis, over the expected lifetime of the facility;
- (2) a schedule for—

- (A) obtaining any license necessary to construct and operate a consolidated storage facility from the Nuclear Regulatory Commission;

- (B) constructing the facility;

- (C) transporting spent nuclear fuel to the facility; and

- (D) removing the spent nuclear fuel and decommissioning the facility;

- (3) an estimate of the cost of any financial assistance, compensation, or incentives proposed to be paid to the host State, Indian tribe, or local government;

- (4) an estimate of any future reductions in the damages expected to be paid by the United States for the delay of the Department in accepting spent nuclear fuel expected to result from the pilot program;

- (5) recommendations for any additional legislation needed to authorize and implement the pilot program; and

- (6) recommendations for a mechanism to ensure that any spent nuclear fuel or high-level radioactive waste stored at a consolidated storage facility pursuant to this section shall move to deep geologic disposal capacity, following a consent-based approval process for that deep geologic disposal capacity consistent with subsection (d), within a reasonable time after the issuance of a license to construct and operate the consolidated storage facility.

(g) **PUBLIC PARTICIPATION.**—Prior to choosing a site for the construction of a consolidated storage facility under this section, the Secretary shall conduct 1 or more public hearings in the vicinity of each potential site and in at least 1 other location within the State in which the site is located to solicit public comments and recommendations.

(h) **USE OF NUCLEAR WASTE FUND.**—The Secretary may make expenditures from the Nuclear Waste Fund to carry out this section, subject to appropriations.

**SA 1361.** Mrs. FEINSTEIN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

Strike section 1031.

**SA 1362.** Mr. UDALL (for himself and Mr. GRASSLEY) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innova-

tion in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### **TITLE IV—MINERAL LEASING**

##### **SEC. 4001. INCREASED ONSHORE OIL AND GAS ROYALTY RATES.**

Section 17 of the Mineral Leasing Act (30 U.S.C. 226) is amended—

- (1) by striking “12.5” each place it appears and inserting “18.75”; and

- (2) by striking “12½ per centum” each place it appears and inserting “18.75 per cent”.

##### **SEC. 4002. INCREASED MINIMUM BID AMOUNT.**

Section 17(b) of the Mineral Leasing Act (30 U.S.C. 226(b)) is amended—

- (1) in paragraph (1)(B)—

- (A) by striking the subparagraph designation and all that follows through the period at the end of the first sentence and inserting the following:

“(B) NATIONAL MINIMUM ACCEPTABLE BID.—

“(i) IN GENERAL.—Except as provided in clauses (ii) and (v), the national minimum acceptable bid shall be \$10 per acre.”;

(B) in the second sentence—

- (i) by striking “Thereafter, the Secretary” and inserting the following:

“(ii) ADJUSTMENT.—The Secretary”; and

- (ii) by striking “is necessary: (i) to enhance” and inserting the following: “is necessary—

“(I) to enhance”; and

- (iii) by striking “(ii) to promote” and inserting the following:

“(II) to promote”;

- (C) in the third sentence, by striking “Ninety days” and inserting the following:

“(iii) NOTIFICATION.—90 days”;

- (D) in the fourth sentence, by striking “The proposal” and inserting the following:

“(iv) NEPA.—The proposal”; and

- (E) by adding at the end the following:

“(v) EXCEPTION.—To ensure a return of fair market value, as determined by the Secretary, the Secretary may establish in a notice of competitive lease sale a minimum acceptable bid applicable to the lease sale or 1 or more parcels within the lease sale that is higher than the national minimum bid under clause (i).”; and

- (2) in subsection (b)(2)(C), by striking “\$2 per acre” and inserting “\$10 per acre”.

##### **SEC. 4003. INCREASED ONSHORE OIL AND GAS RENTAL RATES.**

Section 17(d) of the Mineral Leasing Act (30 U.S.C. 226(d)) is amended, in the first sentence—

- (1) by striking “\$1.50 per acre” and inserting “\$3 per acre”; and

- (2) by striking “\$2 per acre” and inserting “\$5 per acre”.

##### **SEC. 4004. FEE FOR EXPRESSION OF INTEREST.**

Section 17 of the Mineral Leasing Act (30 U.S.C. 226) is amended by adding at the end the following:

“(q) **FEE FOR EXPRESSION OF INTEREST.**—

“(1) IN GENERAL.—The Secretary shall charge any person who submits, in accordance with procedures established by the Secretary to carry out this subsection, an expression of interest in leasing land available for disposition under this section for exploration for, and development of, oil or gas a fee, in an amount determined by the Secretary under paragraph (2).

“(2) **AMOUNT.**—The fee authorized under paragraph (1) shall be established by the Secretary in an amount that is determined by the Secretary to be appropriate to cover the aggregate cost of processing an expression of interest under this subsection, but not less than \$15 per acre of the area covered by the applicable expression of interest.”.

##### **SEC. 4005. ADJUSTMENT.**

Section 17 of the Mineral Leasing Act (30 U.S.C. 226) (as amended by section 4004) is amended by adding at the end the following:

“(r) **ADJUSTMENT TO CERTAIN FEES.**—The Secretary shall—

“(1) not later than 4 years after the date of enactment of the American Energy Innovation Act of 2020, and at least once every 4 years thereafter, promulgate regulations adjusting each of the per-acre dollar amounts of fees imposed under subsections (b), (d), and (q) and subsections (e) and (f) of section 31 to reflect the change in the Consumer Price Index for All Urban Consumers published by the Bureau of Labor Statistics; and

“(2) as the Secretary determines to be necessary to enhance financial returns to the United States or to promote more efficient management of oil and gas resources on Federal land, promulgate regulations adjusting any of the applicable per-acre dollar amounts of fees imposed under subsection (b), (d), or (q) or subsection (e) or (f) of section 31, as applicable.”.

##### **SEC. 4006. REINSTATEMENT OF COMPETITIVE LEASES.**

Section 31 of the Mineral Leasing Act (30 U.S.C. 188) is amended—

- (1) in subsection (e)—

- (A) by striking paragraph (2) and inserting the following:

“(2) payment of back rentals and the inclusion in a reinstated lease of a requirement for future rentals at a rate of not less than \$20 per acre per year;”;

- (B) in paragraph (3)—

- (i) in subparagraph (A)—

- (I) by striking the subparagraph designation;

- (II) by striking “issued pursuant to the provisions of section 17(b) of this Act”;

- (III) by striking “16½” and inserting “25”; and

- (IV) by inserting “and” after the semicolon; and

- (ii) by striking subparagraph (B); and

- (C) in the second sentence of the undesignated matter following paragraph (4), by striking “, but not to exceed \$500”; and

- (2) in subsection (f)—

- (A) in paragraph (3), by striking “\$5” and inserting “\$10”; and

- (B) in paragraph (4), by striking “12½” and inserting “25”.

##### **SEC. 4007. FISCAL REFORM STUDY AND REPORT.**

(a) **IN GENERAL.**—The Comptroller General of the United States shall offer to enter into an arrangement with the National Academy of Sciences under which the National Academy of Sciences, in cooperation with the Comptroller General of the United States, shall conduct a study evaluating the efficiency and effectiveness of the implementation of this title and the amendments made by this title.

(b) **CONSIDERATIONS.**—The study conducted under subsection (a) shall include consideration of—

- (1) the systems of the Department of the Interior for collecting and auditing payments under this title and the amendments made by this title;

- (2) the performance of the stewardship of the Department of the Interior and the disposition of receipts by the Department of the Interior in carrying this title and the amendments made by this title; and

- (3) the performance of the valuation approach carried out under this title and the amendments made by this title, including a review of whether other approaches could more fully capture foregone revenue of leasing in low-market conditions in light of other possible economic uses at different points in the future.

(c) REPORT.—If the Comptroller General of the United States enters into an arrangement with the National Academy of Sciences under subsection (a), not earlier than 3, but not later than 5, years after the date of enactment of this Act, the Comptroller General shall submit to Congress a report that describes the results of the study conducted under that subsection.

**SA 1363.** Mr. UDALL submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 383, line 8, insert “the Administrator of the Environmental Protection Agency, the Secretary of State,” before “the Secretary”.

On page 383, line 12, strike “national and” and insert “environmental, public health, climate, national, and”.

On page 383, line 25, strike “and”.

On page 384, line 23, strike the period and insert “; and”.

On page 384, between lines 23 and 24, insert the following:

(C) an analysis of the environmental, economic, and public health risks with respect to the proposed infrastructure, including an analysis of—

(i) the climate impacts of the proposed infrastructure during each of the 20- and 50-year periods beginning on the date on which the proposed infrastructure is constructed;

(ii) the environmental and public health impacts (including any cumulative impacts) of the proposed infrastructure on communities in the vicinity of the proposed infrastructure;

(iii) the impacts of the proposed infrastructure on contributions to ocean plastic waste;

(iv) any economic risks associated with the proposed infrastructure if global temperature increases were to be limited to 1.5 degree Celsius; and

(v) which geographical areas would be using the products produced from the proposed infrastructure.

**SA 1364.** Mr. UDALL submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### TITLE IV—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986

##### SEC. 4001. SHORT TITLE.

This title may be cited as the “Clean Energy Victory Bond Act of 2020”.

##### SEC. 4002. FINDINGS.

Congress finds the following:

(1) Potential exists for increasing clean and renewable energy production and energy efficiency installation in the United States.

(2) Other nations, including China and Germany, are ahead of the United States in manufacturing and deploying various clean energy technologies, even though many of these technologies were invented in the United States.

(3) Climate change represents an existential threat to the safety, security, and economy of the United States. Rapid and robust deployment of clean energy will reduce greenhouse gas emissions and mitigate the effects of climate change on American society.

(4) Many segments of the American public want to take charge of efforts to combat the

effects of climate change and practice responsible consumer behavior.

(5) The Office of Energy Efficiency and Renewable Energy of the Department of Energy (referred to in this section as the “EERE”) estimates that taxpayer investment of \$12,000,000,000 into the EERE research and development portfolio has already yielded an estimated net economic benefit to the United States of more than \$230,000,000,000, with an overall annual return on investment of more than 20 percent.

(6) Investments in renewable energy and energy efficiency projects in the United States create green jobs throughout the Nation. New and innovative jobs could be created through expanded government support for clean energy and energy efficiency.

(7) As Americans choose energy efficiency and clean energy and transportation, it reduces our dependence on foreign oil and improves our energy security.

(8) Bonds are a low-cost method for encouraging clean energy, as they do not require direct budget allocations or expenditures. The projects supported through Clean Energy Victory Bonds will create jobs and business revenues that will increase Federal tax revenues, while simultaneously reducing nationwide health and environmental costs incurred by the Federal Government.

(9) Bonds are voluntary measures that allow Americans to contribute financially in whatever amount is available to them.

(10) During World War II, over 80 percent of American households purchased Victory Bonds to support the war effort, raising over \$185,000,000,000, or over \$2,000,000,000,000 in today's dollars.

##### SEC. 4003. DEFINITIONS.

For purposes of this title:

(1) CLEAN ENERGY PROJECT.—The term “clean energy project” means a technology that provides—

(A) performance-based energy efficiency improvements; or

(B) clean energy improvements, including—

(i) electricity generated from solar, wind, geothermal, small-scale hydropower, and hydrokinetic energy sources;

(ii) fuel cells using non-fossil fuel sources;

(iii) advanced storage technologies;

(iv) next generation biofuels from sustainable non-food feedstocks; and

(v) electric vehicle infrastructure.

(2) SECRETARY.—The term “Secretary” means the Secretary of the Treasury or the Secretary's delegate.

##### SEC. 4004. CLEAN ENERGY VICTORY BONDS.

(a) IN GENERAL.—Not later than 6 months after the date of the enactment of this Act, the Secretary, in consultation with the Secretary of Energy and the Secretary of Defense, shall issue bonds to be known as “Clean Energy Victory Bonds”, the proceeds from which shall be used to carry out the purposes described in subsection (c) of section 9512 of the Internal Revenue Code of 1986 (as added by section 4005).

(b) SAVINGS BOND.—Any Clean Energy Victory Bond issued under this section shall be issued by the Secretary—

(1) as a savings bond of series EE, or as administered by the Bureau of the Fiscal Service of the Department of the Treasury, in a manner consistent with the provisions of section 3105 of title 31, United States Code; and

(2) in denominations of \$25 and such other amounts as are determined appropriate by the Secretary, and shall mature within such periods as determined by the Secretary.

(c) AMOUNT OF CLEAN ENERGY VICTORY BONDS.—The aggregate face amount of the Clean Energy Victory Bonds issued annually under this section shall be not greater than \$50,000,000,000.

(d) INTEREST.—Clean Energy Victory Bonds shall bear interest at the rate the Secretary sets for Savings Bonds of Series EE and Series I, plus a rate of return determined by the Secretary which is based on the valuation of—

(1) savings achieved through reduced energy spending by the Federal Government resulting from clean energy projects funded from the proceeds of such bonds; and

(2) interest collected on loans financed or guaranteed from the proceeds of such bonds.

(e) FULL FAITH AND CREDIT.—Payment of interest and principal with respect to any Clean Energy Victory Bond issued under this section shall be made from the general fund of the Treasury of the United States and shall be backed by the full faith and credit of the United States.

(f) PROMOTION.—

(1) IN GENERAL.—The Secretary shall take such actions, independently and in conjunction with financial institutions offering Clean Energy Victory Bonds, to promote the purchase of Clean Energy Victory Bonds, including campaigns describing the financial and social benefits of purchasing Clean Energy Victory Bonds.

(2) PROMOTIONAL ACTIVITIES.—For purposes of paragraph (1), promotional activities may include advertisements, pamphlets, or other promotional materials—

(A) in periodicals;

(B) on billboards and other outdoor venues;

(C) on television;

(D) on radio;

(E) on the internet;

(F) within financial institutions; or

(G) any other venues or outlets the Secretary may identify.

##### SEC. 4005. CLEAN ENERGY VICTORY BONDS TRUST FUND.

(a) IN GENERAL.—Subchapter A of chapter 98 of the Internal Revenue Code of 1986 is amended by adding at the end the following new section:

##### “SEC. 9512. CLEAN ENERGY VICTORY BONDS TRUST FUND.

“(a) CREATION OF TRUST FUND.—There is established in the Treasury of the United States a trust fund to be known as the ‘Clean Energy Victory Bonds Trust Fund’, consisting of such amounts as may be apportioned or credited to such Trust Fund as provided in this section or section 9602(b).

“(b) TRANSFERS TO TRUST FUND.—There are hereby appropriated to the Trust Fund—

“(1) amounts equivalent to revenue from the issuance of Clean Energy Victory Bonds under section 4 of the Clean Energy Victory Bond Act of 2020, and

“(2) any gifts or bequests made to the Trust Fund which are accepted by the Secretary for the benefit of such Fund or any activity financed through such Fund.

“(c) EXPENDITURES FROM TRUST FUND.—Amounts in the Trust Fund shall be available, without further appropriation, to finance clean energy projects (as defined in section 3 of the Clean Energy Victory Bond Act of 2020) at the Federal, State, and local level, which may include—

“(1) providing additional support to existing Federal financing programs available to States for energy efficiency upgrades and clean energy deployment,

“(2) providing funding for clean energy investments by all Federal agencies,

“(3) providing funding for electric grid enhancements and connections that enable clean energy deployment,

“(4) providing funding to renovate existing inefficient buildings or building new energy efficient buildings,

“(5) providing tax incentives and tax credits for clean energy technologies,

“(6) providing funding for new innovation research, including ARPA-E, public competitions similar to those designed by the X

Prize Foundation, grants provided through the Office of Energy Efficiency and Renewable Energy of the Department of Energy, or other mechanisms to fund revolutionary clean energy technology.

“(7) providing additional support to existing Federal, State, and local grant programs that finance clean energy projects, and

“(8) providing funding for zero-emission vehicle infrastructure and manufacturing.”.

(b) CLERICAL AMENDMENT.—The table of sections for subchapter A of chapter 98 of such Code is amended by adding at the end the following new item:

“Sec. 9512. Clean Energy Victory Bonds Trust Fund.”.

**SA 1365.** Mr. UDALL submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title II, add the following:

**Subtitle D—Miscellaneous**

**SEC. 24. CODIFICATION OF FINAL RULE RELATING TO WASTE PREVENTION.**

The final rule of the Bureau of Land Management entitled “Waste Prevention, Production Subject to Royalties, and Resource Conservation” (81 Fed. Reg. 83008 (November 18, 2016)) shall have the force and effect of law.

**SA 1366.** Mr. UDALL (for himself, Mr. HEINRICH, Mr. BENNET, Ms. HARRIS, Mr. MARKEY, and Ms. STABENOW) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. . HARDROCK MINING AND RECLAMATION.**

(a) DEFINITIONS.—In this section:

(1) ABANDONED HARDROCK MINE STATE.—The term “abandoned hardrock mine State” means each of the States of Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

(2) FEDERAL LAND.—The term “Federal land” means any land and any interest in land that is—

(A) owned by the United States; and

(B) open to location of mining claims under the general mining laws.

(3) FUND.—The term “Fund” means the Hardrock Minerals Reclamation Fund established by subsection (c)(1).

(4) INDIAN LAND.—The term “Indian land” means land that is—

(A) held in trust for the benefit of an Indian tribe or member of an Indian tribe; or

(B) held by an Indian tribe or member of an Indian tribe, subject to a restriction by the United States against alienation.

(5) INDIAN TRIBE.—The term “Indian tribe” has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(6) HARDROCK MINERAL.—The term “hardrock mineral” has the meaning given the term “locatable mineral” except that—

(A) legal and beneficial title to the mineral need not be held by the United States; and

(B) paragraph (7)(B) does not apply to this paragraph.

(7) LOCATABLE MINERAL.—

(A) IN GENERAL.—The term “locatable mineral” means any mineral—

(i) the legal and beneficial title to which remains in the United States; and

(ii) that is not subject to disposition under—

(I) the Mineral Leasing Act (30 U.S.C. 181 et seq.);

(II) the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.);

(III) the Act of July 31, 1947 (commonly known as the “Materials Act of 1947”) (30 U.S.C. 601 et seq.); or

(IV) the Act of August 7, 1947 (commonly known as the “Mineral Leasing Act for Acquired Lands”) (30 U.S.C. 351 et seq.).

(B) EXCLUSIONS.—The term “locatable mineral” does not include any mineral that is—

(i) subject to a restriction against alienation imposed by the United States; and

(ii) held in trust by the United States for, or owned by, any Indian tribe or member of an Indian tribe, as defined in section 2 of the Indian Mineral Development Act of 1982 (25 U.S.C. 2101).

(8) SECRETARY.—The term “Secretary” means the Secretary of the Interior.

(b) ROYALTY.—

(1) IN GENERAL.—Subject to paragraphs (3) and (4), production of all locatable minerals from any mining claim located under the general mining laws shall be subject to a royalty established by the Secretary by regulation of not less than 5 percent, and not more than 8 percent, of the gross income from mining for production of all locatable minerals.

(2) ROYALTY RATE.—The regulation shall establish a reasonable royalty rate for each locatable mineral subject to a royalty under this subsection that may vary based on the locatable mineral concerned.

(3) NO ROYALTY FOR FEDERAL LAND SUBJECT TO EXISTING PERMIT.—No royalty under paragraph (1) shall be required for production on Federal land that—

(A) is subject to an approved plan of operations or an operations permit on the date of the enactment of this Act; and

(B) produces valuable locatable minerals in commercial quantities on the date of enactment of this Act.

(4) ROYALTY RELIEF.—

(A) IN GENERAL.—Subject to subparagraph (B), in order to promote the greatest ultimate recovery pursuant to a mining permit or a plan of operations under which production in commercial quantities has occurred and in the interest of conservation of natural resources, the Secretary may reduce any royalty otherwise required for all or part of a mining operation under paragraph (1), on a showing by clear and convincing evidence by the person conducting mineral activities under the operations or mining permit or plan of operations that, without the reduction in royalty, production would not occur.

(B) EFFECTIVE DATE.—Any reduction in a royalty provided for by this paragraph shall not be effective until 60 days after the date on which the Secretary—

(i) publishes public notice of the royalty reduction; and

(ii) submits to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives notice and a statement of the reasons for granting the royalty reduction.

(5) FEDERAL LAND NOT SUBJECT TO EXISTING OPERATIONS PERMIT.—Production from any Federal land not specifically approved for mineral extraction under a plan of operations or an operations permit in existence on the date of enactment of this Act shall be subject to the royalty described in paragraph (1).

(6) DEPOSIT.—Amounts received by the United States as royalties under this subsection shall be deposited in the Fund.

(c) HARDROCK MINERALS RECLAMATION FUND.—

(1) ESTABLISHMENT.—There is established in the Treasury of the United States a separate account, to be known as the “Hardrock Minerals Reclamation Fund”, consisting of—

(A) any amounts collected under subsection (b);

(B) any amounts collected under subsection (d); and

(C) any income on investments under paragraph (2).

(2) INVESTMENT.—

(A) IN GENERAL.—The Secretary shall notify the Secretary of the Treasury of any portion of the Fund that the Secretary determines is not required to meet current withdrawals.

(B) ELIGIBLE INVESTMENTS.—The Secretary of the Treasury shall invest portions of the Fund identified under subparagraph (A) in public debt securities with maturities suitable for the needs of the Fund.

(3) INTEREST.—Investments in public debt securities shall bear interest at rates determined by the Secretary of the Treasury, taking into consideration current market yields on outstanding marketplace obligations of the United States of comparable maturity.

(4) ADMINISTRATION.—The Fund shall be administered by the Secretary, acting through the Director of the Office of Surface Mining Reclamation and Enforcement.

(5) EXPENDITURES.—Subject to paragraph (7), amounts in the Fund may, without fiscal year limitation and without further appropriation—

(A) be expended by the Secretary for the purposes described in paragraph (7);

(B) be transferred by the Secretary to the Director of the Bureau of Land Management, the Chief of the Forest Service, the Director of the National Park Service, the Director of the United States Fish and Wildlife Service, or the head of any other Federal agency, that develops, implements, and has the ability to carry out all or a significant portion of a reclamation program under this subsection; or

(C) be transferred by the Secretary to an Indian tribe or a State with an approved reclamation program, as provided in paragraph (6).

(6) STATE AND TRIBAL RECLAMATION PROGRAMS.—

(A) IN GENERAL.—Each State having within the borders of the State, or Indian tribe having within the borders of the reservation of the Indian tribe, mined land that is eligible for reclamation under this subsection may submit to the Secretary a reclamation program for the land.

(B) APPROVAL.—If the Secretary determines that a State or Indian tribe has developed and submitted a program for reclamation of abandoned mines consistent with the priorities established under paragraph (7)(C) and has the ability and necessary State or tribal legislation to implement this subsection, the Secretary shall—

(i) approve the program; and

(ii) grant to the State or Indian tribe the exclusive responsibility and authority to implement the approved program.

(C) WITHDRAWAL OF APPROVAL.—The Secretary shall withdraw the approval and authorization if the Secretary determines that the State or tribal program is not in compliance with procedures, guidelines, and requirements established by the Secretary.

(D) APPROVAL OF EXISTING PROGRAMS.—Subject to subparagraph (C), any State program in an abandoned hardrock mine State or tribal program for reclamation of abandoned mines approved under title IV of the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1231 et seq.) before the date of enactment of this Act and in good

standing with the Secretary as of that date shall be considered approved under this subsection.

(7) USE AND OBJECTIVES OF THE FUND.—

(A) USE.—

(i) IN GENERAL.—The Secretary may, without fiscal year limitation and without further appropriation, use amounts in the Fund for the reclamation and restoration of land and water resources adversely affected by past hardrock minerals and mining and related activities in abandoned hardrock mine States and on Indian land located within the exterior boundaries of abandoned hardrock mine States, including the conduct of activities—

(I) to protect public health and safety;

(II) to prevent, abate, treat, and control water pollution created by abandoned mine drainage, including activities conducted in watersheds;

(III) to reclaim and restore abandoned surface and underground mined areas;

(IV) to reclaim and restore abandoned milling and processing areas;

(V) to backfill, seal, or otherwise control abandoned underground mine entries;

(VI) to revegetate land adversely affected by past mining activities—

(aa) to prevent erosion and sedimentation; and

(bb) for any other reclamation purpose;

(VII) to control surface subsidence due to abandoned underground mines; and

(VIII) to enhance fish and wildlife habitat.

(ii) DETERMINATION.—Before expending amounts in the Fund for the purposes described in clause (i), the Secretary shall make a determination that there is no continuing reclamation responsibility of the claim holder, operator, or other person who abandoned the site before completion of the required reclamation under Federal or State law.

(B) ALLOCATION.—Of the amounts deposited in the Fund each fiscal year—

(i) 20 percent shall be allocated by the Secretary for expenditure by the Secretary or, if a State or Indian tribe has an approved program pursuant to paragraph (6), by the State or Indian tribe, in the States in which, or on Indian land on which, hardrock minerals are produced, based on a formula reflecting existing production in the State or on the land of the Indian tribe;

(ii) 30 percent shall be allocated by the Secretary for expenditure by the Secretary or, if a State or Indian tribe has an approved program pursuant to paragraph (6), by the State or Indian tribe, in the States and on Indian land using a formula based on the quantity of hardrock minerals historically produced in the State or from the Indian land before the date of enactment of this Act;

(iii) 25 percent shall be allocated by the Secretary for expenditure on Federal land;

(iv) 10 percent shall be available to the Secretary for grants under subparagraph (E);

(v) 10 percent shall be available to the Secretary for grants under subparagraph (F); and

(vi) 5 percent shall be available for administrative expenses of the United States, Indian tribes, and the States to accomplish the purposes of this subsection.

(C) PRIORITIES.—

(i) IN GENERAL.—Subject to clause (ii), expenditures from the Fund shall be based on the following priorities:

(I) The conduct of activities to protect public health and safety from the adverse effects of past hardrock mineral mining activities, including activities addressing surface water and groundwater contaminants.

(II) The conduct of activities to restore land, water, and fish and wildlife resources degraded by the adverse effects of past

hardrock mineral mining activities, including restoration activities in watershed areas.

(ii) MULTIPLE PRIORITIES.—In complying with the priorities established under this subparagraph, funds may be expended for reclamation activities under clause (i)(II) before the completion of all reclamation projects under clause (i)(I) if the expenditure of the funds for reclamation activities under clause (i)(II) is made in conjunction with reclamation activities under clause (i)(I).

(iii) MINIMUM EXPENDITURE.—Notwithstanding clauses (i) and (ii), not less than 25 percent of the expenditures by the Secretary on Federal lands for any year shall be for the purposes described in clause (i)(II).

(D) ELIGIBLE LAND AND WATER.—

(i) IN GENERAL.—Amounts may be expended for reclamation activities under this paragraph only with respect to land or water resources if the land or water resources have been—

(I) affected by hardrock mineral mining activities; and

(II) abandoned or left in an inadequate reclamation status.

(ii) SPECIFIC SITES AND AREAS NOT ELIGIBLE.—Section 411(d) of the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1240a(d)) shall apply to expenditures from the Fund.

(iii) INVENTORY.—

(I) IN GENERAL.—The Secretary shall—

(aa) prepare and maintain a publicly available inventory of abandoned hardrock minerals mines on Federal land, State land, other publicly owned land, private land, and any abandoned mine on Indian land that may be eligible for expenditures under this paragraph; and

(bb) submit to Congress an annual report that describes the progress in reclaiming the sites listed on the inventory.

(II) MAXIMUM EXPENDITURE.—The Secretary shall expend not more than \$5,000,000 to carry out the inventory required by this clause.

(E) GRANTS TO CERTAIN STATES AND INDIAN TRIBES.—

(i) IN GENERAL.—The Secretary shall use amounts made available under subparagraph (B)(IV) to make grants to States (other than abandoned hardrock mine States) and Indian tribes to carry out reclamation and restoration of land and water resources adversely affected by past hardrock minerals and mining activities, including the conduct of activities described in subparagraph (A)(i).

(ii) DETERMINATION.—Before awarding a grant under this subparagraph, the Secretary shall make a determination that there is no continuing reclamation responsibility of any person who abandoned the site before completion of required reclamation under Federal or State law.

(iii) CRITERIA.—The Secretary shall establish by regulation the procedures and criteria for awarding grants under this subparagraph, which shall include—

(I) consistency with the priorities established under subparagraph (C)(i); and

(II) priority for those projects for which Federal funding is not available under other laws or programs.

(F) GRANTS TO PUBLIC ENTITIES AND NON-PROFIT ORGANIZATIONS.—The Secretary shall use amounts made available under subparagraph (B)(v) to make grants to public entities (including State fish and game agencies and local governments) and nonprofit organizations (based on criteria established by the Secretary by regulation) to carry out activities that support collaborative restoration projects to improve fish and wildlife habitat affected by past hardrock minerals and mining activities, including activities that—

(i) improve water quality and quantity;

(ii) restore watersheds in which historic mining dewatered or otherwise fragmented stream habitats;

(iii) restore instream habitat conditions necessary to support aquatic species;

(iv) restore vegetative cover and streamside areas to control erosion and improve conditions for fish and wildlife;

(v) control and remove noxious weeds and invasive species associated with historic mining disturbances that affect fish and wildlife;

(vi) restore fish and wildlife habitat in cases in which previous hardrock minerals and mining activity limits fish and wildlife productivity;

(vii) protect and restore fish and wildlife habitat in areas affected by historic minerals and mining activity; and

(viii) mitigate impacts to watersheds affected by past hardrock minerals and mining activities.

(G) RESPONSE OR REMOVAL ACTIONS.—

(i) IN GENERAL.—Reclamation and restoration activities conducted under this paragraph that constitute a removal or remedial action under section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601) shall be conducted only with the concurrence of the Administrator of the Environmental Protection Agency.

(ii) MEMORANDUM OF UNDERSTANDING.—The Secretary and the Administrator of the Environmental Protection Agency shall enter into a memorandum of understanding to establish procedures for consultation, concurrence, training, the exchange of technical expertise, and the conduct of joint activities, as appropriate, that provide assurances that reclamation or restoration activities under this paragraph shall not be conducted in a manner that—

(I) increases the costs or likelihood of removal or remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.); or

(II) to the maximum extent practicable, avoids oversight by multiple agencies.

(d) ABANDONED MINE LAND RECLAMATION FEE.—

(1) IMPOSITION OF FEE.—Each operator of a hardrock minerals mining operation shall pay to the Secretary, for deposit in the Fund, a reclamation fee in an amount established by the Secretary by regulation of not less than 1 percent, and not more than 3 percent, of the value of the production from the hardrock minerals mining operation for each calendar year.

(2) VALUE OF PRODUCTION.—For purposes of this subsection, the Secretary shall determine the value of production in the same manner as provided under subsection (b)(1).

(3) PAYMENT DEADLINE.—The reclamation fee shall be paid not later than 60 days after the end of each calendar year beginning with the first calendar year occurring after the date of enactment of this Act.

(4) DEPOSIT OF REVENUES.—Amounts received by the Secretary under paragraph (1) shall be deposited into the Fund.

(5) EFFECT.—Nothing in this subsection requires a reduction in, or otherwise affects, any similar fee required under any law (including regulations) of any State.

**SA 1367.** Mrs. LOEFFLER submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle H of title I, add the following:

**SEC. 18. OFFICE OF ARTIFICIAL INTELLIGENCE AND TECHNOLOGY.**

(a) IN GENERAL.—The Department of Energy Organization Act is amended by inserting after section 215 (42 U.S.C. 7144b) the following:

**“SEC. 216. OFFICE OF ARTIFICIAL INTELLIGENCE AND TECHNOLOGY.**

“(a) ESTABLISHMENT.—There is established within the Department an Office of Artificial Intelligence and Technology (referred to in this section as the ‘Office’).”

“(b) MISSION.—The mission of the Office shall be to scale and synchronize the development and impact of artificial intelligence across the Department.”

“(c) DIRECTOR.—

“(1) IN GENERAL.—The Office shall be headed by a Director, who shall be appointed by the Secretary.”

“(2) DUTIES.—The Director of the Office shall—

“(A) carry out and administer the mission of the Office; and

“(B) advise the Secretary with respect to accelerating the delivery of artificial intelligence-enabled capabilities and supporting United States leadership in artificial intelligence.”

“(3) QUALIFICATIONS.—The Director of the Office shall be an individual who, by reason of professional background and experience, is specially qualified to advise the Secretary on matters pertaining to artificial intelligence.”

(b) CONFORMING AMENDMENT.—The table of contents for the Department of Energy Organization Act (Public Law 95–91; 91 Stat. 565) is amended by inserting after the item relating to section 215 the following:

“Sec. 216. Office of Artificial Intelligence and Technology.”

**SA 1368.** Ms. STABENOW (for herself, Mr. BOOZMAN, Ms. BALDWIN, and Mr. CASSIDY) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

In section 1203, in the heading of subsection (e), strike “TO INCLUDE THERMAL ENERGY”.

In section 1203(e)(1), strike subparagraph (A) and insert the following:

(A) in subsection (b)(2)—

(i) by striking “generated” and inserting “produced”;

(ii) by striking “The term” and inserting the following:

“(A) IN GENERAL.—The term”; and

(iii) by adding at the end the following:

“(B) EXCLUSION.—The term ‘renewable energy’ does not include electric energy generated from municipal solid waste that includes—

“(i) paper that is commonly recycled and has been segregated from other solid waste; or

“(ii) solid waste collected as part of a system that does not provide for the separate collection of paper that is commonly recycled from residential solid waste (as such terms are defined in section 246.101 of title 40, Code of Federal Regulations (as in effect on the date of enactment of the American Energy Innovation Act of 2020)).”; and

**SA 1369.** Ms. STABENOW (for herself and Ms. HIRONO) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes;

which was ordered to lie on the table; as follows:

At the appropriate place in title I, insert the following:

**SEC. 1. STATE ENERGY CONSERVATION PLANS.**

Section 362(d) of the Energy Policy and Conservation Act (42 U.S.C. 6322(d)) is amended by striking paragraph (3) and inserting the following:

“(3) programs to increase transportation energy efficiency and help achieve net-zero carbon emissions in the transportation sector by 2050, including programs to accelerate the use of alternative transportation fuels for and electrification of State government vehicles, fleet vehicles, taxis and ridesharing services, mass transit, school buses, and privately owned passenger and medium- and heavy-duty vehicles;”.

**SA 1370.** Ms. STABENOW (for herself and Ms. HIRONO) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title I, insert the following:

**SEC. 1. STATE ENERGY CONSERVATION PLANS.**

Section 362(d) of the Energy Policy and Conservation Act (42 U.S.C. 6322(d)) is amended by striking paragraph (3) and inserting the following:

“(3) programs to increase transportation energy efficiency, including programs to help achieve net-zero carbon emissions in the transportation sector by 2050 and accelerate the use of alternative transportation fuels for and electrification of State government vehicles, fleet vehicles, taxis and ridesharing services, mass transit, school buses, and privately owned passenger and medium- and heavy-duty vehicles;”.

**SA 1371.** Mr. DURBIN submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. . CLIMATE CHANGE RESILIENCY FUND FOR AMERICA.**

(a) DEFINITIONS.—Except as otherwise provided, in this section:

(1) COMMISSION.—The term “Commission” means the Climate Change Advisory Commission established by subsection (b)(1)(A).

(2) FUND.—The term “Fund” means the Climate Change Resiliency Fund established by subsection (c)(1)(A).

(3) QUALIFIED CLIMATE CHANGE ADAPTATION PURPOSE.—

(A) IN GENERAL.—The term “qualified climate change adaptation purpose” means an objective with a demonstrated intent to reduce the economic, social, and environmental impact of the adverse effects of climate change.

(B) INCLUSIONS.—The term “qualified climate change adaptation purpose” includes—

(i) infrastructure resiliency and mitigation;

(ii) improved disaster response; and

(iii) ecosystem protection.

(4) SECRETARY.—The term “Secretary” means the Secretary of Commerce.

(b) CLIMATE CHANGE ADVISORY COMMISSION.—

(1) ESTABLISHMENT OF CLIMATE CHANGE ADVISORY COMMISSION.—

(A) IN GENERAL.—There is established a commission to be known as the “Climate Change Advisory Commission”.

(B) MEMBERSHIP.—The Commission shall be composed of 11 members—

(i) who shall be selected from the public and private sectors and institutions of higher education; and

(ii) of whom—

(I) 3 shall be appointed by the President, in consultation with the Interagency Climate Change Adaptation Task Force;

(II) 2 shall be appointed by the Speaker of the House of Representatives;

(III) 2 shall be appointed by the minority leader of the House of Representatives;

(IV) 2 shall be appointed by the majority leader of the Senate; and

(V) 2 shall be appointed by the minority leader of the Senate.

(C) TERMS.—Each member of the Commission shall be appointed for the life of the Commission.

(D) INITIAL APPOINTMENTS.—Each member of the Commission shall be appointed not later than 90 days after the date of enactment of this Act.

(E) VACANCIES.—A vacancy on the Commission—

(i) shall not affect the powers of the Commission; and

(ii) shall be filled in the manner in which the original appointment was made.

(F) INITIAL MEETING.—Not later than 30 days after the date on which all members of the Commission have been appointed, the Commission shall hold the initial meeting of the Commission.

(G) MEETINGS.—The Commission shall meet at the call of the Chairperson.

(H) QUORUM.—A majority of the members of the Commission shall constitute a quorum, but a lesser number of members may hold hearings.

(I) CHAIRPERSON AND VICE CHAIRPERSON.—The Commission shall select a Chairperson and Vice Chairperson from among the members of the Commission.

(2) DUTIES.—The Commission shall—

(A) establish recommendations, frameworks, and guidelines for a Federal investment program funded by revenue from climate change obligations issued under subsection (d)(1) for States, municipalities, and other public entities, including utility districts, transit authorities, and multistate regulatory bodies that—

(i) improves and adapts energy, transportation, water, and general infrastructure impacted or expected to be impacted due to climate variability; and

(ii) integrates best available science, data, standards, models, and trends that improve the resiliency of infrastructure systems described in clause (i); and

(B) identify categories of the most cost-effective investments and projects that emphasize multiple benefits to commerce, human health, and ecosystems.

(3) COMMISSION PERSONNEL MATTERS.—

(A) COMPENSATION OF MEMBERS.—

(i) NON-FEDERAL EMPLOYEES.—A member of the Commission who is not an officer or employee of the Federal Government shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code, for each day (including travel time) during which the member is engaged in the performance of the duties of the Commission.

(ii) FEDERAL EMPLOYEES.—A member of the Commission who is an officer or employee of the Federal Government shall serve without



compensation in addition to the compensation received for the services of the member as an officer or employee of the Federal Government.

(B) TRAVEL EXPENSES.—A member of the Commission shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for an employee of an agency under subchapter I of chapter 57 of title 5, United States Code, while away from the home or regular place of business of the member in the performance of the duties of the Commission.

(C) STAFF.—

(i) IN GENERAL.—The Chairperson of the Commission may, without regard to the civil service laws (including regulations), appoint and terminate such personnel as are necessary to enable the Commission to perform the duties of the Commission.

(ii) COMPENSATION.—

(I) IN GENERAL.—Except as provided in subclause (II), the Chairperson of the Commission may fix the compensation of personnel without regard to the provisions of chapter 51 and subchapter III of chapter 53 of title 5, United States Code, relating to classification of positions and General Schedule pay rates.

(II) MAXIMUM RATE OF PAY.—The rate of pay for personnel shall not exceed the rate payable for level V of the Executive Schedule under section 5316 of title 5, United States Code.

(4) FUNDING.—The Commission shall use amounts in the Fund to pay for all administrative expenses of the Commission.

(5) TERMINATION.—The Commission shall terminate on such date as the Commission determines after the Commission carries out the duties of the Commission under paragraph (2).

(C) CLIMATE CHANGE RESILIENCY FUND.—

(1) ESTABLISHMENT.—

(A) IN GENERAL.—There is established within the Department of Commerce the “Climate Change Resiliency Fund”.

(B) RESPONSIBILITY OF SECRETARY.—The Secretary shall take such action as the Secretary determines to be necessary to assist in implementing the establishment of the Fund in accordance with this section.

(2) CLIMATE CHANGE ADAPTATION PROJECTS.—The Secretary, in consultation with the Commission, shall carry out a program to provide funds to eligible applicants to carry out projects for a qualified climate change adaptation purpose.

(3) ELIGIBLE ENTITIES.—An entity eligible to participate in the program under paragraph (2) shall include—

(A) a Federal agency;

(B) a State or a group of States;

(C) a unit of local government or a group of local governments;

(D) a utility district;

(E) a tribal government or a consortium of tribal governments;

(F) a State or regional transit agency or a group of State or regional transit agencies;

(G) a nonprofit organization;

(H) a special purpose district or public authority, including a port authority; and

(I) any other entity, as determined by the Secretary.

(4) APPLICATION.—An eligible entity shall submit to the Secretary an application for a project for a qualified climate change adaptation purpose at such time, in such manner, and containing such information as the Secretary may require, including data relating to any benefits, such as economic impact or improvements to public health, that the project is expected to provide.

(5) SELECTION.—The Secretary shall select projects from eligible entities to receive funds under this subsection based on criteria and guidelines determined and published by the Commission.

(6) NON-FEDERAL FUNDING REQUIREMENT.—In order to receive funds under this section, an eligible entity shall provide funds for the project in an amount that is equal to not less than 25 percent of the amount of funds provided under this subsection.

(7) MAINTENANCE OF EFFORT.—All amounts deposited in the Fund in accordance with subsection (d)(1)(A) shall be used only to fund new projects in accordance with this section.

(8) APPLICABILITY OF FEDERAL LAW.—Nothing in this section waives the requirements of any Federal law (including regulations) that would otherwise apply to a qualified climate change project that receives funds under this subsection.

(9) COMPLIANCE WITH DAVIS-BACON ACT.—

(A) IN GENERAL.—All laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Fund pursuant to this subsection shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of part A of title 40, United States Code.

(B) LABOR STANDARDS.—With respect to the labor standards specified in this paragraph, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.

(10) FUNDING.—The Secretary shall use funds made available to the Secretary and not otherwise obligated to carry out the program under paragraph (2).

(d) REVENUE.—

(1) CLIMATE CHANGE OBLIGATIONS.—

(A) IN GENERAL.—Not later than 6 months after the date of the enactment of this Act, the Secretary of the Treasury or the Secretary's delegate (referred to in this subsection as the “Secretary”) shall issue obligations under chapter 31 of title 31, United States Code (referred to in this subsection as “climate change obligations”), the proceeds from which shall be deposited in the Fund.

(B) FULL FAITH AND CREDIT.—Payment of interest and principal with respect to any climate change obligation issued under this paragraph shall be made from the general fund of the Treasury of the United States and shall be backed by the full faith and credit of the United States.

(C) EXEMPTION FROM LOCAL TAXATION.—All climate change obligations issued by the Secretary, and the interest on or credits with respect to such obligations, shall not be subject to taxation by any State, county, municipality, or local taxing authority.

(D) AMOUNT OF CLIMATE CHANGE OBLIGATIONS.—

(i) IN GENERAL.—Except as provided in clause (ii), the aggregate face amount of the climate change obligations issued annually under this paragraph shall be \$200,000,000.

(ii) ADDITIONAL OBLIGATIONS.—For any calendar year in which all of the obligations issued pursuant to clause (i) have been purchased, the Secretary may issue additional climate change obligations during such calendar year, provided that the aggregate face amount of such additional obligations does not exceed \$800,000,000.

(E) FUNDING.—The Secretary shall use funds made available to the Secretary and not otherwise obligated to carry out the purposes of this paragraph.

(2) PROMOTION.—

(A) IN GENERAL.—The Secretary shall promote the purchase of climate change obligations through such means as are determined appropriate by the Secretary, with the amount expended for such promotion not to

exceed \$10,000,000 for any fiscal year during the period of fiscal years 2021 through 2025.

(B) DONATED ADVERTISING.—In addition to any advertising paid for with funds made available under subparagraph (C), the Secretary shall solicit and may accept the donation of advertising relating to the sale of climate change obligations.

(C) AUTHORIZATION OF APPROPRIATIONS.—For each fiscal year during the period of fiscal years 2021 through 2025, there is authorized to be appropriated \$10,000,000 to carry out the purposes of this paragraph.

**SA 1372.** Mr. BENNET submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### **TITLE IV—COLORADO OUTDOOR RECREATION**

##### **SEC. 4001. DEFINITION OF STATE.**

In this title, the term “State” means the State of Colorado.

##### **SEC. 4002. DETERMINATION OF BUDGETARY EFFECTS.**

The budgetary effects of this title, for the purpose of complying with the Statutory Pay-As-You-Go Act of 2010, shall be determined by reference to the latest statement titled “Budgetary Effects of PAYGO Legislation” for this title, submitted for printing in the Congressional Record by the Chairman of the House Budget Committee, provided that such statement has been submitted prior to the vote on passage.

#### **Subtitle A—Continental Divide**

##### **SEC. 4101. DEFINITIONS.**

In this subtitle:

(1) COVERED AREA.—The term “covered area” means any area designated as wilderness by the amendments to section 2(a) of the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77) made by section 4102(a).

(2) HISTORIC LANDSCAPE.—The term “Historic Landscape” means the Camp Hale National Historic Landscape designated by section 4107(a).

(3) RECREATION MANAGEMENT AREA.—The term “Recreation Management Area” means the Tenmile Recreation Management Area designated by section 4104(a).

(4) SECRETARY.—The term “Secretary” means the Secretary of Agriculture.

(5) WILDLIFE CONSERVATION AREA.—The term “Wildlife Conservation Area” means, as applicable—

(A) the Porcupine Gulch Wildlife Conservation Area designated by section 4105(a); and

(B) the Williams Fork Mountains Wildlife Conservation Area designated by section 4106(a).

##### **SEC. 4102. COLORADO WILDERNESS ADDITIONS.**

(a) DESIGNATION.—Section 2(a) of the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77) is amended—

(1) in paragraph (18), by striking “1993,” and inserting “1993, and certain Federal land within the White River National Forest that comprises approximately 6,896 acres, as generally depicted as ‘Proposed Ptarmigan Peak Wilderness Additions’ on the map entitled ‘Proposed Ptarmigan Peak Wilderness Additions’ and dated June 24, 2019,”; and

(2) by adding at the end the following:

“(23) HOLY CROSS WILDERNESS ADDITION.—Certain Federal land within the White River National Forest that comprises approximately 3,866 acres, as generally depicted as ‘Proposed Megan Dickie Wilderness Addition’ on the map entitled ‘Holy Cross Wilderness Addition Proposal’ and dated June 24,

2019, which shall be incorporated into, and managed as part of, the Holy Cross Wilderness designated by section 102(a)(5) of Public Law 96-560 (94 Stat. 3266).

“(24) HOOSIER RIDGE WILDERNESS.—Certain Federal land within the White River National Forest that comprises approximately 5,235 acres, as generally depicted as ‘Proposed Hoosier Ridge Wilderness’ on the map entitled ‘Tenmile Proposal’ and dated June 24, 2019, which shall be known as the ‘Hoosier Ridge Wilderness’.

“(25) TENMILE WILDERNESS.—Certain Federal land within the White River National Forest that comprises approximately 7,624 acres, as generally depicted as ‘Proposed Tenmile Wilderness’ on the map entitled ‘Tenmile Proposal’ and dated June 24, 2019, which shall be known as the ‘Tenmile Wilderness’.

“(26) EAGLES NEST WILDERNESS ADDITIONS.—Certain Federal land within the White River National Forest that comprises approximately 9,670 acres, as generally depicted as ‘Proposed Freeman Creek Wilderness Addition’ and ‘Proposed Spraddle Creek Wilderness Addition’ on the map entitled ‘Eagles Nest Wilderness Additions Proposal’ and dated June 24, 2019, which shall be incorporated into, and managed as part of, the Eagles Nest Wilderness designated by Public Law 94-352 (90 Stat. 870).”.

(b) APPLICABLE LAW.—Any reference in the Wilderness Act (16 U.S.C. 1131 et seq.) to the effective date of that Act shall be considered to be a reference to the date of enactment of this Act for purposes of administering a covered area.

(c) FIRE, INSECTS, AND DISEASES.—In accordance with section 4(d)(1) of the Wilderness Act (16 U.S.C. 1133(d)(1)), the Secretary may carry out any activity in a covered area that the Secretary determines to be necessary for the control of fire, insects, and diseases, subject to such terms and conditions as the Secretary determines to be appropriate.

(d) GRAZING.—The grazing of livestock on a covered area, if established before the date of enactment of this Act, shall be permitted to continue subject to such reasonable regulations as are considered to be necessary by the Secretary, in accordance with—

(1) section 4(d)(4) of the Wilderness Act (16 U.S.C. 1133(d)(4)); and

(2) the guidelines set forth in Appendix A of the report of the Committee on Interior and Insular Affairs of the House of Representatives accompanying H.R. 2570 of the 101st Congress (H. Rept. 101-405).

(e) COORDINATION.—For purposes of administering the Federal land designated as wilderness by paragraph (26) of section 2(a) of the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77) (as added by subsection (a)(2)), the Secretary shall, as determined to be appropriate for the protection of watersheds, coordinate the activities of the Secretary in response to fires and flooding events with interested State and local agencies, including operations using aircraft or mechanized equipment.

#### SEC. 4103. WILLIAMS FORK MOUNTAINS WILDERNESS.

(a) DESIGNATION.—In furtherance of the purposes of the Wilderness Act (16 U.S.C. 1131 et seq.), certain Federal land in the White River National Forest in the State, comprising approximately 8,036 acres and generally depicted as “Proposed Williams Fork Mountains Wilderness” on the map entitled “Williams Fork Mountains Proposal” and dated June 24, 2019, is designated as a potential wilderness area.

(b) MANAGEMENT.—Subject to valid existing rights and except as provided in subsection (d), the potential wilderness area designated by subsection (a) shall be managed in accordance with—

(1) the Wilderness Act (16 U.S.C. 1131 et seq.); and

(2) this section.

(c) LIVESTOCK USE OF VACANT ALLOTMENTS.—

(1) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, in accordance with applicable laws (including regulations), the Secretary shall publish a determination regarding whether to authorize livestock grazing or other use by livestock on the vacant allotments known as—

(A) the “Big Hole Allotment”; and

(B) the “Blue Ridge Allotment”.

(2) MODIFICATION OF ALLOTMENTS.—In publishing a determination pursuant to paragraph (1), the Secretary may modify or combine the vacant allotments referred to in that paragraph.

(3) PERMIT OR OTHER AUTHORIZATION.—Not later than 1 year after the date on which a determination of the Secretary to authorize livestock grazing or other use by livestock is published under paragraph (1), if applicable, the Secretary shall grant a permit or other authorization for that livestock grazing or other use in accordance with applicable laws (including regulations).

(d) RANGE IMPROVEMENTS.—

(1) IN GENERAL.—If the Secretary permits livestock grazing or other use by livestock on the potential wilderness area under subsection (c), the Secretary, or a third party authorized by the Secretary, may use any motorized or mechanized transport or equipment for purposes of constructing or rehabilitating such range improvements as are necessary to obtain appropriate livestock management objectives (including habitat and watershed restoration).

(2) TERMINATION OF AUTHORITY.—The authority provided by this subsection terminates on the date that is 2 years after the date on which the Secretary publishes a positive determination under subsection (c)(3).

(e) DESIGNATION AS WILDERNESS.—

(1) DESIGNATION.—The potential wilderness area designated by subsection (a) shall be designated as wilderness, to be known as the “Williams Fork Mountains Wilderness”.

(A) effective not earlier than the date that is 180 days after the date of enactment of this Act; and

(B) on the earliest of—

(i) the date on which the Secretary publishes in the Federal Register a notice that the construction or rehabilitation of range improvements under subsection (d) is complete;

(ii) the date described in subsection (d)(2); and

(iii) the effective date of a determination of the Secretary not to authorize livestock grazing or other use by livestock under subsection (c)(1).

(2) ADMINISTRATION.—Subject to valid existing rights, the Secretary shall manage the Williams Fork Mountains Wilderness in accordance with—

(A) the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77); and

(B) this subtitle.

#### SEC. 4104. TENMILE RECREATION MANAGEMENT AREA.

(a) DESIGNATION.—Subject to valid existing rights, the approximately 17,122 acres of Federal land in the White River National Forest in the State, as generally depicted as “Proposed Tenmile Recreation Management Area” on the map entitled “Tenmile Proposal” and dated June 24, 2019, are designated as the “Tenmile Recreation Management Area”.

(b) PURPOSES.—The purposes of the Recreation Management Area are to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the recreational, scenic, watershed, habitat, and

ecological resources of the Recreation Management Area.

(c) MANAGEMENT.—

(1) IN GENERAL.—The Secretary shall manage the Recreation Management Area—

(A) in a manner that conserves, protects, and enhances—

(i) the purposes of the Recreation Management Area described in subsection (b); and

(ii) recreation opportunities, including mountain biking, hiking, fishing, horseback riding, snowshoeing, climbing, skiing, camping, and hunting; and

(B) in accordance with—

(i) the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1600 et seq.);

(ii) any other applicable laws (including regulations); and

(iii) this section.

(2) USES.—

(A) IN GENERAL.—The Secretary shall only allow such uses of the Recreation Management Area as the Secretary determines would further the purposes described in subsection (b).

(B) VEHICLES.—

(i) IN GENERAL.—Except as provided in clause (iii), the use of motorized vehicles in the Recreation Management Area shall be limited to the roads, vehicle classes, and periods authorized for motorized vehicle use on the date of enactment of this Act.

(ii) NEW OR TEMPORARY ROADS.—Except as provided in clause (iii), no new or temporary road shall be constructed in the Recreation Management Area.

(iii) EXCEPTIONS.—Nothing in clause (i) or (ii) prevents the Secretary from—

(I) rerouting or closing an existing road or trail to protect natural resources from degradation, as the Secretary determines to be appropriate;

(II) authorizing the use of motorized vehicles for administrative purposes or roadside camping;

(III) constructing temporary roads or permitting the use of motorized vehicles to carry out pre- or post-fire watershed protection projects;

(IV) authorizing the use of motorized vehicles to carry out any activity described in subsection (d), (e)(1), or (f); or

(V) responding to an emergency.

(C) COMMERCIAL TIMBER.—

(i) IN GENERAL.—Subject to clause (ii), no project shall be carried out in the Recreation Management Area for the purpose of harvesting commercial timber.

(ii) LIMITATION.—Nothing in clause (i) prevents the Secretary from harvesting or selling a merchantable product that is a byproduct of an activity authorized under this section.

(d) FIRE, INSECTS, AND DISEASES.—The Secretary may carry out any activity, in accordance with applicable laws (including regulations), that the Secretary determines to be necessary to prevent, control, or mitigate fire, insects, or disease in the Recreation Management Area, subject to such terms and conditions as the Secretary determines to be appropriate.

(e) WATER.—

(1) EFFECT ON WATER MANAGEMENT INFRASTRUCTURE.—Nothing in this section affects the construction, repair, reconstruction, replacement, operation, maintenance, or renovation within the Recreation Management Area of—

(A) water management infrastructure in existence on the date of enactment of this Act; or

(B) any future infrastructure necessary for the development or exercise of water rights decreed before the date of enactment of this Act.

(2) **APPLICABLE LAW.**—Section 3(e) of the James Peak Wilderness and Protection Area Act (Public Law 107-216; 116 Stat. 1058) shall apply to the Recreation Management Area.

(f) **REGIONAL TRANSPORTATION PROJECTS.**—Nothing in this section precludes the Secretary from authorizing, in accordance with applicable laws (including regulations), the use or leasing of Federal land within the Recreation Management Area for—

(1) a regional transportation project, including—

(A) highway widening or realignment; and  
(B) construction of multimodal transportation systems; or

(2) any infrastructure, activity, or safety measure associated with the implementation or use of a facility constructed under paragraph (1).

(g) **APPLICABLE LAW.**—Nothing in this section affects the designation of the Federal land within the Recreation Management Area for purposes of—

(1) section 138 of title 23, United States Code; or

(2) section 303 of title 49, United States Code.

(h) **PERMITS.**—Nothing in this section alters or limits—

(1) any permit held by a ski area or other entity; or

(2) the acceptance, review, or implementation of associated activities or facilities proposed or authorized by law or permit outside the boundaries of the Recreation Management Area.

#### **SEC. 4105. PORCUPINE GULCH WILDLIFE CONSERVATION AREA.**

(a) **DESIGNATION.**—Subject to valid existing rights, the approximately 8,287 acres of Federal land located in the White River National Forest, as generally depicted as “Proposed Porcupine Gulch Wildlife Conservation Area” on the map entitled “Porcupine Gulch Wildlife Conservation Area Proposal” and dated June 24, 2019, are designated as the “Porcupine Gulch Wildlife Conservation Area” (referred to in this section as the “Wildlife Conservation Area”).

(b) **PURPOSES.**—The purposes of the Wildlife Conservation Area are—

(1) to conserve and protect a wildlife migration corridor over Interstate 70; and

(2) to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the wildlife, scenic, roadless, watershed, and ecological resources of the Wildlife Conservation Area.

(c) **MANAGEMENT.**—

(1) **IN GENERAL.**—The Secretary shall manage the Wildlife Conservation Area—

(A) in a manner that conserves, protects, and enhances the purposes described in subsection (b); and

(B) in accordance with—

(i) the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1600 et seq.);

(ii) any other applicable laws (including regulations); and  
(iii) this section.

(2) **USES.**—

(A) **IN GENERAL.**—The Secretary shall only allow such uses of the Wildlife Conservation Area as the Secretary determines would further the purposes described in subsection (b).

(B) **RECREATION.**—The Secretary may permit such recreational activities in the Wildlife Conservation Area that the Secretary determines are consistent with the purposes described in subsection (b).

(C) **MOTORIZED VEHICLES AND MECHANIZED TRANSPORT; NEW OR TEMPORARY ROADS.**—

(i) **MOTORIZED VEHICLES AND MECHANIZED TRANSPORT.**—Except as provided in clause (iii), the use of motorized vehicles and mechanized transport in the Wildlife Conservation Area shall be prohibited.

(ii) **NEW OR TEMPORARY ROADS.**—Except as provided in clause (iii) and subsection (e), no new or temporary road shall be constructed within the Wildlife Conservation Area.

(iii) **EXCEPTIONS.**—Nothing in clause (i) or (ii) prevents the Secretary from—

(I) authorizing the use of motorized vehicles or mechanized transport for administrative purposes;

(II) constructing temporary roads or permitting the use of motorized vehicles or mechanized transport to carry out pre- or post-fire watershed protection projects;

(III) authorizing the use of motorized vehicles or mechanized transport to carry out activities described in subsection (d) or (e); or  
(IV) responding to an emergency.

(D) **COMMERCIAL TIMBER.**—

(i) **IN GENERAL.**—Subject to clause (ii), no project shall be carried out in the Wildlife Conservation Area for the purpose of harvesting commercial timber.

(ii) **LIMITATION.**—Nothing in clause (i) prevents the Secretary from harvesting or selling a merchantable product that is a byproduct of an activity authorized under this section.

(d) **FIRE, INSECTS, AND DISEASES.**—The Secretary may carry out any activity, in accordance with applicable laws (including regulations), that the Secretary determines to be necessary to prevent, control, or mitigate fire, insects, or disease in the Wildlife Conservation Area, subject to such terms and conditions as the Secretary determines to be appropriate.

(e) **REGIONAL TRANSPORTATION PROJECTS.**—Nothing in this section or section 4110(e) precludes the Secretary from authorizing, in accordance with applicable laws (including regulations), the use or leasing of Federal land within the Wildlife Conservation Area for—

(1) a regional transportation project, including—

(A) highway widening or realignment; and  
(B) construction of multimodal transportation systems; or

(2) any infrastructure, activity, or safety measure associated with the implementation or use of a facility constructed under paragraph (1).

(f) **APPLICABLE LAW.**—Nothing in this section affects the designation of the Federal land within the Wildlife Conservation Area for purposes of—

(1) section 138 of title 23, United States Code; or

(2) section 303 of title 49, United States Code.

(g) **WATER.**—Section 3(e) of the James Peak Wilderness and Protection Area Act (Public Law 107-216; 116 Stat. 1058) shall apply to the Wildlife Conservation Area.

#### **SEC. 4106. WILLIAMS FORK MOUNTAINS WILDLIFE CONSERVATION AREA.**

(a) **DESIGNATION.**—Subject to valid existing rights, the approximately 3,528 acres of Federal land in the White River National Forest in the State, as generally depicted as “Proposed Williams Fork Mountains Wildlife Conservation Area” on the map entitled “Williams Fork Mountains Proposal” and dated June 24, 2019, are designated as the “Williams Fork Mountains Wildlife Conservation Area” (referred to in this section as the “Wildlife Conservation Area”).

(b) **PURPOSES.**—The purposes of the Wildlife Conservation Area are to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the wildlife, scenic, roadless, watershed, recreational, and ecological resources of the Wildlife Conservation Area.

(c) **MANAGEMENT.**—

(1) **IN GENERAL.**—The Secretary shall manage the Wildlife Conservation Area—

(A) in a manner that conserves, protects, and enhances the purposes described in subsection (b); and

(B) in accordance with—

(i) the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1600 et seq.);

(ii) any other applicable laws (including regulations); and

(iii) this section.

(2) **USES.**—

(A) **IN GENERAL.**—The Secretary shall only allow such uses of the Wildlife Conservation Area as the Secretary determines would further the purposes described in subsection (b).

(B) **MOTORIZED VEHICLES.**—

(i) **IN GENERAL.**—Except as provided in clause (iii), the use of motorized vehicles in the Wildlife Conservation Area shall be limited to designated roads and trails.

(ii) **NEW OR TEMPORARY ROADS.**—Except as provided in clause (iii), no new or temporary road shall be constructed in the Wildlife Conservation Area.

(iii) **EXCEPTIONS.**—Nothing in clause (i) or (ii) prevents the Secretary from—

(I) authorizing the use of motorized vehicles for administrative purposes;

(II) authorizing the use of motorized vehicles to carry out activities described in subsection (d); or

(III) responding to an emergency.

(C) **BICYCLES.**—The use of bicycles in the Wildlife Conservation Area shall be limited to designated roads and trails.

(D) **COMMERCIAL TIMBER.**—

(i) **IN GENERAL.**—Subject to clause (ii), no project shall be carried out in the Wildlife Conservation Area for the purpose of harvesting commercial timber.

(ii) **LIMITATION.**—Nothing in clause (i) prevents the Secretary from harvesting or selling a merchantable product that is a byproduct of an activity authorized under this section.

(E) **GRAZING.**—The laws (including regulations) and policies followed by the Secretary in issuing and administering grazing permits or leases on land under the jurisdiction of the Secretary shall continue to apply with regard to the land in the Wildlife Conservation Area, consistent with the purposes described in subsection (b).

(d) **FIRE, INSECTS, AND DISEASES.**—The Secretary may carry out any activity, in accordance with applicable laws (including regulations), that the Secretary determines to be necessary to prevent, control, or mitigate fire, insects, or disease in the Wildlife Conservation Area, subject to such terms and conditions as the Secretary determines to be appropriate.

(e) **REGIONAL TRANSPORTATION PROJECTS.**—Nothing in this section or section 4110(e) precludes the Secretary from authorizing, in accordance with applicable laws (including regulations), the use or leasing of Federal land within the Wildlife Conservation Area for—

(1) a regional transportation project, including—

(A) highway widening or realignment; and  
(B) construction of multimodal transportation systems; or

(2) any infrastructure, activity, or safety measure associated with the implementation or use of a facility constructed under paragraph (1).

(f) **WATER.**—Section 3(e) of the James Peak Wilderness and Protection Area Act (Public Law 107-216; 116 Stat. 1058) shall apply to the Wildlife Conservation Area.

#### **SEC. 4107. CAMP HALE NATIONAL HISTORIC LANDSCAPE.**

(a) **DESIGNATION.**—Subject to valid existing rights, the approximately 28,676 acres of Federal land in the White River National Forest in the State, as generally depicted as “Proposed Camp Hale National Historic Landscape” on the map entitled “Camp Hale National Historic Landscape Proposal” and

dated June 24, 2019, are designated the “Camp Hale National Historic Landscape”.

(b) **PURPOSES.**—The purposes of the Historic Landscape are—

(1) to provide for—

(A) the interpretation of historic events, activities, structures, and artifacts of the Historic Landscape, including with respect to the role of the Historic Landscape in local, national, and world history;

(B) the historic preservation of the Historic Landscape, consistent with—

(i) the designation of the Historic Landscape as a national historic site; and

(ii) the other purposes of the Historic Landscape;

(C) recreational opportunities, with an emphasis on the activities related to the historic use of the Historic Landscape, including skiing, snowshoeing, snowmobiling, hiking, horseback riding, climbing, other road- and trail-based activities, and other outdoor activities; and

(D) the continued environmental remediation and removal of unexploded ordnance at the Camp Hale Formerly Used Defense Site and the Camp Hale historic cantonment area; and

(2) to conserve, protect, restore, and enhance for the benefit and enjoyment of present and future generations the scenic, watershed, and ecological resources of the Historic Landscape.

(c) **MANAGEMENT.**—

(1) **IN GENERAL.**—The Secretary shall manage the Historic Landscape in accordance with—

(A) the purposes of the Historic Landscape described in subsection (b); and

(B) any other applicable laws (including regulations).

(2) **MANAGEMENT PLAN.**—

(A) **IN GENERAL.**—Not later than 5 years after the date of enactment of this Act, the Secretary shall prepare a management plan for the Historic Landscape.

(B) **CONTENTS.**—The management plan prepared under subparagraph (A) shall include plans for—

(i) improving the interpretation of historic events, activities, structures, and artifacts of the Historic Landscape, including with respect to the role of the Historic Landscape in local, national, and world history;

(ii) conducting historic preservation and veteran outreach and engagement activities;

(iii) managing recreational opportunities, including the use and stewardship of—

(I) the road and trail systems; and

(II) dispersed recreation resources;

(iv) the conservation, protection, restoration, or enhancement of the scenic, watershed, and ecological resources of the Historic Landscape, including conducting the restoration and enhancement project under subsection (d); and

(v) environmental remediation and, consistent with subsection (e)(2), the removal of unexploded ordnance.

(3) **EXPLOSIVE HAZARDS.**—The Secretary shall provide to the Secretary of the Army a notification of any unexploded ordnance (as defined in section 101(e) of title 10, United States Code) that is discovered in the Historic Landscape.

(d) **CAMP HALE RESTORATION AND ENHANCEMENT PROJECT.**—

(1) **IN GENERAL.**—The Secretary shall conduct a restoration and enhancement project in the Historic Landscape—

(A) to improve aquatic, riparian, and wetland conditions in and along the Eagle River and tributaries of the Eagle River;

(B) to maintain or improve recreation and interpretive opportunities and facilities; and

(C) to conserve historic values in the Camp Hale area.

(2) **COORDINATION.**—In carrying out the project described in paragraph (1), the Secretary shall coordinate with—

(A) the United States Army Corps of Engineers;

(B) the Camp Hale-Eagle River Headwaters Collaborative Group;

(C) the National Forest Foundation;

(D) the Colorado Department of Public Health and Environment;

(E) the Colorado State Historic Preservation Office;

(F) units of local government; and

(G) other interested organizations and members of the public.

(e) **ENVIRONMENTAL REMEDIATION.**—

(1) **IN GENERAL.**—The Secretary of the Army shall continue to carry out the projects and activities of the Department of the Army in existence on the date of enactment of this Act relating to cleanup of—

(A) the Camp Hale Formerly Used Defense Site; or

(B) the Camp Hale historic cantonment area.

(2) **REMOVAL OF UNEXPLODED ORDNANCE.**—

(A) **IN GENERAL.**—The Secretary of the Army may remove unexploded ordnance (as defined in section 101(e) of title 10, United States Code) from the Historic Landscape, as the Secretary of the Army determines to be appropriate in accordance with applicable law (including regulations).

(B) **ACTION ON RECEIPT OF NOTICE.**—On receipt from the Secretary of a notification of unexploded ordnance under subsection (c)(3), the Secretary of the Army may remove the unexploded ordnance in accordance with—

(i) the program for environmental restoration of formerly used defense sites under section 2701 of title 10, United States Code;

(ii) the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.); and

(iii) any other applicable provision of law (including regulations).

(3) **EFFECT OF SUBSECTION.**—Nothing in this subsection modifies any obligation in existence on the date of enactment of this Act relating to environmental remediation or removal of any unexploded ordnance located in or around the Camp Hale historic cantonment area, the Camp Hale Formerly Used Defense Site, or the Historic Landscape, including such an obligation under—

(A) the program for environmental restoration of formerly used defense sites under section 2701 of title 10, United States Code;

(B) the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.); or

(C) any other applicable provision of law (including regulations).

(f) **INTERAGENCY AGREEMENT.**—The Secretary and the Secretary of the Army shall enter into an agreement—

(1) to specify—

(A) the activities of the Secretary relating to the management of the Historic Landscape; and

(B) the activities of the Secretary of the Army relating to environmental remediation and the removal of unexploded ordnance in accordance with subsection (e) and other applicable laws (including regulations); and

(2) to require the Secretary to provide to the Secretary of the Army, by not later than 1 year after the date of enactment of this Act and periodically thereafter, as appropriate, a management plan for the Historic Landscape for purposes of the removal activities described in subsection (e).

(g) **EFFECT.**—Nothing in this section—

(1) affects the jurisdiction of the State over any water law, water right, or adjudication or administration relating to any water resource;

(2) affects any water right in existence on or after the date of enactment of this Act, or the exercise of such a water right, including—

(A) a water right under an interstate water compact (including full development of any apportionment made in accordance with such a compact);

(B) a water right decreed within, above, below, or through the Historic Landscape;

(C) a water right held by the United States;

(D) the management or operation of any reservoir, including the storage, management, release, or transportation of water; and

(E) the construction or operation of such infrastructure as is determined to be necessary by an individual or entity holding water rights to develop and place to beneficial use those rights, subject to applicable Federal, State, and local law (including regulations);

(3) constitutes an express or implied reservation by the United States of any reserved or appropriative water right;

(4) alters or limits—

(A) a permit held by a ski area;

(B) the implementation of activities governed by a ski area permit; or

(C) the authority of the Secretary to modify or expand an existing ski area permit;

(5) prevents the Secretary from closing portions of the Historic Landscape for public safety, environmental remediation, or other use in accordance with applicable laws; or

(6) affects—

(A) any special use permit in effect on the date of enactment of this Act; or

(B) the renewal of a permit described in subparagraph (A).

(h) **FUNDING.**—

(1) **IN GENERAL.**—There is established in the general fund of the Treasury a special account, to be known as the “Camp Hale Historic Preservation and Restoration Fund”.

(2) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Camp Hale Historic Preservation and Restoration Fund \$10,000,000, to be available to the Secretary until expended, for activities relating to historic interpretation, preservation, and restoration carried out in and around the Historic Landscape.

(i) **DESIGNATION OF OVERLOOK.**—The interpretive site located beside United States Route 24 in the State, at 39.431N 106.323W, is hereby designated as the “Sandy Treat Overlook”.

#### **SEC. 4108. WHITE RIVER NATIONAL FOREST BOUNDARY MODIFICATION.**

(a) **IN GENERAL.**—The boundary of the White River National Forest is modified to include the approximately 120 acres comprised of the SW 1/4, the SE 1/4, and the NE 1/4 of the SE 1/4 of sec. 1, T. 2 S., R. 80 W., 6th Principal Meridian, in Summit County in the State.

(b) **LAND AND WATER CONSERVATION FUND.**—For purposes of section 200306 of title 54, United States Code, the boundaries of the White River National Forest, as modified under subsection (a), shall be considered to be the boundaries of the White River National Forest as in existence on January 1, 1965.

#### **SEC. 4109. ROCKY MOUNTAIN NATIONAL PARK POTENTIAL WILDERNESS BOUNDARY ADJUSTMENT.**

(a) **PURPOSE.**—The purpose of this section is to provide for the ongoing maintenance and use of portions of the Trail River Ranch and the associated property located within Rocky Mountain National Park in Grand County in the State.

(b) **BOUNDARY ADJUSTMENT.**—Section 1952(b) of the Omnibus Public Land Management Act of 2009 (Public Law 111-11; 123 Stat.

1070) is amended by adding at the end the following:

“(3) **BOUNDARY ADJUSTMENT.**—The boundary of the Potential Wilderness is modified to exclude the area comprising approximately 15.5 acres of land identified as ‘Potential Wilderness to Non-wilderness’ on the map entitled ‘Rocky Mountain National Park Proposed Wilderness Area Amendment’ and dated January 16, 2018.”.

#### SEC. 4110. ADMINISTRATIVE PROVISIONS.

(a) **FISH AND WILDLIFE.**—Nothing in this subtitle affects the jurisdiction or responsibility of the State with respect to fish and wildlife in the State.

(b) **NO BUFFER ZONES.**—

(1) **IN GENERAL.**—Nothing in this subtitle or an amendment made by this subtitle establishes a protective perimeter or buffer zone around—

- (A) a covered area;
- (B) a wilderness area or potential wilderness area designated by section 4103;
- (C) the Recreation Management Area;
- (D) a Wildlife Conservation Area; or
- (E) the Historic Landscape.

(2) **OUTSIDE ACTIVITIES.**—The fact that a nonwilderness activity or use on land outside of a covered area can be seen or heard from within the covered area shall not preclude the activity or use outside the boundary of the covered area.

(c) **MAPS AND LEGAL DESCRIPTIONS.**—

(1) **IN GENERAL.**—As soon as practicable after the date of enactment of this Act, the Secretary shall file maps and legal descriptions of each area described in subsection (b)(1) with—

(A) the Committee on Natural Resources of the House of Representatives; and

(B) the Committee on Energy and Natural Resources of the Senate.

(2) **FORCE OF LAW.**—Each map and legal description filed under paragraph (1) shall have the same force and effect as if included in this subtitle, except that the Secretary may correct any typographical errors in the maps and legal descriptions.

(3) **PUBLIC AVAILABILITY.**—Each map and legal description filed under paragraph (1) shall be on file and available for public inspection in the appropriate offices of the Forest Service.

(d) **ACQUISITION OF LAND.**—

(1) **IN GENERAL.**—The Secretary may acquire any land or interest in land within the boundaries of an area described in subsection (b)(1) only through exchange, donation, or purchase from a willing seller.

(2) **MANAGEMENT.**—Any land or interest in land acquired under paragraph (1) shall be incorporated into, and administered as a part of, the wilderness area, Recreation Management Area, Wildlife Conservation Area, or Historic Landscape, as applicable, in which the land or interest in land is located.

(e) **WITHDRAWAL.**—Subject to valid rights in existence on the date of enactment of this Act, the areas described in subsection (b)(1) are withdrawn from—

(1) entry, appropriation, and disposal under the public land laws;

(2) location, entry, and patent under mining laws; and

(3) operation of the mineral leasing, mineral materials, and geothermal leasing laws.

(f) **MILITARY OVERFLIGHTS.**—Nothing in this subtitle or an amendment made by this subtitle restricts or precludes—

(1) any low-level overflight of military aircraft over any area subject to this subtitle or an amendment made by this subtitle, including military overflights that can be seen, heard, or detected within such an area;

(2) flight testing or evaluation over an area described in paragraph (1); or

(3) the use or establishment of—

(A) any new unit of special use airspace over an area described in paragraph (1); or

(B) any military flight training or transportation over such an area.

(g) **SENSE OF CONGRESS.**—It is the sense of Congress that military aviation training on Federal public lands in Colorado, including the training conducted at the High-Altitude Army National Guard Aviation Training Site, is critical to the national security of the United States and the readiness of the Armed Forces.

#### Subtitle B—San Juan Mountains

#### SEC. 4201. DEFINITIONS.

In this subtitle:

(1) **COVERED LAND.**—The term “covered land” means—

(A) land designated as wilderness under paragraphs (27) through (29) of section 2(a) of the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77) (as added by section 4202); and

(B) a Special Management Area.

(2) **SECRETARY.**—The term “Secretary” means the Secretary of Agriculture.

(3) **SPECIAL MANAGEMENT AREA.**—The term “Special Management Area” means each of—

(A) the Sheep Mountain Special Management Area designated by section 4203(a)(1); and

(B) the Liberty Bell East Special Management Area designated by section 4203(a)(2).

#### SEC. 4202. ADDITIONS TO NATIONAL WILDERNESS PRESERVATION SYSTEM.

Section 2(a) of the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77) (as amended by section 4102(a)(2)) is amended by adding at the end the following:

“(27) **LIZARD HEAD WILDERNESS ADDITION.**—Certain Federal land in the Grand Mesa, Uncompahgre, and Gunnison National Forests comprising approximately 3,141 acres, as generally depicted on the map entitled ‘Proposed Wilson, Sunshine, Black Face and San Bernardo Additions to the Lizard Head Wilderness’ and dated September 6, 2018, which is incorporated in, and shall be administered as part of, the Lizard Head Wilderness.

“(28) **MOUNT SNEFFELS WILDERNESS ADDITIONS.**—

“(A) **LIBERTY BELL AND LAST DOLLAR ADDITIONS.**—Certain Federal land in the Grand Mesa, Uncompahgre, and Gunnison National Forests comprising approximately 7,235 acres, as generally depicted on the map entitled ‘Proposed Liberty Bell and Last Dollar Additions to the Mt. Sneffels Wilderness, Liberty Bell East Special Management Area’ and dated September 6, 2018, which is incorporated in, and shall be administered as part of, the Mount Sneffels Wilderness.

“(B) **WHITEHOUSE ADDITIONS.**—Certain Federal land in the Grand Mesa, Uncompahgre, and Gunnison National Forests comprising approximately 12,465 acres, as generally depicted on the map entitled ‘Proposed Whitehouse Additions to the Mt. Sneffels Wilderness’ and dated September 6, 2018, which is incorporated in, and shall be administered as part of, the Mount Sneffels Wilderness.

“(29) **MCKENNA PEAK WILDERNESS.**—Certain Federal land in the State of Colorado comprising approximately 8,884 acres of Bureau of Land Management land, as generally depicted on the map entitled ‘Proposed McKenna Peak Wilderness Area’ and dated September 18, 2018, to be known as the ‘McKenna Peak Wilderness’.”.

#### SEC. 4203. SPECIAL MANAGEMENT AREAS.

(a) **DESIGNATION.**—

(1) **SHEEP MOUNTAIN SPECIAL MANAGEMENT AREA.**—The Federal land in the Grand Mesa, Uncompahgre, and Gunnison and San Juan National Forests in the State comprising approximately 21,663 acres, as generally depicted on the map entitled “Proposed Sheep Mountain Special Management Area” and

dated September 19, 2018, is designated as the “Sheep Mountain Special Management Area”.

(2) **LIBERTY BELL EAST SPECIAL MANAGEMENT AREA.**—The Federal land in the Grand Mesa, Uncompahgre, and Gunnison National Forests in the State comprising approximately 792 acres, as generally depicted on the map entitled “Proposed Liberty Bell and Last Dollar Additions to the Mt. Sneffels Wilderness, Liberty Bell East Special Management Area” and dated September 6, 2018, is designated as the “Liberty Bell East Special Management Area”.

(b) **PURPOSE.**—The purpose of the Special Management Areas is to conserve and protect for the benefit and enjoyment of present and future generations the geological, cultural, archaeological, paleontological, natural, scientific, recreational, wilderness, wildlife, riparian, historical, educational, and scenic resources of the Special Management Areas.

(c) **MANAGEMENT.**—

(1) **IN GENERAL.**—The Secretary shall manage the Special Management Areas in a manner that—

(A) conserves, protects, and enhances the resources and values of the Special Management Areas described in subsection (b);

(B) subject to paragraph (3), maintains or improves the wilderness character of the Special Management Areas and the suitability of the Special Management Areas for potential inclusion in the National Wilderness Preservation System; and

(C) is in accordance with—

(i) the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.);

(ii) this subtitle; and

(iii) any other applicable laws.

(2) **PROHIBITIONS.**—The following shall be prohibited in the Special Management Areas:

(A) Permanent roads.

(B) Except as necessary to meet the minimum requirements for the administration of the Federal land, to provide access for abandoned mine cleanup, and to protect public health and safety—

(i) the use of motor vehicles, motorized equipment, or mechanical transport (other than as provided in paragraph (3)); and

(ii) the establishment of temporary roads.

(3) **AUTHORIZED ACTIVITIES.**—

(A) **IN GENERAL.**—The Secretary may allow any activities (including helicopter access for recreation and maintenance and the competitive running event permitted since 1992) that have been authorized by permit or license as of the date of enactment of this Act to continue within the Special Management Areas, subject to such terms and conditions as the Secretary may require.

(B) **PERMITTING.**—The designation of the Special Management Areas by subsection (a) shall not affect the issuance of permits relating to the activities covered under subparagraph (A) after the date of enactment of this Act.

(C) **BICYCLES.**—The Secretary may permit the use of bicycles in—

(i) the portion of the Sheep Mountain Special Management Area identified as “Ophir Valley Area” on the map entitled “Proposed Sheep Mountain Special Management Area” and dated September 19, 2018; and

(ii) the portion of the Liberty Bell East Special Management Area identified as “Liberty Bell Corridor” on the map entitled “Proposed Liberty Bell and Last Dollar Additions to the Mt. Sneffels Wilderness, Liberty Bell East Special Management Area” and dated September 6, 2018.

(d) **APPLICABLE LAW.**—Water and water rights in the Special Management Areas shall be administered in accordance with section 8 of the Colorado Wilderness Act of

1993 (Public Law 103-77; 107 Stat. 762), except that, for purposes of this title—

(1) any reference contained in that section to “the lands designated as wilderness by this Act”, “the Piedra, Roubideau, and Tabeguache areas identified in section 9 of this Act, or the Bowen Gulch Protection Area or the Fossil Ridge Recreation Management Area identified in sections 5 and 6 of this Act”, or “the areas described in sections 2, 5, 6, and 9 of this Act” shall be considered to be a reference to “the Special Management Areas”; and

(2) any reference contained in that section to “this Act” shall be considered to be a reference to “title IV of the American Energy Innovation Act of 2020”.

#### SEC. 4204. RELEASE OF WILDERNESS STUDY AREAS.

(a) DOMINGUEZ CANYON WILDERNESS STUDY AREA.—Subtitle E of title II of Public Law 111-11 is amended—

(1) by redesignating section 2408 (16 U.S.C. 460zzz-7) as section 2409; and

(2) by inserting after section 2407 (16 U.S.C. 460zzz-6) the following:

##### “SEC. 2408. RELEASE.

“(a) IN GENERAL.—Congress finds that, for the purposes of section 603(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782(c)), the portions of the Dominguez Canyon Wilderness Study Area not designated as wilderness by this subtitle have been adequately studied for wilderness designation.

“(b) RELEASE.—Any public land referred to in subsection (a) that is not designated as wilderness by this subtitle—

“(1) is no longer subject to section 603(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782(c)); and

“(2) shall be managed in accordance with this subtitle and any other applicable laws.”.

(b) MCKENNA PEAK WILDERNESS STUDY AREA.—

(1) IN GENERAL.—Congress finds that, for the purposes of section 603(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782(c)), the portions of the McKenna Peak Wilderness Study Area in San Miguel County in the State not designated as wilderness by paragraph (29) of section 2(a) of the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77) (as added by section 4202) have been adequately studied for wilderness designation.

(2) RELEASE.—Any public land referred to in paragraph (1) that is not designated as wilderness by paragraph (29) of section 2(a) of the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77) (as added by section 4202)—

(A) is no longer subject to section 603(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782(c)); and

(B) shall be managed in accordance with applicable laws.

#### SEC. 4205. ADMINISTRATIVE PROVISIONS.

(a) FISH AND WILDLIFE.—Nothing in this subtitle affects the jurisdiction or responsibility of the State with respect to fish and wildlife in the State.

(b) NO BUFFER ZONES.—

(1) IN GENERAL.—Nothing in this subtitle establishes a protective perimeter or buffer zone around covered land.

(2) ACTIVITIES OUTSIDE WILDERNESS.—The fact that a nonwilderness activity or use on land outside of the covered land can be seen or heard from within covered land shall not preclude the activity or use outside the boundary of the covered land.

(c) MAPS AND LEGAL DESCRIPTIONS.—

(1) IN GENERAL.—As soon as practicable after the date of enactment of this Act, the Secretary or the Secretary of the Interior, as appropriate, shall file a map and a legal de-

scription of each wilderness area designated by paragraphs (27) through (29) of section 2(a) of the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77) (as added by section 4202) and the Special Management Areas with—

(A) the Committee on Natural Resources of the House of Representatives; and

(B) the Committee on Energy and Natural Resources of the Senate.

(2) FORCE OF LAW.—Each map and legal description filed under paragraph (1) shall have the same force and effect as if included in this subtitle, except that the Secretary or the Secretary of the Interior, as appropriate, may correct any typographical errors in the maps and legal descriptions.

(3) PUBLIC AVAILABILITY.—Each map and legal description filed under paragraph (1) shall be on file and available for public inspection in the appropriate offices of the Bureau of Land Management and the Forest Service.

(d) ACQUISITION OF LAND.—

(1) IN GENERAL.—The Secretary or the Secretary of the Interior, as appropriate, may acquire any land or interest in land within the boundaries of a Special Management Area or the wilderness designated under paragraphs (27) through (29) of section 2(a) of the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77) (as added by section 4202) only through exchange, donation, or purchase from a willing seller.

(2) MANAGEMENT.—Any land or interest in land acquired under paragraph (1) shall be incorporated into, and administered as a part of, the wilderness or Special Management Area in which the land or interest in land is located.

(e) GRAZING.—The grazing of livestock on covered land, if established before the date of enactment of this Act, shall be permitted to continue subject to such reasonable regulations as are considered to be necessary by the Secretary with jurisdiction over the covered land, in accordance with—

(1) section 4(d)(4) of the Wilderness Act (16 U.S.C. 1133(d)(4)); and

(2) the applicable guidelines set forth in Appendix A of the report of the Committee on Interior and Insular Affairs of the House of Representatives accompanying H.R. 2570 of the 101st Congress (H. Rept. 101-405) or H.R. 5487 of the 96th Congress (H. Rept. 96-617).

(f) FIRE, INSECTS, AND DISEASES.—In accordance with section 4(d)(1) of the Wilderness Act (16 U.S.C. 1133(d)(1)), the Secretary with jurisdiction over a wilderness area designated by paragraphs (27) through (29) of section 2(a) of the Colorado Wilderness Act of 1993 (16 U.S.C. 1132 note; Public Law 103-77) (as added by section 4202) may carry out any activity in the wilderness area that the Secretary determines to be necessary for the control of fire, insects, and diseases, subject to such terms and conditions as the Secretary determines to be appropriate.

(g) WITHDRAWAL.—Subject to valid rights in existence on the date of enactment of this Act, the covered land and the approximately 6,590 acres generally depicted on the map entitled “Proposed Naturita Canyon Mineral Withdrawal Area” and dated September 6, 2018, is withdrawn from—

(1) entry, appropriation, and disposal under the public land laws;

(2) location, entry, and patent under mining laws; and

(3) operation of the mineral leasing, mineral materials, and geothermal leasing laws.

##### Subtitle C—Thompson Divide

#### SEC. 4301. PURPOSES.

The purposes of this subtitle are—

(1) subject to valid existing rights, to withdraw certain Federal land in the Thompson

Divide area from mineral and other disposal laws; and

(2) to promote the capture of fugitive methane emissions that would otherwise be emitted into the atmosphere—

(A) to reduce methane gas emissions; and

(B) to provide—

(i) new renewable electricity supplies and other beneficial uses of fugitive methane emissions; and

(ii) increased royalties for taxpayers.

#### SEC. 4302. DEFINITIONS.

In this subtitle:

(1) FUGITIVE METHANE EMISSIONS.—The term “fugitive methane emissions” means methane gas from those Federal lands in Garfield, Gunnison, Delta, or Pitkin County in the State generally depicted on the pilot program map as “Fugitive Coal Mine Methane Use Pilot Program Area” that would leak or be vented into the atmosphere from an active, inactive or abandoned underground coal mine.

(2) PILOT PROGRAM.—The term “pilot program” means the Greater Thompson Divide Fugitive Coal Mine Methane Use Pilot Program established by section 4305(a)(1).

(3) PILOT PROGRAM MAP.—The term “pilot program map” means the map entitled “Greater Thompson Divide Fugitive Coal Mine Methane Use Pilot Program Area” and dated June 17, 2019.

(4) SECRETARY.—The term “Secretary” means the Secretary of the Interior.

(5) THOMPSON DIVIDE LEASE.—

(A) IN GENERAL.—The term “Thompson Divide lease” means any oil or gas lease in effect on the date of enactment of this Act within the Thompson Divide Withdrawal and Protection Area.

(B) EXCLUSIONS.—The term “Thompson Divide lease” does not include any oil or gas lease that—

(i) is associated with a Wolf Creek Storage Field development right; or

(ii) before the date of enactment of this Act, has expired, been cancelled, or otherwise terminated.

(6) THOMPSON DIVIDE MAP.—The term “Thompson Divide map” means the map entitled “Greater Thompson Divide Area Map” and dated June 13, 2019.

(7) THOMPSON DIVIDE WITHDRAWAL AND PROTECTION AREA.—The term “Thompson Divide Withdrawal and Protection Area” means the Federal land and minerals generally depicted on the Thompson Divide map as the “Thompson Divide Withdrawal and Protection Area”.

(8) WOLF CREEK STORAGE FIELD DEVELOPMENT RIGHT.—

(A) IN GENERAL.—The term “Wolf Creek Storage Field development right” means a development right for any of the Federal mineral leases numbered COC 007496, COC 007497, COC 007498, COC 007499, COC 007500, COC 007538, COC 008128, COC 015373, COC 0128018, COC 051645, and COC 051646, and generally depicted on the Thompson Divide map as “Wolf Creek Storage Agreement”.

(B) EXCLUSIONS.—The term “Wolf Creek Storage Field development right” does not include any storage right or related activity within the area described in subparagraph (A).

#### SEC. 4303. THOMPSON DIVIDE WITHDRAWAL AND PROTECTION AREA.

(a) WITHDRAWAL.—Subject to valid existing rights, the Thompson Divide Withdrawal and Protection Area is withdrawn from—

(1) entry, appropriation, and disposal under the public land laws;

(2) location, entry, and patent under the mining laws; and

(3) operation of the mineral leasing, mineral materials, and geothermal leasing laws.



(b) **SURVEYS.**—The exact acreage and legal description of the Thompson Divide Withdrawal and Protection Area shall be determined by surveys approved by the Secretary, in consultation with the Secretary of Agriculture.

(c) **GRAZING.**—The grazing of livestock on covered land, if established before the date of enactment of this Act, shall be allowed to continue subject to such reasonable regulations as are considered to be necessary by the Secretary with jurisdiction over the covered land.

**SEC. 4304. THOMPSON DIVIDE LEASE EXCHANGE.**

(a) **IN GENERAL.**—In exchange for the relinquishment by a leaseholder of all Thompson Divide leases of the leaseholder, the Secretary may issue to the leaseholder credits for any bid, royalty, or rental payment due under any Federal oil or gas lease on Federal land in the State, in accordance with subsection (b).

(b) **AMOUNT OF CREDITS.**—

(1) **IN GENERAL.**—Subject to paragraph (2), the amount of the credits issued to a leaseholder of a Thompson Divide lease relinquished under subsection (a) shall—

(A) be equal to the sum of—

(i) the amount of the bonus bids paid for the applicable Thompson Divide leases;

(ii) the amount of any rental paid for the applicable Thompson Divide leases as of the date on which the leaseholder submits to the Secretary a notice of the decision to relinquish the applicable Thompson Divide leases; and

(iii) the amount of any expenses incurred by the leaseholder of the applicable Thompson Divide leases in the preparation of any drilling permit, sundry notice, or other related submission in support of the development of the applicable Thompson Divide leases as of January 28, 2019, including any expenses relating to the preparation of any analysis under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); and

(B) require the approval of the Secretary.

(2) **EXCLUSION.**—The amount of a credit issued under subsection (a) shall not include any expenses paid by the leaseholder of a Thompson Divide lease for legal fees or related expenses for legal work with respect to a Thompson Divide lease.

(c) **CANCELLATION.**—Effective on relinquishment under this section, and without any additional action by the Secretary, a Thompson Divide lease—

(1) shall be permanently cancelled; and

(2) shall not be reissued.

(d) **CONDITIONS.**—

(1) **APPLICABLE LAW.**—Except as otherwise provided in this section, each exchange under this section shall be conducted in accordance with—

(A) this title; and

(B) other applicable laws (including regulations).

(2) **ACCEPTANCE OF CREDITS.**—The Secretary shall accept credits issued under subsection (a) in the same manner as cash for the payments described in that subsection.

(3) **APPLICABILITY.**—The use of a credit issued under subsection (a) shall be subject to the laws (including regulations) applicable to the payments described in that subsection, to the extent that the laws are consistent with this section.

(4) **TREATMENT OF CREDITS.**—All amounts in the form of credits issued under subsection (a) accepted by the Secretary shall be considered to be amounts received for the purposes of—

(A) section 35 of the Mineral Leasing Act (30 U.S.C. 191); and

(B) section 20 of the Geothermal Steam Act of 1970 (30 U.S.C. 1019).

(e) **WOLF CREEK STORAGE FIELD DEVELOPMENT RIGHTS.**—

(1) **CONVEYANCE TO SECRETARY.**—As a condition precedent to the relinquishment of a Thompson Divide lease, any leaseholder with a Wolf Creek Storage Field development right shall permanently relinquish, transfer, and otherwise convey to the Secretary, in a form acceptable to the Secretary, all Wolf Creek Storage Field development rights of the leaseholder.

(2) **LIMITATION OF TRANSFER.**—An interest acquired by the Secretary under paragraph (1)—

(A) shall be held in perpetuity; and

(B) shall not be—

(i) transferred;

(ii) reissued; or

(iii) otherwise used for mineral extraction.

**SEC. 4305. GREATER THOMPSON DIVIDE FUGITIVE COAL MINE METHANE USE PILOT PROGRAM.**

(a) **FUGITIVE COAL MINE METHANE USE PILOT PROGRAM.**—

(1) **ESTABLISHMENT.**—There is established in the Bureau of Land Management a pilot program, to be known as the “Greater Thompson Divide Fugitive Coal Mine Methane Use Pilot Program”.

(2) **PURPOSE.**—The purpose of the pilot program is to promote the capture, beneficial use, mitigation, and sequestration of fugitive methane emissions—

(A) to reduce methane emissions;

(B) to promote economic development;

(C) to produce bid and royalty revenues;

(D) to improve air quality; and

(E) to improve public safety.

(3) **PLAN.**—

(A) **IN GENERAL.**—Not later than 180 days after the date of enactment of this Act, the Secretary shall develop a plan—

(i) to complete an inventory of fugitive methane emissions in accordance with subsection (b);

(ii) to provide for the leasing of fugitive methane emissions in accordance with subsection (c); and

(iii) to provide for the capping or destruction of fugitive methane emissions in accordance with subsection (d).

(B) **COORDINATION.**—In developing the plan under this paragraph, the Secretary shall coordinate with—

(i) the State;

(ii) Garfield, Gunnison, Delta, and Pitkin Counties in the State;

(iii) lessees of Federal coal within the counties referred to in clause (ii);

(iv) interested institutions of higher education in the State; and

(v) interested members of the public.

(c) **FUGITIVE METHANE EMISSION INVENTORY.**—

(1) **IN GENERAL.**—Not later than 1 year after the date of enactment of this Act, the Secretary shall complete an inventory of fugitive methane emissions.

(2) **CONDUCT.**—The Secretary may conduct the inventory under paragraph (1) through, or in collaboration with—

(A) the Bureau of Land Management;

(B) the United States Geological Survey;

(C) the Environmental Protection Agency;

(D) the United States Forest Service;

(E) State departments or agencies;

(F) Garfield, Gunnison, Delta, or Pitkin County in the State;

(G) the Garfield County Federal Mineral Lease District;

(H) institutions of higher education in the State;

(I) lessees of Federal coal within a county referred to in subparagraph (F);

(J) the National Oceanic and Atmospheric Administration;

(K) the National Center for Atmospheric Research; or

(L) other interested entities, including members of the public.

(3) **CONTENTS.**—The inventory under paragraph (1) shall include—

(A) the general location and geographic coordinates of each vent, seep, or other source producing significant fugitive methane emissions;

(B) an estimate of the volume and concentration of fugitive methane emissions from each source of significant fugitive methane emissions including details of measurements taken and the basis for that emissions estimate;

(C) an estimate of the total volume of fugitive methane emissions each year;

(D) relevant data and other information available from—

(i) the Environmental Protection Agency;

(ii) the Mine Safety and Health Administration;

(iii) Colorado Department of Natural Resources;

(iv) Colorado Public Utility Commission;

(v) Colorado Department of Health and Environment; and

(vi) Office of Surface Mining Reclamation and Enforcement; and

(E) such other information as may be useful in advancing the purposes of the pilot program.

(4) **PUBLIC PARTICIPATION; DISCLOSURE.**—

(A) **PUBLIC PARTICIPATION.**—The Secretary shall provide opportunities for public participation in the inventory under this subsection.

(B) **AVAILABILITY.**—The Secretary shall make the inventory under this subsection publicly available.

(C) **DISCLOSURE.**—Nothing in this subsection requires the Secretary to publicly release information that—

(i) poses a threat to public safety;

(ii) is confidential business information; or

(iii) is otherwise protected from public disclosure.

(5) **USE.**—The Secretary shall use the inventory in carrying out—

(A) the leasing program under subsection (c); and

(B) the capping or destruction of fugitive methane emissions under subsection (d).

(c) **FUGITIVE METHANE EMISSION LEASING PROGRAM.**—

(1) **IN GENERAL.**—Subject to valid existing rights and in accordance with this section, not later than 1 year after the date of completion of the inventory required under subsection (b), the Secretary shall carry out a program to encourage the use and destruction of fugitive methane emissions.

(2) **FUGITIVE METHANE EMISSIONS FROM COAL MINES SUBJECT TO LEASE.**—

(A) **IN GENERAL.**—The Secretary shall authorize the holder of a valid existing Federal coal lease for a mine that is producing fugitive methane emissions to capture for use, or destroy by flaring, the fugitive methane emissions.

(B) **CONDITIONS.**—The authority under subparagraph (A) shall be—

(i) subject to valid existing rights; and

(ii) subject to such terms and conditions as the Secretary may require.

(C) **LIMITATIONS.**—The program carried out under paragraph (1) shall only include fugitive methane emissions that can be captured for use, or destroyed by flaring, in a manner that does not—

(i) endanger the safety of any coal mine worker; or

(ii) unreasonably interfere with any ongoing operation at a coal mine.

(D) **COOPERATION.**—

(i) **IN GENERAL.**—The Secretary shall work cooperatively with the holders of valid existing Federal coal leases for mines that produce fugitive methane emissions to encourage—

(I) the capture of fugitive methane emissions for beneficial use, such as generating electrical power, producing usable heat, transporting the methane to market, transforming the fugitive methane emissions into a different marketable material; or

(II) if the beneficial use of the fugitive methane emissions is not feasible, the destruction of the fugitive methane emissions by flaring.

(ii) **GUIDANCE.**—In furtherance of the purposes of this paragraph, not later than 1 year after the date of enactment of this Act, the Secretary shall issue guidance for the implementation of Federal authorities and programs to encourage the capture for use, or destruction by flaring, of fugitive methane emissions while minimizing impacts on natural resources or other public interest values.

(E) **ROYALTIES.**—The Secretary shall determine whether any fugitive methane emissions used or destroyed pursuant to this paragraph are subject to the payment of a royalty under applicable law.

(3) **FUGITIVE METHANE EMISSIONS FROM ABANDONED COAL MINES.**—

(A) **IN GENERAL.**—Except as otherwise provided in this section, notwithstanding section 4303, subject to valid existing rights, and in accordance with section 21 of the Mineral Leasing Act (30 U.S.C. 241) and any other applicable law, the Secretary shall—

(i) authorize the capture for use, or destruction by flaring, of fugitive methane emissions from abandoned coal mines on Federal land; and

(ii) make available for leasing such fugitive methane emissions from abandoned coal mines on Federal land as the Secretary considers to be in the public interest.

(B) **SOURCE.**—To the maximum extent practicable, the Secretary shall offer for lease each significant vent, seep, or other source of fugitive methane emissions from abandoned coal mines.

(C) **BID QUALIFICATIONS.**—A bid to lease fugitive methane emissions under this paragraph shall specify whether the prospective lessee intends—

(i) to capture the fugitive methane emissions for beneficial use, such as generating electrical power, producing usable heat, transporting the methane to market, transforming the fugitive methane emissions into a different marketable material;

(ii) to destroy the fugitive methane emissions by flaring; or

(iii) to employ a specific combination of—

(I) capturing the fugitive methane emissions for beneficial use; and

(II) destroying the fugitive methane emissions by flaring.

(D) **PRIORITY.**—

(i) **IN GENERAL.**—If there is more than one qualified bid for a lease under this paragraph, the Secretary shall select the bid that the Secretary determines is likely to most significantly advance the public interest.

(ii) **CONSIDERATIONS.**—In determining the public interest under clause (i), the Secretary shall take into consideration—

(I) the size of the overall decrease in the time-integrated radiative forcing of the fugitive methane emissions;

(II) the impacts to other natural resource values, including wildlife, water, and air; and

(III) other public interest values, including scenic, economic, recreation, and cultural values.

(E) **LEASE FORM.**—

(i) **IN GENERAL.**—The Secretary shall develop and provide to prospective bidders a lease form for leases issued under this paragraph.

(ii) **DUE DILIGENCE.**—The lease form developed under clause (i) shall include terms and conditions requiring the leased fugitive

methane emissions to be put to beneficial use or flared by not later than 1 year after the date of issuance of the lease.

(F) **ROYALTY RATE.**—The Secretary shall develop a minimum bid and royalty rate for leases under this paragraph to advance the purposes of this section, to the maximum extent practicable.

(d) **SEQUESTRATION.**—If, by not later than 4 years after the date of enactment of this Act, any significant fugitive methane emissions from abandoned coal mines on Federal land are not leased under subsection (c)(3), the Secretary shall, in accordance with applicable law, take all reasonable measures—

(1) to cap those fugitive methane emissions at the source in any case in which the cap will result in the long-term sequestration of all or a significant portion of the fugitive methane emissions; or

(2) if sequestration under paragraph (1) is not feasible, destroy the fugitive methane emissions by flaring.

(e) **REPORT TO CONGRESS.**—Not later than 4 years after the date of enactment of this Act the Secretary shall submit to the Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report detailing—

(1) the economic and environmental impacts of the pilot program, including information on increased royalties and estimates of avoided greenhouse gas emissions; and

(2) any recommendations by the Secretary on whether the pilot program could be expanded geographically to include other significant sources of fugitive methane emissions from coal mines.

#### **SEC. 4306. EFFECT.**

Except as expressly provided in this subtitle, nothing in this subtitle—

(1) expands, diminishes, or impairs any valid existing mineral leases, mineral interest, or other property rights wholly or partially within the Thompson Divide Withdrawal and Protection Area, including access to the leases, interests, rights, or land in accordance with applicable Federal, State, and local laws (including regulations);

(2) prevents the capture of methane from any active, inactive, or abandoned coal mine covered by this subtitle, in accordance with applicable laws; or

(3) prevents access to, or the development of, any new or existing coal mine or lease in Delta or Gunnison County in the State.

#### **Subtitle D—Curecanti National Recreation Area**

#### **SEC. 4401. DEFINITIONS.**

In this subtitle:

(1) **MAP.**—The term “map” means the map entitled “Curecanti National Recreation Area, Proposed Boundary”, numbered 616/100,485C, and dated August 11, 2016.

(2) **NATIONAL RECREATION AREA.**—The term “National Recreation Area” means the Curecanti National Recreation Area established by section 4402(a).

(3) **SECRETARY.**—The term “Secretary” means the Secretary of the Interior.

#### **SEC. 4402. CURECANTI NATIONAL RECREATION AREA.**

(a) **ESTABLISHMENT.**—Effective beginning on the earlier of the date on which the Secretary approves a request under subsection (c)(2)(B)(i)(I) and the date that is 1 year after the date of enactment of this Act, there shall be established as a unit of the National Park System the Curecanti National Recreation Area, in accordance with this title, consisting of approximately 50,667 acres of land in the State, as generally depicted on the map as “Curecanti National Recreation Area Proposed Boundary”.

(b) **AVAILABILITY OF MAP.**—The map shall be on file and available for public inspection

in the appropriate offices of the National Park Service.

(c) **ADMINISTRATION.**—

(1) **IN GENERAL.**—The Secretary shall administer the National Recreation Area in accordance with—

(A) this subtitle; and

(B) the laws (including regulations) generally applicable to units of the National Park System, including section 100101(a), chapter 1003, and sections 100751(a), 100752, 100753, and 102101 of title 54, United States Code.

(2) **DAM, POWER PLANT, AND RESERVOIR MANAGEMENT AND OPERATIONS.**—

(A) **IN GENERAL.**—Nothing in this subtitle affects or interferes with the authority of the Secretary—

(i) to operate the Uncompahgre Valley Reclamation Project under the reclamation laws;

(ii) to operate the Wayne N. Aspinall Unit of the Colorado River Storage Project under the Act of April 11, 1956 (commonly known as the “Colorado River Storage Project Act”) (43 U.S.C. 620 et seq.); or

(iii) under the Federal Water Project Recreation Act (16 U.S.C. 4601–12 et seq.).

(B) **RECLAMATION LAND.**—

(i) **SUBMISSION OF REQUEST TO RETAIN ADMINISTRATIVE JURISDICTION.**—If, before the date that is 1 year after the date of enactment of this Act, the Commissioner of Reclamation submits to the Secretary a request for the Commissioner of Reclamation to retain administrative jurisdiction over the minimum quantity of land within the land identified on the map as “Lands withdrawn or acquired for Bureau of Reclamation projects” that the Commissioner of Reclamation identifies as necessary for the effective operation of Bureau of Reclamation water facilities, the Secretary may—

(I) approve, approve with modifications, or disapprove the request; and

(II) if the request is approved under subclause (I), make any modifications to the map that are necessary to reflect that the Commissioner of Reclamation retains management authority over the minimum quantity of land required to fulfill the reclamation mission.

(ii) **TRANSFER OF LAND.**—

(I) **IN GENERAL.**—Administrative jurisdiction over the land identified on the map as “Lands withdrawn or acquired for Bureau of Reclamation projects”, as modified pursuant to clause (i)(II), if applicable, shall be transferred from the Commissioner of Reclamation to the Director of the National Park Service by not later than the date that is 1 year after the date of enactment of this Act.

(II) **ACCESS TO TRANSFERRED LAND.**—

(aa) **IN GENERAL.**—Subject to item (bb), the Commissioner of Reclamation shall retain access to the land transferred to the Director of the National Park Service under subclause (I) for reclamation purposes, including for the operation, maintenance, and expansion or replacement of facilities.

(bb) **MEMORANDUM OF UNDERSTANDING.**—The terms of the access authorized under item (aa) shall be determined by a memorandum of understanding entered into between the Commissioner of Reclamation and the Director of the National Park Service not later than 1 year after the date of enactment of this Act.

(3) **MANAGEMENT AGREEMENTS.**—

(A) **IN GENERAL.**—The Secretary may enter into management agreements, or modify management agreements in existence on the date of enactment of this Act, relating to the authority of the Director of the National Park Service, the Commissioner of Reclamation, the Director of the Bureau of Land Management, or the Chief of the Forest

Service to manage Federal land within or adjacent to the boundary of the National Recreation Area.

(B) STATE LAND.—The Secretary may enter into cooperative management agreements for any land administered by the State that is within or adjacent to the National Recreation Area, in accordance with the cooperative management authority under section 101703 of title 54, United States Code.

(4) RECREATIONAL ACTIVITIES.—

(A) AUTHORIZATION.—Except as provided in subparagraph (B), the Secretary shall allow boating, boating-related activities, hunting, and fishing in the National Recreation Area in accordance with applicable Federal and State laws.

(B) CLOSURES; DESIGNATED ZONES.—

(i) IN GENERAL.—The Secretary, acting through the Superintendent of the National Recreation Area, may designate zones in which, and establish periods during which, no boating, hunting, or fishing shall be permitted in the National Recreation Area under subparagraph (A) for reasons of public safety, administration, or compliance with applicable laws.

(ii) CONSULTATION REQUIRED.—Except in the case of an emergency, any closure proposed by the Secretary under clause (i) shall not take effect until after the date on which the Superintendent of the National Recreation Area consults with—

(I) the appropriate State agency responsible for hunting and fishing activities; and

(II) the Board of County Commissioners in each county in which the zone is proposed to be designated.

(5) LANDOWNER ASSISTANCE.—On the written request of an individual that owns private land located not more than 3 miles from the boundary of the National Recreation Area, the Secretary may work in partnership with the individual to enhance the long-term conservation of natural, cultural, recreational, and scenic resources in and around the National Recreation Area—

(A) by acquiring all or a portion of the private land or interests in private land located not more than 3 miles from the boundary of the National Recreation Area by purchase, exchange, or donation, in accordance with section 4403;

(B) by providing technical assistance to the individual, including cooperative assistance;

(C) through available grant programs; and

(D) by supporting conservation easement opportunities.

(6) WITHDRAWAL.—Subject to valid existing rights, all Federal land within the National Recreation Area is withdrawn from—

(A) entry, appropriation, and disposal under the public land laws;

(B) location, entry, and patent under the mining laws; and

(C) operation of the mineral leasing, mineral materials, and geothermal leasing laws.

(7) GRAZING.—

(A) STATE LAND SUBJECT TO A STATE GRAZING LEASE.—

(i) IN GENERAL.—If State land acquired under this subtitle is subject to a State grazing lease in effect on the date of acquisition, the Secretary shall allow the grazing to continue for the remainder of the term of the lease, subject to the related terms and conditions of user agreements, including permitted stocking rates, grazing fee levels, access rights, and ownership and use of range improvements.

(ii) ACCESS.—A lessee of State land may continue its use of established routes within the National Recreation Area to access State land for purposes of administering the lease if the use was permitted before the date of enactment of this Act, subject to such terms and conditions as the Secretary may require.

(B) STATE AND PRIVATE LAND.—The Secretary may, in accordance with applicable laws, authorize grazing on land acquired from the State or private landowners under section 4403, if grazing was established before the date of acquisition.

(C) PRIVATE LAND.—On private land acquired under section 403 for the National Recreation Area on which authorized grazing is occurring before the date of enactment of this Act, the Secretary, in consultation with the lessee, may allow the continuation and renewal of grazing on the land based on the terms of acquisition or by agreement between the Secretary and the lessee, subject to applicable law (including regulations).

(D) FEDERAL LAND.—The Secretary shall—

(i) allow, consistent with the grazing leases, uses, and practices in effect as of the date of enactment of this Act, the continuation and renewal of grazing on Federal land located within the boundary of the National Recreation Area on which grazing is allowed before the date of enactment of this Act, unless the Secretary determines that grazing on the Federal land would present unacceptable impacts (as defined in section 1.4.7.1 of the National Park Service document entitled “Management Policies 2006: The Guide to Managing the National Park System”) to the natural, cultural, recreational, and scenic resource values and the character of the land within the National Recreation Area; and

(ii) retain all authorities to manage grazing in the National Recreation Area.

(E) TERMINATION OF LEASES.—Within the National Recreation Area, the Secretary may—

(i) accept the voluntary termination of a lease or permit for grazing; or

(ii) in the case of a lease or permit vacated for a period of 3 or more years, terminate the lease or permit.

(8) WATER RIGHTS.—Nothing in this subtitle—

(A) affects any use or allocation in existence on the date of enactment of this Act of any water, water right, or interest in water;

(B) affects any vested absolute or decreed conditional water right in existence on the date of enactment of this Act, including any water right held by the United States;

(C) affects any interstate water compact in existence on the date of enactment of this Act;

(D) authorizes or imposes any new reserved Federal water right;

(E) shall be considered to be a relinquishment or reduction of any water right reserved or appropriated by the United States in the State on or before the date of enactment of this Act; or

(F) constitutes an express or implied Federal reservation of any water or water rights with respect to the National Recreation area.

(9) FISHING EASEMENTS.—

(A) IN GENERAL.—Nothing in this subtitle diminishes or alters the fish and wildlife program for the Aspinall Unit developed under section 8 of the Act of April 11, 1956 (commonly known as the “Colorado River Storage Project Act”) (70 Stat. 110, chapter 203; 43 U.S.C. 620g), by the United States Fish and Wildlife Service, the Bureau of Reclamation, and the Colorado Division of Wildlife (including any successor in interest to that division) that provides for the acquisition of public access fishing easements as mitigation for the Aspinall Unit (referred to in this paragraph as the “program”).

(B) ACQUISITION OF FISHING EASEMENTS.—The Secretary shall continue to fulfill the obligation of the Secretary under the program to acquire 26 miles of class 1 public fishing easements to provide to sportsmen access for fishing within the Upper Gunnison

Basin upstream of the Aspinall Unit, subject to the condition that no existing fishing access downstream of the Aspinall Unit shall be counted toward the minimum mileage requirement under the program.

(C) PLAN.—Not later than 1 year after the date of enactment of this Act, the Secretary shall—

(i) develop a plan for fulfilling the obligation of the Secretary described in subparagraph (B); and

(ii) submit to Congress a report that—

(I) includes the plan developed under clause (i); and

(II) describes any progress made in the acquisition of public access fishing easements as mitigation for the Aspinall Unit under the program.

**SEC. 4403. ACQUISITION OF LAND; BOUNDARY MANAGEMENT.**

(a) ACQUISITION.—

(1) IN GENERAL.—The Secretary may acquire any land or interest in land within the boundary of the National Recreation Area.

(2) MANNER OF ACQUISITION.—

(A) IN GENERAL.—Subject to subparagraph (B), land described in paragraph (1) may be acquired under this subsection by—

(i) donation;

(ii) purchase from willing sellers with donated or appropriated funds;

(iii) transfer from another Federal agency; or

(iv) exchange.

(B) STATE LAND.—Land or interests in land owned by the State or a political subdivision of the State may only be acquired by purchase, donation, or exchange.

(b) TRANSFER OF ADMINISTRATIVE JURISDICTION.—

(1) FOREST SERVICE LAND.—

(A) IN GENERAL.—Administrative jurisdiction over the approximately 2,560 acres of land identified on the map as “U.S. Forest Service proposed transfer to the National Park Service” is transferred to the Secretary, to be administered by the Director of the National Park Service as part of the National Recreation Area.

(B) BOUNDARY ADJUSTMENT.—The boundary of the Gunnison National Forest shall be adjusted to exclude the land transferred to the Secretary under subparagraph (A).

(2) BUREAU OF LAND MANAGEMENT LAND.—Administrative jurisdiction over the approximately 5,040 acres of land identified on the map as “Bureau of Land Management proposed transfer to National Park Service” is transferred from the Director of the Bureau of Land Management to the Director of the National Park Service, to be administered as part of the National Recreation Area.

(3) WITHDRAWAL.—Administrative jurisdiction over the land identified on the map as “Proposed for transfer to the Bureau of Land Management, subject to the revocation of Bureau of Reclamation withdrawal” shall be transferred to the Director of the Bureau of Land Management on relinquishment of the land by the Bureau of Reclamation and revocation by the Bureau of Land Management of any withdrawal as may be necessary.

(c) POTENTIAL LAND EXCHANGE.—

(1) IN GENERAL.—The withdrawal for reclamation purposes of the land identified on the map as “Potential exchange lands” shall be relinquished by the Commissioner of Reclamation and revoked by the Director of the Bureau of Land Management and the land shall be transferred to the National Park Service.

(2) EXCHANGE; INCLUSION IN NATIONAL RECREATION AREA.—On transfer of the land described in paragraph (1), the transferred land—

(A) may be exchanged by the Secretary for private land described in section 4402(c)(5)—

(i) subject to a conservation easement remaining on the transferred land, to protect the scenic resources of the transferred land; and

(ii) in accordance with the laws (including regulations) and policies governing National Park Service land exchanges; and

(B) if not exchanged under subparagraph (A), shall be added to, and managed as a part of, the National Recreation Area.

(d) ADDITION TO NATIONAL RECREATION AREA.—Any land within the boundary of the National Recreation Area that is acquired by the United States shall be added to, and managed as a part of, the National Recreation Area.

#### SEC. 4404. GENERAL MANAGEMENT PLAN.

Not later than 3 years after the date on which funds are made available to carry out this subtitle, the Director of the National Park Service, in consultation with the Commissioner of Reclamation, shall prepare a general management plan for the National Recreation Area in accordance with section 100502 of title 54, United States Code.

#### SEC. 4405. BOUNDARY SURVEY.

The Secretary (acting through the Director of the National Park Service) shall prepare a boundary survey and legal description of the National Recreation Area.

**SA 1373.** Mr. BENNET submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle B of title I, add the following:

#### SEC. 12 \_\_. COMMUNITY SOLAR.

(a) COMMUNITY SOLAR CONSUMER CHOICE PROGRAM; FEDERAL GOVERNMENT PARTICIPATION IN COMMUNITY SOLAR.—

(1) DEFINITIONS.—In this subsection:

(A) COMMUNITY SOLAR.—The term “community solar” means a solar power plant, the benefits of the electricity produced by which are shared by 2 or more electricity customers.

(B) SUBSCRIBER.—The term “subscriber” means an electricity customer who receives a benefit associated with the proportional output of the community solar facility of the customer.

(2) ESTABLISHMENT OF COMMUNITY SOLAR CONSUMER CHOICE PROGRAM.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall establish a program to expand community solar options to—

(i) individuals, particularly individuals that do not have regular access to onsite solar, including low- and moderate-income individuals;

(ii) businesses;

(iii) nonprofit organizations; and

(iv) States and local and Tribal governments.

(B) ALIGNMENT WITH EXISTING FEDERAL PROGRAMS.—The Secretary shall align the program under subparagraph (A) with existing Federal programs that serve low-income communities.

(C) ASSISTANCE TO STATE AND LOCAL GOVERNMENTS.—In carrying out the program under subparagraph (A), the Secretary shall—

(i) provide technical assistance to States and local and Tribal governments for projects to increase community solar;

(ii) assist States and local and Tribal governments in the development of new and innovative financial and business models that leverage competition in the marketplace in order to serve community solar subscribers; and

(iii) use National Laboratories to collect and disseminate data to assist private entities in the financing of, subscription to, and operation of community solar projects.

(3) FEDERAL GOVERNMENT PARTICIPATION IN COMMUNITY SOLAR.—The Secretary shall expand the existing grant, loan, and financing programs of the Department to include community solar projects.

(b) ESTABLISHMENT OF COMMUNITY SOLAR PROGRAMS.—

(1) IN GENERAL.—Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:

“(20) COMMUNITY SOLAR PROGRAMS.—

“(A) DEFINITIONS.—In this paragraph:

“(i) COMMUNITY SOLAR FACILITY.—The term ‘community solar facility’ means a solar photovoltaic system that—

“(I) allocates electricity to multiple electric consumers of an electric utility; and

“(II) is—

“(aa) connected to a local distribution facility of the electric utility;

“(bb) located on or off the property of an electric consumer; and

“(cc) owned by an electric utility, an electric consumer, or a third party.

“(ii) COMMUNITY SOLAR PROGRAM.—The term ‘community solar program’ means a service provided by an electric utility to an electric consumer served by the electric utility through which the value of electric energy generated by a community solar facility may be used to offset charges billed to the electric consumer by the electric utility.

“(B) STANDARD.—Each electric utility shall offer a community solar program.”.

(2) COMPLIANCE.—

(A) TIME LIMITATIONS.—Section 112(b) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(b)) is amended by adding at the end the following:

“(7)(A) Not later than 1 year after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which the State has rate-making authority) and each nonregulated utility shall commence consideration under section 111, or set a hearing date for consideration, with respect to the standard established by paragraph (20) of section 111(d).

“(B) Not later than 2 years after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which the State has rate-making authority), and each nonregulated electric utility shall complete the consideration and make the determination under section 111 with respect to the standard established by paragraph (20) of section 111(d).”.

(B) FAILURE TO COMPLY.—

(i) IN GENERAL.—Section 112(c) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(c)) is amended—

(I) by striking “such paragraph (14)” and all that follows through “paragraphs (16)” and inserting “such paragraph (14). In the case of the standard established by paragraph (15) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of that paragraph (15). In the case of the standards established by paragraphs (16)”;

(II) by adding at the end the following: “In the case of the standard established by paragraph (20) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of that paragraph (20).”.

(ii) TECHNICAL CORRECTION.—

(I) IN GENERAL.—Section 1254(b) of the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 971) is amended—

(aa) by striking paragraph (2); and

(bb) by redesignating paragraph (3) as paragraph (2).

(II) TREATMENT.—The amendment made by paragraph (2) of section 1254(b) of the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 971) (as in effect on the day before the date of enactment of this Act) is void, and section 112(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(d)) shall be in effect as if those amendments had not been enacted.

(C) PRIOR STATE ACTIONS.—

(i) IN GENERAL.—Section 112 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622) is amended by adding at the end the following:

“(g) PRIOR STATE ACTIONS.—Subsections (b) and (c) shall not apply to the standard established by paragraph (20) of section 111(d) in the case of any electric utility in a State if, before the date of enactment of this subsection—

“(1) the State has implemented for the electric utility the standard (or a comparable standard);

“(2) the State regulatory authority for the State or the relevant nonregulated electric utility has conducted a proceeding to consider implementation of the standard (or a comparable standard) for the electric utility; or

“(3) the State legislature has voted on the implementation of the standard (or a comparable standard) for the electric utility.”.

(ii) CROSS-REFERENCE.—Section 124 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2634) is amended by adding at the end the following: “In the case of the standard established by paragraph (20) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of that paragraph (20).”.

(c) FEDERAL CONTRACTS FOR PUBLIC UTILITY SERVICES.—Section 501(b)(1) of title 40, United States Code, is amended by striking subparagraph (B) and inserting the following:

“(B) PUBLIC UTILITY CONTRACTS.—A contract under this paragraph for public utility services may be for a period of not more than 20 years.”.

**SA 1374.** Mrs. CAPITO (for herself, Mr. WHITEHOUSE, Mr. BARRASSO, and Mr. CRAMER) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### TITLE IV—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986

#### SEC. 4001. EXTENSION OF CREDIT FOR CARBON OXIDE SEQUESTRATION.

Section 45Q(d)(1) of the Internal Revenue Code of 1986 is amended by striking “January 1, 2024” and inserting “January 1, 2029”.

**SA 1375.** Mr. WICKER (for himself and Mr. MARKEY) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title I, insert the following:

#### SEC. 1 \_\_. REPORT ON ELECTROCHROMIC GLASS.

(a) DEFINITION OF ELECTROCHROMIC GLASS.—In this section, the term

“electrochromic glass” means glass that uses electricity to change the light transmittance properties of the glass to heat or cool a structure.

(b) **REPORT.**—Not later than 1 year after the date of enactment of this Act, the Secretary, in collaboration with the heads of other relevant agencies, shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that addresses the benefits of electrochromic glass, including the following:

(1) Reductions in energy consumption in commercial buildings, especially peak cooling load reduction and annual energy bill savings.

(2) Benefits in the workplace, especially visual comfort and employee health.

(3) Benefits of natural light in hospitals for patients and staff, especially accelerated patient healing and recovery time.

**SA 1376.** Mr. WICKER (for himself, Mr. KAINE, and Mr. WARNER) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 178, line 16, insert “, including 2-dimensional materials such as graphene,” after “designs”.

**SA 1377.** Ms. HASSAN (for herself and Ms. COLLINS) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

**TITLE IV—AMENDMENTS TO THE  
INTERNAL REVENUE CODE OF 1986  
SEC. 4001. UPDATING CREDIT FOR NONBUSINESS  
ENERGY PROPERTY.**

(a) **IN GENERAL.**—Section 25C of the Internal Revenue Code of 1986 is amended—

(1) in subsection (a)(1), by striking “10 percent” and inserting “15 percent”;

(2) in subsection (b)—

(A) in paragraph (1)—

(i) by striking “\$500” and inserting “\$1,200”, and

(ii) by striking “December 31, 2005” and inserting “December 31, 2020”, and

(B) by striking paragraphs (2) and (3) and inserting the following:

“(2) **LIMITATION ON INSULATION MATERIAL OR SYSTEM.**—In the case of amounts paid or incurred for components described in subsection (c)(3)(A) by any taxpayer for any taxable year, the credit allowed under this section with respect to such amounts for such year shall not exceed the excess (if any) of \$600 over the aggregate credits allowed under this section with respect to such amounts for all prior taxable years ending after December 31, 2020.

“(3) **LIMITATION ON WINDOWS.**—

“(A) **IN GENERAL.**—

“(i) **ENERGY STAR MOST EFFICIENT.**—In the case of amounts paid or incurred by any taxpayer for any taxable year for components described in subsection (c)(3)(B) which meet the most efficient certification under applicable Energy Star program requirements, the credit allowed under this section with respect to such amounts for such year shall not exceed the excess (if any) of \$600 over the aggregate credits allowed under this section with respect to such amounts for all prior taxable years ending after December 31, 2020.

“(ii) **ENERGY STAR.**—In the case of amounts paid or incurred by any taxpayer for any taxable year for components described in subsection (c)(3)(B) which do not meet the most efficient certification under applicable Energy Star program requirements, the credit allowed under this section with respect to such amounts for such year shall not exceed the excess (if any) of \$200 over the aggregate credits allowed under this section with respect to such amounts for all prior taxable years ending after December 31, 2020.

“(B) **ELECTION.**—

“(i) **IN GENERAL.**—For purposes of any amounts paid or incurred by any taxpayer for components described in subsection (c)(3)(B), the credit allowed under this section shall only be allowed for components described in clause (i) of subparagraph (A) or clause (ii) of such subparagraph, but not both, as elected by the taxpayer during the first taxable year in which such credit is being claimed by the taxpayer.

“(ii) **IRREVOCABILITY.**—The Secretary shall, through such rules, regulations, and procedures as are determined appropriate, establish procedures for making an election under this subparagraph, which shall require that—

“(I) any election made by the taxpayer shall be irrevocable, and

“(II) such election shall remain in effect for all subsequent taxable years.

“(4) **LIMITATION ON DOORS.**—In the case of amounts paid or incurred for components described in subsection (c)(3)(C) by any taxpayer for any taxable year, the credit allowed under this section with respect to such amounts for such year shall not exceed—

“(A) the excess (if any) of \$500 over the aggregate credits allowed under this section with respect to such amounts for all prior taxable years ending after December 31, 2020, or

“(B) \$250 for each exterior door.

“(5) **LIMITATION ON RESIDENTIAL ENERGY PROPERTY EXPENDITURES.**—The amount of the credit allowed under this section by reason of subsection (a)(2) shall not exceed—

“(A) in the case of any energy-efficient building property—

(i) for any item of property described in subparagraph (A), (B), or (C) of subsection (d)(3), \$600, and

(ii) for any item of property described in subparagraph (D) or (E) of such subsection, \$400, and

“(B) in the case of any qualified natural gas, propane, or oil furnace or hot water boiler (as defined in subsection (d)(4)), an amount equal to—

“(i) \$600 for a hot water boiler, and

“(ii) in the case of a furnace, an amount equal to the sum of—

“(I) \$300, plus

“(II) if the taxpayer is converting from a non-condensing furnace to a condensing furnace, \$300.”,

(3) in subsection (c)—

(A) in paragraph (2)—

(i) by striking subparagraphs (A) and (B) and inserting the following:

“(A) applicable Energy Star program requirements, in the case of an exterior window, a skylight, or an exterior door, and”;

(ii) by redesignating subparagraph (C) as subparagraph (B), and

(iii) in subparagraph (B), as so redesignated, by striking “2009 International” and all that follows through “Act of 2009” and inserting “2015 IECC (as defined in section 45L(b)(5))”;

(B) in paragraph (3)—

(i) in subparagraph (B), by adding “and” at the end,

(ii) in subparagraph (C), by striking “, and” and inserting a period, and

(iii) by striking subparagraph (D), and

(C) by adding at the end the following new paragraph:

“(5) **LABOR COSTS.**—The term ‘qualified energy efficiency improvements’ includes expenditures for labor costs properly allocable to the onsite preparation, assembly, or original installation of any energy efficient building envelope component.”;

(4) in subsection (d)—

(A) in paragraph (2)(A)—

(i) in clause (i), by adding “or” at the end,

(ii) in clause (ii), by striking “; or” and inserting a period, and

(iii) by striking clause (iii),

(B) in paragraph (3)—

(i) by striking subparagraph (A) and inserting the following:

“(A) an electric heat pump water heater which, in the standard Department of Energy test procedure, yields a uniform energy factor of at least 3.0.”;

(ii) in subparagraph (B), by striking “January 1, 2009” and inserting “the date of enactment of the American Energy Innovation Act of 2020”;

(iii) in subparagraph (C), by striking “January 1, 2009” and inserting “the date of enactment of the American Energy Innovation Act of 2020”;

(iv) by striking subparagraph (D) and inserting the following:

“(D) a natural gas, propane, or oil water heater which, in the standard Department of Energy test procedure, yields—

“(i) in the case of a storage tank water heater—

“(I) in the case of a medium-draw water heater, a uniform energy factor of not less than 0.78, and

“(II) in the case of a high-draw water heater, a uniform energy factor of not less than 0.80, and

“(ii) in the case of a tankless water heater—

“(I) in the case of a medium-draw water heater, a uniform energy factor of not less than 0.87, and

“(II) in the case of a high-draw water heater, a uniform energy factor of not less than 0.90, and”;

(v) in subparagraph (E), by striking “of at least 75 percent” and inserting the following:

“(as determined pursuant to the applicable list published by the Environmental Protection Agency for certified wood stoves, hydronic heaters, or forced-air furnaces) of at least—

“(i) in the case of any stove placed in service before January 1, 2022, 73 percent, and

“(ii) in the case of any stove placed in service after December 31, 2021, 75 percent.”;

(C) in paragraph (4), by striking “not less than 95” and inserting the following: “not less than—

“(A) in the case of a furnace, 97 percent, and

“(B) in the case of a hot water boiler, 95 percent.”;

(D) by striking paragraph (5), and

(E) by redesignating paragraph (6) as paragraph (5),

(5) in subsection (e), by adding the following new paragraphs at the end:

“(4) **INSTALLATION STANDARDS.**—The terms ‘energy efficient building envelope component’ and ‘qualified energy property’ shall not include any components or property which are not installed according to any applicable Air Conditioning Contractors of America Quality Installation standards which are in effect at the time that such components or property are placed in service.

“(5) **REPLACEMENT OF TERMINATED STANDARDS.**—In the case of any standard, requirement, or criteria applicable to any energy efficient building envelope component or

qualified energy property which is terminated after the date of enactment of the American Energy Innovation Act of 2020, the Secretary, in consultation with the Secretary of Energy, shall identify a similar standard, requirement, or criteria for purposes of determining the eligibility of any such component or property for purposes of credit allowed under this section.”, and

(6) in subsection (g)(2), by striking “December 31, 2020” and inserting “December 31, 2027”.

(b) **EFFECTIVE DATE.**—The amendments made by this section shall apply to property placed in service after December 31, 2020.

**SA 1378.** Ms. HASSAN (for herself and Ms. COLLINS) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

**TITLE IV—AMENDMENTS TO THE  
INTERNAL REVENUE CODE OF 1986**

**SEC. 4001. UPDATING NEW ENERGY EFFICIENT  
HOME CREDIT.**

(a) **IN GENERAL.**—Section 45L of the Internal Revenue Code of 1986 is amended—

(1) in subsection (a)(2)—

(A) in subparagraph (A), by striking “\$2,000” and inserting “\$2,500”; and

(B) in subparagraph (B), by inserting “or (4)” after “paragraph (3)”;

(2) in subsection (b)—

(A) in paragraph (2)(B), by striking “this section” and inserting “the American Energy Innovation Act of 2020”; and

(B) by adding at the end the following:

“(5) 2018 IECC.—

“(A) **IN GENERAL.**—The term ‘2018 IECC’ means the 2018 International Energy Conservation Code, as such Code (including supplements) is in effect on the date of the enactment of the American Energy Innovation Act of 2020.

“(B) **SPECIAL RULE.**—For purposes of subsection (c)(1)(B)(i)(I), in determining whether a dwelling unit has been constructed in accordance with the standards of chapter 4 of the 2018 IECC by achieving a level of energy efficiency which meets Section R406.4 (N1106.4) of such Code, such determination shall be made without accounting for on-site energy generation.”;

(3) by striking subsection (c) and inserting the following:

“(c) **ENERGY SAVING REQUIREMENTS.**—A dwelling unit meets the energy saving requirements of this subsection if such unit—

“(1)(A) is certified—

“(i) to have a level of annual heating and cooling energy consumption which is at least 60 percent below the annual level of heating and cooling energy consumption of a comparable dwelling unit—

“(I) which is constructed in accordance with the standards of chapter 4 of the 2006 International Energy Conservation Code, as such Code (including supplements) is in effect on January 1, 2006, and

“(II) for which the heating and cooling equipment efficiencies correspond to the minimum allowed under the regulations established by the Department of Energy pursuant to the National Appliance Energy Conservation Act of 1987 and in effect at the time of completion of construction, and

“(ii) to have building envelope component improvements account for at least ⅓ of such 60 percent, or

“(B) is certified—

“(i) to have a level of annual energy consumption which is at least 15 percent below

the annual level of energy consumption of a comparable dwelling unit—

“(I) which is constructed in accordance with the standards of chapter 4 of the 2018 IECC, and

“(II) which meets the requirements described in subparagraph (A)(i)(II), and

“(ii) to have building envelope component improvements account for at least ⅓ of such 15 percent,

“(2) is a manufactured home which—

“(A) conforms to Federal Manufactured Home Construction and Safety Standards (part 3280 of title 24, Code of Federal Regulations), and

“(B) meets the requirements described in subparagraph (A) or (B) of paragraph (1),

“(3) meets the requirements established by the Administrator of the Environmental Protection Agency under the Energy Star Labeled Homes program, or

“(4) is a manufactured home which—

“(A) conforms to the standards described in paragraph (2)(A), and

“(B) meets the requirements described in paragraph (3).”;

(4) in subsection (g), by striking “December 31, 2020” and inserting “December 31, 2022”.

(b) **EFFECTIVE DATE.**—The amendments made by this section shall apply to qualified new energy efficient homes acquired after December 31, 2020.

**SA 1379.** Ms. HASSAN (for herself and Ms. COLLINS) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title I, insert the following:

**SEC. \_\_\_\_ . LOAN GUARANTEES FOR BATTERY  
STORAGE TECHNOLOGIES.**

Section 1703(b) of the Energy Policy Act of 2005 (42 U.S.C. 16513(b)) is amended by adding at the end the following:

“(1) Battery storage technologies for residential, industrial, or transportation applications.”.

**SA 1380.** Ms. HASSAN (for herself and Ms. COLLINS) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ . REGIONAL GREENHOUSE GAS REDUC-  
TION.**

(a) **DEFINITIONS.**—In this section:

(1) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(2) **GREENHOUSE GAS.**—The term “greenhouse gas” means carbon dioxide, methane, nitrous oxide, hydrofluorocarbon, perfluorocarbon, and sulfur hexafluoride.

(3) **OFFICE.**—The term “Office” means the Office of Regional Greenhouse Gas Reduction Programs established under subsection (b)(1).

(4) **REGIONAL GREENHOUSE GAS REDUCTION PROGRAM.**—The term “regional greenhouse gas reduction program” means a program that uses market-based tools to reduce greenhouse gases across States at the regional level, such as—

(A) the Regional Greenhouse Gas Initiative organized among, as of November 14, 2019,

the States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont to cap and reduce carbon dioxide emissions from the power sector; and

(B) the Western Climate Initiative, a regional carbon trading system organized between the State of California and Quebec, Canada.

(5) **STATE.**—The term “State” means—

(A) a State;

(B) the District of Columbia;

(C) the Commonwealth of Puerto Rico;

(D) the United States Virgin Islands;

(E) Guam;

(F) American Samoa;

(G) the Commonwealth of the Northern Mariana Islands; and

(H) the Trust Territory of the Pacific Islands.

(6) **UNIT OF LOCAL GOVERNMENT.**—The term “unit of local government” means—

(A) a city, town, borough, county, parish, district, association, or other public body created by or pursuant to State law;

(B) an Indian tribe (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304)); and

(C) a tribal organization (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304)).

(b) **OFFICE OF REGIONAL GREENHOUSE GAS REDUCTION PROGRAMS.**—

(1) **ESTABLISHMENT.**—Not later than 1 year after the date of enactment of this Act, there shall be established within the Environmental Protection Agency an office, to be known as the “Office of Regional Greenhouse Gas Reduction Programs”.

(2) **PURPOSE.**—The purpose of the Office shall be—

(A) to support, and assist in the expansion of, existing regional greenhouse gas reduction programs; and

(B) to facilitate the establishment of new regional greenhouse gas reduction programs.

(3) **DIRECTOR.**—The Office shall be headed by a Director, who shall be appointed by the Administrator—

(A) without regard to political affiliation; and

(B) solely on the basis of fitness to perform the duties of the Director described in paragraph (4).

(4) **DUTIES OF DIRECTOR.**—The Director of the Office shall—

(A) on request by a State or other relevant entity, provide access to Federal data relevant to regional greenhouse gas reduction programs;

(B)(i) assist States and other relevant entities with analysis and modeling of technical, economic, and public policy issues relating to regional greenhouse gas reduction programs; and

(ii) provide any other relevant technical support, on request;

(C) develop and share best practices based on existing regional greenhouse gas reduction programs;

(D) track and report on greenhouse gas emissions in States participating in regional greenhouse gas reduction programs using data collected by the Environmental Protection Agency;

(E) designate a representative in the Office—

(i) to act as a liaison to regional greenhouse gas reduction programs; and

(ii) to communicate with States and other entities seeking to establish regional greenhouse gas reduction programs;

(F) facilitate communication among Federal and State agencies, agencies of units of local government, and stakeholders to share



lessons learned about greenhouse gas monitoring and control programs, through methods such as workshops, conferences, websites, and newsletters;

(G) administer the grant program established under subsection (c);

(H) coordinate with the interagency task force established under subsection (d); and

(I) carry out any other activity relevant to the function of the Office.

(5) **REPORT.**—The Administrator, acting through the Director of the Office, shall submit a biannual report to Congress that describes and summarizes the efforts made and technical assistance provided by the Office to help States improve the health and environment of communities in those States.

(6) **ACCESS TO INFORMATION.**—On request of the Director, the head of each Federal agency shall provide the Director any information and data necessary for any analyses or reports required as part of the function of the Office.

(7) **NO ADDITIONAL REPORTING REQUIREMENTS.**—Nothing in this subsection authorizes the Administrator or the Director of the Office to impose an additional reporting requirement on a State participating in a regional greenhouse gas reduction program.

(c) **REGIONAL GREENHOUSE GAS REDUCTION PROGRAM STARTUP GRANTS.**—

(1) **DEFINITION OF ELIGIBLE ENTITY.**—In this subsection, the term “eligible entity” means—

(A) a State;

(B) a unit of local government; and

(C) a regional consortium that is a partnership between or among 1 or more entities described in subparagraphs (A) and (B).

(2) **ESTABLISHMENT.**—Not later than 1 year after the date of enactment of this Act, the Director of the Office shall establish a program within the Office to provide grants to eligible entities, on a competitive basis, to take active preliminary steps (including information-gathering) towards developing or participating in a regional greenhouse gas reduction program.

(3) **APPLICATION.**—An eligible entity shall submit to the Director of the Office an application to receive a grant under paragraph (2) at such time, in such manner, and containing such information as the Director of the Office may require.

(4) **MINIMUM GRANT AMOUNT.**—A grant awarded under paragraph (2) shall be in an amount that is not less than \$250,000.

(5) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Director of the Office such amounts as are necessary to carry out this subsection, to remain available until expended.

(d) **INTERAGENCY TASK FORCE.**—

(1) **ESTABLISHMENT.**—The Administrator shall establish an interagency task force (referred to in this subsection as the “task force”)—

(A) to determine how best to support existing regional greenhouse gas reduction programs;

(B) to consult with States to determine how best to support States and other entities that seek to develop regional greenhouse gas reduction programs or expand existing regional greenhouse gas reduction programs; and

(C) to analyze existing gaps in Federal data that are relevant to the formation or analysis of regional greenhouse gas reduction programs.

(2) **MEMBERS.**—The task force shall—

(A) be headed by a representative from the Office; and

(B) include representatives from—

(i) the Department of Energy;

(ii) the Department of Agriculture;

(iii) the Department of Transportation; and

(iv) the Department of the Interior.

(3) **REPORT.**—Not later than 1 year after the date on which the task force is established under paragraph (1), the task force shall submit to Congress a report that describes a plan—

(A) to support existing regional greenhouse gas reduction programs;

(B) to support States and other entities seeking to develop regional greenhouse gas reduction programs; and

(C) that addresses Federal data gaps with respect to regional greenhouse gas reduction programs.

**SA 1381.** Ms. HASSAN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title I, insert the following:

**SEC. 1. NET METERING STUDY AND EVALUATION.**

(a) **IN GENERAL.**—Title XVIII of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 1122) is amended by adding at the end the following:

**“SEC. 1841. NET METERING STUDY AND EVALUATION.**

“(a) **IN GENERAL.**—Not later than 180 days after the date of enactment of this section, the Secretary shall seek to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine (referred to in this section as the ‘National Academies’) under which the National Academies shall—

“(1) study the opportunities and challenges associated with net metering; and

“(2) evaluate the expected medium- and long-term impacts of net metering.

“(b) **ELEMENTS.**—The study and evaluation conducted pursuant to the agreement entered into under subsection (a) shall address—

“(1) developments in net metering, including the emergence of new technologies;

“(2) alternatives to existing metering systems that—

“(A) provide for transactions that—

“(i) measure electric energy consumption by an electric consumer at the home or facility of that electric consumer; and

“(ii) are capable of sending electric energy usage information through a communications network to an electric utility;

“(B) promote equitable distribution of resources and costs; and

“(C) provide incentives for the use of distributed renewable generation;

“(3) net metering planning and operating techniques;

“(4) effective architecture for net metering;

“(5) successful net metering business models;

“(6) consumer and industry incentives for net metering;

“(7) the role of renewable resources in the electric grid;

“(8) the role of net metering in developing future models for renewable infrastructure; and

“(9) the use of battery storage with net metering.

“(c) **REPORT.**—

“(1) **IN GENERAL.**—The agreement entered into under subsection (a) shall require the National Academies to submit to the Secretary, not later than 2 years after entering into the agreement, a report that describes the results of the study and evaluation conducted pursuant to the agreement.

“(2) **PUBLIC AVAILABILITY.**—The report submitted under paragraph (1) shall be made available to the public through electronic means, including the internet.”.

(b) **CLERICAL AMENDMENT.**—The table of contents for the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 604) is amended by adding at the end the following:

“Sec. 1841. Net metering study and evaluation.”.

**SA 1382.** Mr. DURBIN (for himself and Mr. ALEXANDER) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. . OFFICE OF SCIENCE.**

Section 209 of the Department of Energy Organization Act (42 U.S.C. 7139) is amended by adding at the end the following:

“(d) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Secretary to carry out the functions of the Office of Science—

“(1) for fiscal year 2021, \$7,500,000,000;

“(2) for fiscal year 2022, \$8,000,000,000;

“(3) for fiscal year 2023, \$8,600,000,000;

“(4) for fiscal year 2024, \$9,200,000,000; and

“(5) for fiscal year 2025, \$9,800,000,000.”.

**SA 1383.** Mr. CARPER (for himself, Mr. INHOFE, Mr. BARRASSO, Mr. WHITEHOUSE, Mr. SULLIVAN, Mr. BOOKER, Mrs. CAPITO, Mrs. GILLIBRAND, Mr. CRAMER, Mr. VAN HOLLEN, and Mr. BLUMENTHAL) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. . DIESEL EMISSIONS REDUCTION.**

(a) **REAUTHORIZATION OF DIESEL EMISSIONS REDUCTION PROGRAM.**—Section 797(a) of the Energy Policy Act of 2005 (42 U.S.C. 16137(a)) is amended by striking “2016” and inserting “2024”.

(b) **RECOGNIZING DIFFERENCES IN DIESEL VEHICLE, ENGINE, EQUIPMENT, AND FLEET USE.**—

(1) **NATIONAL GRANT, REBATE, AND LOAN PROGRAMS.**—Section 792(c)(4)(D) of the Energy Policy Act of 2005 (42 U.S.C. 16132(c)(4)(D)) is amended by inserting “, recognizing differences in typical vehicle, engine, equipment, and fleet use throughout the United States” before the semicolon.

(2) **STATE GRANT, REBATE, AND LOAN PROGRAMS.**—Section 793(b)(1) of the Energy Policy Act of 2005 (42 U.S.C. 16133(b)(1)) is amended—

(A) in subparagraph (B), by striking “; and” and inserting a semicolon; and

(B) by adding at the end the following:

“(D) the recognition, for purposes of implementing this section, of differences in typical vehicle, engine, equipment, and fleet use throughout the United States, including expected useful life; and”.

(c) **REALLOCATION OF UNUSED STATE FUNDS.**—Section 793(c)(2)(C) of the Energy Policy Act of 2005 (42 U.S.C. 16133(c)(2)(C)) is amended beginning in the matter preceding clause (i) by striking “to each remaining” and all that follows through “this paragraph” in clause (ii) and inserting “to carry out section 792”.

**SA 1384.** Mrs. SHAHEEN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 130, strike line 1 and insert the following:

(g) **TIMING FOR DISTRIBUTION OF FINANCIAL ASSISTANCE.**—Section 417(d) of the Energy Conservation and Production Act (42 U.S.C. 6867(d)) is amended—

(1) by striking “(d) Payments” and inserting the following:

“(d) **METHOD AND TIMING OF PAYMENTS.**—

“(1) **IN GENERAL.**—Subject to paragraph (2), any payments”; and

(2) by adding at the end the following:

“(2) **TIMING.**—Notwithstanding any other provision of law (including regulations), not later than 60 days after the date on which funds have been made available to provide assistance under this part, the Secretary shall distribute to the applicable recipient the full amount of assistance to be provided to the recipient under this part for the fiscal year.”.

(h) **ANNUAL REPORT.**—Section 421 of the Energy

On page 130, line 9, strike “(h)” and insert “(i)”.

On page 130, line 16, strike “(i)” and insert “(j)”.

At the end of subtitle H of title I, add the following:

**SEC. 18. . . . TIMING FOR DISTRIBUTION OF FINANCIAL ASSISTANCE UNDER THE STATE ENERGY PROGRAM.**

Section 363 of the Energy Policy and Conservation Act (42 U.S.C. 6323) is amended by adding at the end the following:

“(g) **TIMING FOR DISTRIBUTION OF FINANCIAL ASSISTANCE.**—Notwithstanding any other provision of law (including regulations), not later than 60 days after the date on which funds have been made available to provide financial assistance under this section, the Secretary shall distribute to the applicable State the full amount of assistance to be provided to the State under this section for the fiscal year.”.

**SA 1385.** Mrs. SHAHEEN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title I, insert the following:

**SEC. 1. . . . HEAT EFFICIENCY THROUGH APPLIED TECHNOLOGY.**

(a) **FINDINGS.**—Congress finds that—

(1) combined heat and power technology, also known as cogeneration, is a technology that efficiently produces electricity and thermal energy at the point of use of the technology;

(2) by combining the provision of both electricity and thermal energy in a single step, combined heat and power technology makes significantly more efficient use of fuel compared to separate generation of heat and power, which has significant economic and environmental advantages;

(3) waste heat to power is a technology that captures heat discarded by an existing industrial process and uses that heat to generate power with no additional fuel and no incremental emissions, reducing the need for electricity from other sources and the grid, and any associated emissions;

(4) waste heat or waste heat to power is considered renewable energy in 17 States;

(5)(A) a 2012 joint report by the Department of Energy and the Environmental Protection Agency estimated that by achieving the national goal outlined in Executive Order 13624 (77 Fed. Reg. 54779) (September 5, 2012) of deploying 40 gigawatts of new combined heat and power technology by 2020, the United States would increase the total combined heat and power capacity of the United States by 50 percent in less than a decade; and

(B) additional efficiency would—

(i) save 1,000,000,000,000 BTUs of energy; and

(ii) reduce emissions by 150,000,000 metric tons of carbon dioxide annually, a quantity equivalent to the emissions from more than 25,000,000 cars;

(6) a 2012 report by the Environmental Protection Agency estimated the amount of waste heat available at a temperature high enough for power generation from industrial and nonindustrial applications represents an additional 10 gigawatts of electric generating capacity on a national basis;

(7) distributed energy generation, including through combined heat and power technology and waste heat to power technology, has ancillary benefits, such as—

(A) removing load from the electricity distribution grid; and

(B) improving the overall reliability of the electricity distribution system; and

(8)(A) a number of regulatory barriers impede broad deployment of combined heat and power technology and waste heat to power technology; and

(B) a 2008 study by Oak Ridge National Laboratory identified interconnection issues, regulated fees and tariffs, and environmental permitting as areas that could be streamlined with respect to the provision of combined heat and power technology and waste heat to power technology.

(b) **DEFINITIONS.**—

(1) **IN GENERAL.**—In this section:

(A) **COMBINED HEAT AND POWER TECHNOLOGY.**—The term “combined heat and power technology” means the generation of electric energy and heat in a single, integrated system that meets the efficiency criteria in clauses (ii) and (iii) of section 48(c)(3)(A) of the Internal Revenue Code of 1986, under which heat that is conventionally rejected is recovered and used to meet thermal energy requirements.

(B) **OUTPUT-BASED EMISSION STANDARD.**—The term “output-based emission standard” means a standard that relates emissions to the electrical, thermal, or mechanical productive output of a device or process rather than the heat input of fuel burned or pollutant concentration in the exhaust.

(C) **QUALIFIED WASTE HEAT RESOURCE.**—

(i) **IN GENERAL.**—The term “qualified waste heat resource” means—

(I) exhaust heat or flared gas from any industrial or commercial process;

(II) waste gas or industrial tail gas that would otherwise be flared, incinerated, or vented;

(III) a pressure drop in any gas for an industrial or commercial process; or

(IV) any other form of waste heat resource as the Secretary may determine.

(ii) **EXCLUSION.**—The term “qualified waste heat resource” does not include a heat resource from a process the primary purpose of which is the generation of electricity using a fossil fuel.

(D) **WASTE HEAT TO POWER TECHNOLOGY.**—The term “waste heat to power technology” means a system that generates electricity through the recovery of a qualified waste heat resource.

(2) **PURPA DEFINITIONS.**—Section 3 of the Public Utility Regulatory Policies Act of

1978 (16 U.S.C. 2602) is amended by adding at the end the following:

“(22) **COMBINED HEAT AND POWER TECHNOLOGY.**—The term ‘combined heat and power technology’ means the generation of electric energy and heat in a single, integrated system that meets the efficiency criteria in clauses (ii) and (iii) of section 48(c)(3)(A) of the Internal Revenue Code of 1986, under which heat that is conventionally rejected is recovered and used to meet thermal energy requirements.

“(23) **QUALIFIED WASTE HEAT RESOURCE.**—

“(A) **IN GENERAL.**—The term ‘qualified waste heat resource’ means—

“(i) exhaust heat or flared gas from any industrial process;

“(ii) waste gas or industrial tail gas that would otherwise be flared, incinerated, or vented;

“(iii) a pressure drop in any gas for an industrial or commercial process; or

“(iv) any other form of waste heat resource as the Secretary may determine.

“(B) **EXCLUSION.**—The term ‘qualified waste heat resource’ does not include a heat resource from a process the primary purpose of which is the generation of electricity using a fossil fuel.

“(24) **WASTE HEAT TO POWER TECHNOLOGY.**—The term ‘waste heat to power technology’ means a system that generates electricity through the recovery of a qualified waste heat resource.”.

(c) **UPDATED INTERCONNECTION PROCEDURES AND TARIFF SCHEDULE.**—

(1) **ADOPTION OF STANDARDS.**—Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:

“(20) **UPDATED INTERCONNECTION PROCEDURES AND TARIFF SCHEDULE.**—

“(A) **IN GENERAL.**—Not later than 1 year after the date of enactment of this paragraph, the Secretary, in consultation with the Commission and other appropriate agencies, shall establish, for generation with nameplate capacity up to 20 megawatts using all fuels—

“(i) guidance for technical interconnection standards that ensure interoperability with existing Federal interconnection rules;

“(ii) model interconnection procedures, including appropriate fast track procedures; and

“(iii) model rules for determining and assigning interconnection costs.

“(B) **STANDARDS.**—The standards established under subparagraph (A) shall, to the maximum extent practicable, reflect current best practices (as demonstrated in model codes and rules adopted by States) to encourage the use of distributed generation (such as combined heat and power technology and waste heat to power technology) while ensuring the safety and reliability of the interconnected units and the distribution and transmission networks to which the units connect.

“(C) **VARIATIONS.**—In establishing the model standards under subparagraph (A), the Secretary shall consider the appropriateness of using standards or procedures that vary based on unit size, fuel type, or other relevant characteristics.”.

(2) **COMPLIANCE.**—

(A) **TIME LIMITATIONS.**—Section 112(b) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(b)) is amended by adding at the end the following:

“(7)(A) Not later than 90 days after the date on which the Secretary completes the standards required under section 111(d)(20), each State regulatory authority (with respect to each electric utility for which the authority has ratemaking authority) shall commence the consideration referred to in

that section, or set a hearing date for such consideration, with respect to each standard.

“(B) Not later than 2 years after the date on which the Secretary completes the standards required under section 111(d)(20), each State regulatory authority (with respect to each electric utility for which the authority has ratemaking authority) shall—

“(i) complete the consideration under subparagraph (A);

“(ii) make the determination referred to in section 111 with respect to each standard established under section 111(d)(20); and

“(iii) submit to the Secretary and the Commission a report detailing the updated plans of the State regulatory authority for interconnection procedures and tariff schedules that reflect best practices to encourage the use of distributed generation.”.

(B) FAILURE TO COMPLY.—Section 112(c) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(c)) is amended by adding at the end the following: “In the case of each standard established under paragraph (20) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of that paragraph.”.

(C) PRIOR STATE ACTIONS.—

(i) IN GENERAL.—Section 112 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622) is amended by adding at the end the following:

“(g) PRIOR STATE ACTIONS.—Subsections (b) and (c) shall not apply to a standard established under paragraph (20) of section 111(d) in the case of any electric utility in a State if, before the date of enactment of this subsection—

“(1) the State has implemented for the electric utility the standard (or a comparable standard);

“(2) the State regulatory authority for the State has conducted a proceeding after December 31, 2016, to consider implementation of the standard (or a comparable standard) for the electric utility; or

“(3) the State legislature has voted on the implementation of the standard (or a comparable standard) for the electric utility.”.

(ii) CROSS-REFERENCE.—Section 124 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2634) is amended by adding at the end the following: “In the case of each standard established under paragraph (20) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of that paragraph.”.

(d) SUPPLEMENTAL, BACKUP, AND STANDBY POWER FEES OR RATES.—

(1) ADOPTION OF STANDARDS.—Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) (as amended by subsection (c)(1)) is amended by adding at the end the following:

“(21) SUPPLEMENTAL, BACKUP, AND STANDBY POWER FEES OR RATES.—

“(A) IN GENERAL.—Not later than 1 year after the date of enactment of this paragraph, the Secretary, in consultation with the Commission and other appropriate agencies, shall establish model rules and procedures for determining fees or rates for supplementary power, backup or standby power, maintenance power, and interruptible power supplied to facilities that operate combined heat and power technology and waste heat to power technology that appropriately allow for adequate cost recovery by an electric utility but are not excessive.

“(B) FACTORS.—In establishing model rules and procedures for determining fees or rates described in subparagraph (A), the Secretary shall consider—

“(i) the best practices that are used to model outage assumptions and contingencies to determine the fees or rates;

“(ii) the appropriate duration, magnitude, or usage of demand charge ratchets;

“(iii) the benefits to the utility and ratepayers, such as increased reliability, fuel diversification, enhanced power quality, and reduced electric losses from the use of combined heat and power technology and waste heat to power technology by a qualifying facility; and

“(iv) alternative arrangements to the purchase of supplementary, backup, or standby power by the owner of combined heat and power technology and waste heat to power technology generating units if the alternative arrangements—

“(I) do not compromise system reliability; and

“(II) are nondiscretionary and nonpreferential.”.

(2) COMPLIANCE.—

(A) TIME LIMITATIONS.—Section 112(b) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(b)) (as amended by subsection (c)(2)(A)) is amended by adding at the end the following:

“(8)(A) Not later than 90 days after the date on which the Secretary completes the standards required under section 111(d)(21), each State regulatory authority (with respect to each electric utility for which the authority has ratemaking authority) shall commence the consideration referred to in that section, or set a hearing date for such consideration, with respect to each standard.

“(B) Not later than 2 years after the date on which the Secretary completes the standards required under section 111(d)(21), each State regulatory authority (with respect to each electric utility for which the authority has ratemaking authority) shall—

“(i) complete the consideration under subparagraph (A);

“(ii) make the determination referred to in section 111 with respect to each standard established under section 111(d)(21); and

“(iii) submit to the Secretary and the Commission a report detailing the updated plans of the State regulatory authority for supplemental, backup, and standby power fees that reflect best practices to encourage the use of distributed generation.”.

(B) FAILURE TO COMPLY.—Section 112(c) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(c)) (as amended by subsection (c)(2)(B)) is amended by adding at the end the following: “In the case of each standard established under paragraph (21) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of that paragraph.”.

(C) PRIOR STATE ACTIONS.—

(i) IN GENERAL.—Section 112 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622) (as amended by subsection (c)(2)(C)(i)) is amended by adding at the end the following:

“(h) PRIOR STATE ACTIONS.—Subsections (b) and (c) shall not apply to a standard established under paragraph (21) of section 111(d) in the case of any electric utility in a State if, before the date of enactment of this subsection—

“(1) the State has implemented for the electric utility the standard (or a comparable standard);

“(2) the State regulatory authority for the State has conducted a proceeding after December 31, 2016, to consider implementation of the standard (or a comparable standard) for the electric utility; or

“(3) the State legislature has voted on the implementation of the standard (or a comparable standard) for the electric utility.”.

(ii) CROSS-REFERENCE.—Section 124 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2634) (as amended by subsection (c)(2)(C)(ii)) is amended by adding at

the end the following: “In the case of each standard established under paragraph (21) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of that paragraph.”.

(e) UPDATING OUTPUT-BASED EMISSIONS STANDARDS.—

(1) ESTABLISHMENT.—The Administrator of the Environmental Protection Agency (referred to in this subsection as the “Administrator”) shall establish a program under which the Administrator shall provide to each State (as defined in section 302 of the Clean Air Act (42 U.S.C. 7602)) that elects to participate and that submits an application under paragraph (2) a grant for use by the State in accordance with paragraph (3).

(2) APPLICATION.—To be eligible to receive a grant under this subsection, a State shall submit to the Administrator an application at such time, in such manner, and containing such information as the Administrator may require.

(3) USE OF FUNDS.—

(A) IN GENERAL.—A State shall use a grant provided under this subsection—

(i) to update any applicable State or local air permitting regulations under the Clean Air Act (42 U.S.C. 7401 et seq.) to incorporate environmental regulations relating to output-based emissions standards in accordance with relevant guidelines developed by the Administrator under subparagraph (B); or

(ii) if the State has already updated all applicable State and local permitting regulations to incorporate those output-based emissions standards, to expedite the processing of relevant power generation permit applications under the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.).

(B) GUIDELINES.—As soon as practicable after the date of enactment of this Act, the Administrator shall publish guidelines for updating State and local permitting regulations under the Clean Air Act (42 U.S.C. 7401 et seq.) that—

(i) provide credit, in the calculation of the emission rate of the facility, for any thermal energy produced by combined heat and power technology or waste heat to power technology; and

(ii) apply only to generation units that produce 5 megawatts of electrical energy or less.

(4) MAXIMUM AMOUNT.—The amount of a grant provided under this subsection shall not exceed \$100,000.

(5) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Administrator to carry out this subsection \$5,000,000.

**SA 1386.** Mrs. SHAHEEN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title II, add the following:

#### Subtitle D—Miscellaneous

#### SEC. 24. FEDERAL ENERGY REGULATORY COMMISSION PERMITTING AND REVIEW.

(a) FINDINGS.—The Senate finds that—

(1) the Federal Government plays a central role in the review and approval of projects to maintain and build the energy infrastructure of the United States, including—

(A) interstate gas pipelines;

(B) projects that cross Federal land; and

(C) projects that impact wildlife, cultural or historic resources, or waters of the United States;

(2) the Federal Energy Regulatory Commission—

(A) has jurisdiction under section 7 of the Natural Gas Act (15 U.S.C. 717f) to regulate interstate natural gas pipelines, including siting of the interstate natural gas pipelines; and

(B) is required under section 15 of the Natural Gas Act (15 U.S.C. 717n), as a lead agency, to coordinate with other Federal agencies in the environmental review and processing of each Federal authorization relating to natural gas infrastructure;

(3) a report of the Government Accountability Office entitled “Pipeline Permitting: Interstate and Intrastate Natural Gas Permitting Processes Include Multiple Steps, and Time Frames Vary”, and dated February 2013, reported that—

(A) public interest groups and State officials that were interviewed believed that members of the public need more opportunity to comment on a proposed pipeline project during the permitting process conducted by the Federal Energy Regulatory Commission; and

(B) officials from Federal and State agencies and representatives from industry and public interest groups reported several management practices that—

(i) could help overcome challenges;

(ii) are associated with an efficient permitting process and obtaining public input; and

(iii) include—

(I) ensuring effective collaboration among the numerous stakeholders involved in the permitting process; and

(II) increasing opportunities for public comment; and

(4) robust engagement by the public and stakeholders is essential for the credibility of the siting, permitting, and review of Federal processes by the Federal Energy Regulatory Commission.

(b) SENSE OF THE SENATE.—It is the sense of the Senate that, in accordance with Executive Order 13604 (5 U.S.C. 601 note; relating to improving performance of Federal permitting and review of infrastructure projects), the Federal Energy Regulatory Commission should prioritize meaningful public engagement and coordination with State and local governments to ensure that the Federal permitting and review processes of the Federal Energy Regulatory Commission—

(1) remain transparent and consistent; and

(2) ensure the health, safety, and security of the environment and each community affected by the Federal permitting and review processes.

**SA 1387.** Mrs. SHAHEEN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title II, add the following:

**Subtitle D—Federal Energy Regulatory Commission**

**SEC. 24. OFFICE OF PUBLIC PARTICIPATION AND CONSUMER ADVOCACY.**

Section 319 of the Federal Power Act (16 U.S.C. 825q–1) is amended to read as follows:

**“SEC. 319. OFFICE OF PUBLIC PARTICIPATION AND CONSUMER ADVOCACY.**

“(a) DEFINITIONS.—In this section:

“(1) ADVISORY COMMITTEE.—The term ‘Advisory Committee’ means the Public and Consumer Advocacy Advisory Committee established under subsection (f)(1).

“(2) DIRECTOR.—The term ‘Director’ means the Director of the Office appointed under subsection (c)(1).

“(3) ENERGY CUSTOMER.—The term ‘energy customer’ means a residential customer or a

small commercial customer that receives products or services from—

“(A) a public utility or natural gas company under the jurisdiction of the Commission; or

“(B) an electric cooperative.

“(4) NATURAL GAS COMPANY.—The term ‘natural gas company’ has the meaning given the term ‘natural-gas company’ in section 2 of the Natural Gas Act (15 U.S.C. 717a), as modified by section 601(a)(1)(C) of the Natural Gas Policy Act of 1978 (15 U.S.C. 3431(a)(1)(C)).

“(5) OFFICE.—The term ‘Office’ means the Office of Public Participation and Consumer Advocacy established by subsection (b).

“(b) ESTABLISHMENT.—There is established within the Commission an office, to be known as the ‘Office of Public Participation and Consumer Advocacy’.

“(c) DIRECTOR.—

“(1) IN GENERAL.—The Office shall be headed by a Director, to be appointed by the Secretary of Energy from among individuals who—

“(A) are licensed attorneys admitted to the bar of—

“(i) any State; or

“(ii) the District of Columbia; and

“(B) have experience relating to public utility proceedings.

“(2) DUTIES.—The Director shall coordinate assistance made available to—

“(A) the public, with respect to authorities exercised by the Commission; and

“(B) individuals and entities intervening or participating, or proposing to intervene or participate, in proceedings before the Commission.

“(3) COMPENSATION AND POWERS.—

“(A) COMPENSATION.—The Director shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code.

“(B) POWERS.—The Director may—

“(i) employ at the Office—

“(I) not more than 125 full-time professional employees at appropriate levels of the General Schedule; and

“(II) such additional support personnel as the Director determines to be necessary; and

“(ii) procure for the Office such temporary and intermittent services as the Director determines to be necessary.

“(d) POWERS OF OFFICE.—The Office may—

“(1) intervene, appear, and participate, in accordance with this section, in administrative, regulatory, or judicial proceedings on behalf of energy customers with respect to any matter concerning natural gas siting and infrastructure development under the jurisdiction of the Commission or the rates, charges, prices, tariffs, or service of public utilities and natural gas companies under the jurisdiction of the Commission by representing the interests of the energy customers—

“(A) on any matter before the Commission concerning rates or service of such a public utility or natural gas company; or

“(B) as *amicus curiae* in—

“(i) a review in any United States court of a ruling by the Commission in such a matter; or

“(ii) a hearing or proceeding in any other Federal regulatory agency or commission relating to such a matter;

“(2) support public participation in the siting and permitting of natural gas storage and distribution infrastructure under the jurisdiction of the Commission;

“(3) monitor and review energy customer complaints and grievances on matters concerning rates or service of public utilities and natural gas companies under the jurisdiction of the Commission;

“(4) employ means, such as public dissemination of information, consultative services, and technical assistance, to ensure, to the maximum extent practicable, that the interests of energy customers are adequately represented in the course of any hearing or proceeding described in paragraph (1);

“(5) collect data concerning rates or service of public utilities and natural gas companies under the jurisdiction of the Commission;

“(6) prepare and issue reports and recommendations; and

“(7) take such other actions as the Director determines to be necessary to ensure just and reasonable rates for energy customers.

“(e) INFORMATION FROM FEDERAL DEPARTMENTS AND AGENCIES.—

“(1) IN GENERAL.—The Director may secure directly from a Federal department or agency such information as the Director considers to be necessary to carry out this section.

“(2) PROVISION OF INFORMATION.—On request of the Director under paragraph (1), the head of a Federal department or agency shall, to the extent practicable and authorized by law, provide the information to the Office.

“(f) PUBLIC AND CONSUMER ADVOCACY ADVISORY COMMITTEE.—

“(1) ESTABLISHMENT.—The Director shall establish an advisory committee, to be known as the ‘Public and Consumer Advocacy Advisory Committee’—

“(A) to review rates, services, and disputes; and

“(B) to make recommendations to the Director.

“(2) COMPOSITION.—The Advisory Committee shall—

“(A) be composed of such members as the Director determines to be appropriate; but

“(B) include not fewer than—

“(i) 2 individuals representing State utility consumer advocates; and

“(ii) 1 individual representing a nongovernmental organization that represents consumers.

“(3) MEETINGS.—The Advisory Committee shall meet at such frequency as is required to carry out the duties of the Advisory Committee.

“(4) REPORTS.—The Director shall publish the recommendations of the Advisory Committee on the public internet website established for the Office.

“(5) DURATION.—Notwithstanding any other provision of law, the Advisory Committee shall continue in operation during the period for which the Office exists.

“(6) APPLICATION OF FACA.—Except as otherwise specifically provided, the Advisory Committee shall be subject to the Federal Advisory Committee Act (5 U.S.C. App.).

“(g) REPORTS AND GUIDANCE.—As the Director determines to be appropriate, the Office shall issue to the Commission and entities subject to regulation by the Commission reports and guidance—

“(1) regarding market practices;

“(2) proposing improvements in Commission monitoring of market practices; and

“(3) addressing potential improvements to industry and Commission practices.

“(h) OUTREACH.—The Office shall promote, through outreach, publications, and, as appropriate, direct communication with entities regulated by the Commission—

“(1) improved compliance with Commission rules and orders; and

“(2) public participation in the siting and permitting of natural gas storage and distribution infrastructure under the jurisdiction of the Commission.

“(i) COMPENSATION TO ELIGIBLE RECIPIENTS FOR INTERVENTION OR PARTICIPATION.—

“(1) DEFINITION OF ELIGIBLE RECIPIENT.—In this subsection, the term ‘eligible recipient’ means an individual or entity—

“(A) that intervenes or participates in any proceeding before the Commission;

“(B) the intervention or participation of which substantially contributed to the approval, in whole or in part, of a position advocated by the individual or entity in the proceeding; and

“(C) that is—

“(i) an individual;

“(ii) an energy customer; or

“(iii) a representative of the interests of energy customers.

“(2) COMPENSATION.—Subject to paragraph (3), the Commission, in accordance with regulations promulgated by the Commission, may provide to any eligible recipient compensation for reasonable attorney fees, expert witness fees, and other costs of intervening or participating in the applicable proceeding before the Commission.

“(3) REQUIREMENT.—The Commission may only provide compensation under paragraph (2) if the Commission determines that—

“(A) the applicable proceeding is significant;

“(B) the compensation is approved by the Advisory Committee; and

“(C) the intervention or participation by the eligible recipient in the proceeding without receipt of compensation constitutes a significant financial hardship to the eligible recipient.

“(j) SAVINGS CLAUSE.—Nothing in this section restricts or otherwise affects—

“(1) any right or obligation of an intervenor, participant, State utility consumer advocate, energy customer, or group of energy customers under any other applicable provision of law (including regulations); or

“(2) the work of Commission trial staff in representing the public interest and pursuing appropriate resolutions in contested matters before the Commission.

“(k) FUNDING.—Of the amounts received by the Commission for fiscal year 2020 and each fiscal year thereafter as a result of any fee imposed by the Commission, the Commission shall use such sums as are necessary to establish and provide for the operation of the Office under this section.”

**SA 1388.** Mrs. SHAHEEN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of part II of subtitle B of title II, add the following:

**SEC. 22. IMPROVING ENERGY SYSTEM RESILIENCE.**

(a) DEFINITIONS.—In this section:

(1) COMBINED HEAT AND POWER TECHNOLOGY.—The term “combined heat and power technology” means a technology for the generation of electric energy and heat in a single, integrated system—

(A) that meets the efficiency criteria described in clauses (ii) and (iii) of section 48(c)(3)(A) of the Internal Revenue Code of 1986; and

(B) under which heat that is conventionally rejected is—

(i) recovered; and

(ii) used to meet thermal energy requirements.

(2) DISTRIBUTED ENERGY RESOURCE.—The term “distributed energy resource” means any energy technology that is—

(A) located on a customer site;

(B) operating on the customer side of the electric meter; and

(C) interconnected with the grid.

(3) ENERGY STORAGE.—The term “energy storage” means any technology for the storage of electric energy that is capable of discharge on demand to meet customer or grid needs for electric energy.

(4) ENERGY SYSTEM.—

(A) IN GENERAL.—The term “energy system” means all components relating to the production, conversion, delivery, or use of energy.

(B) INCLUSIONS.—The term “energy system” includes any energy generation, transmission, or distribution asset.

(5) GRID.—The term “grid” means the electric grid composed of—

(A) electric energy distribution and transmission lines; and

(B) associated facilities, including—

(i) substations;

(ii) sensors; and

(iii) operational controls.

(6) RESILIENCE.—The term “resilience”, with respect to an energy system or a component of an energy system, means the ability of the energy system or component—

(A) to adapt to changing conditions; and

(B) to withstand and recover rapidly from a disruption, including a deliberate attack, accident, or naturally occurring threat or incident.

(b) REPORT ON ENERGY SYSTEM PERFORMANCE UNDER EXTREME STORMS.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to the appropriate committees of Congress a report describing energy emergencies, resilience, and mitigation actions that could lessen the impact of future energy system disruptions.

(2) REQUIREMENTS.—In preparing the report under paragraph (1), the Secretary shall—

(A) take into consideration any lessons learned from prior storms, including lessons learned from—

(i) Superstorm Sandy; and

(ii) Hurricanes Harvey, Irma, and Maria;

(B) include a description of the anticipated cost effectiveness and avoided cost to energy ratepayers if a mitigation action described in the report is implemented; and

(C) identify specific lessons learned with regard to coordination among Federal, State, and local entities with respect to energy emergency preparedness, mitigation, and recovery across all energy sectors.

(c) REGIONAL ENERGY EMERGENCY PREPAREDNESS EXERCISES.—

(1) IN GENERAL.—Title V of the Homeland Security Act of 2002 (6 U.S.C. 311 et seq.) is amended by adding at the end the following:

**“SEC. 529. REGIONAL ENERGY EMERGENCY PREPAREDNESS EXERCISES.**

“(a) DEFINITIONS.—In this section:

“(1) ENERGY SYSTEM.—

“(A) IN GENERAL.—The term ‘energy system’ means all components relating to the production, conversion, delivery, or use of energy.

“(B) INCLUSIONS.—The term ‘energy system’ includes any energy generation, transmission, or distribution asset.

“(2) SECRETARY.—The term ‘Secretary’ means the Secretary of Energy.

“(b) ESTABLISHMENT OF PERMANENT PROGRAM.—In carrying out the duties of the Secretary under Emergency Support Function 12 of the National Response Plan, the Secretary shall establish a permanent program within the Office of Electricity Delivery and Energy Reliability under which the Secretary shall conduct regional energy emergency preparedness exercises to strengthen the capability of participants to respond to, and recover from, severe events affecting the reliable operation of the energy system.

“(c) REQUIREMENTS.—An exercise conducted under subsection (b) shall include analyses of—

“(1) any potential hazards to energy systems and associated interdependent systems;

“(2) the outcome of any physical security, cybersecurity, and energy emergency preparedness and response activities conducted under the exercise;

“(3) options for mitigating the impacts of energy system disruptions; and

“(4) the availability and delivery times of material and equipment required to rebuild after energy system disruptions.

“(d) PARTICIPANTS.—Participants in an exercise conducted under subsection (b) shall include—

“(1) State energy officials;

“(2) State public utility commissioners;

“(3) State emergency management officials;

“(4) local emergency management officials;

“(5) utilities;

“(6) petroleum and natural gas providers and other fuel providers;

“(7) utility-scale renewable energy providers;

“(8) telecommunications providers;

“(9) first responders; and

“(10) any other individuals determined to be appropriate by the Secretary.

“(e) COORDINATION.—In carrying out this section, the Secretary is encouraged to coordinate and consult with—

“(1) the Secretary of Defense;

“(2) the Secretary of Homeland Security;

“(3) the Secretary of Transportation;

“(4) the Administrator of the Federal Emergency Management Agency;

“(5) the head of the Office of Energy Infrastructure Security of the Federal Energy Regulatory Commission; and

“(6) the heads of such other Federal departments and agencies as the Secretary determines to have an interest in strengthening the reliable operation of the energy system.

“(f) FUNDING.—The Secretary may request such funding as the Secretary determines to be necessary to carry out this section.”

(2) TECHNICAL AND CONFORMING AMENDMENTS.—

(A) Section 201(g)(4) of the Homeland Security Act of 2002 (6 U.S.C. 121(g)(4)) is amended by inserting “, subject to section 529,” after “Energy and”.

(B) Section 303(1) of the Homeland Security Act of 2002 (6 U.S.C. 183(1)) is amended, in the matter preceding subparagraph (A), by striking “The following” and inserting “Subject to section 529, the following”.

(C) Section 501(8) of the Homeland Security Act of 2002 (6 U.S.C. 311(8)) is amended by striking “section 502(a)(6)” and inserting “section 504(a)(6)”.

(D) Section 504(a)(3)(B) of the Homeland Security Act of 2002 (6 U.S.C. 314(a)(3)(B)) is amended by striking “, the National Disaster Medical System.”

(d) ENERGY RESILIENCE PILOT PROGRAM.—

(1) ESTABLISHMENT.—The Secretary shall establish a pilot program under which the Secretary shall provide to States grants for the development of—

(A) State plans to be used as models for developing a systematic and holistic approach to energy system resilience; and

(B) all-hazards, all-fuels energy emergency plans and mitigation actions.

(2) APPLICATION.—

(A) IN GENERAL.—To be eligible to receive a grant under this subsection, a State, acting jointly with the State energy office and the public utility or service commission of the State (or a substantially similar entity) and in consultation with State energy management offices, utilities (including municipal utilities), electric cooperatives, and private-sector partners in the applicable State or region, shall submit to the Secretary an application at such time, in such manner, and

containing such information as the Secretary may require.

(B) INCLUSIONS.—An application submitted under subparagraph (A) shall include a description of the manner in which the proposed plan would, with respect to the area proposed to be served by the plan—

(i) improve the resilience of the energy system and natural gas and petroleum infrastructure that services critical facilities, including medical facilities, first responder stations, water treatment plants, telecommunications nodes, schools, and other State and local government facilities used for emergency shelter;

(ii) encourage a multi-State coordinated effort to respond to disasters;

(iii) improve the deployment of—

(I) energy-efficient practices and technologies;

(II) distributed energy resources;

(III) combined heat and power technologies; and

(IV) energy storage;

(iv) support the implementation of smart grid technology, including—

(I) sensors;

(II) advanced metering;

(III) automation;

(IV) equipment;

(V) control systems;

(VI) high-temperature, low-sag electric transmission and subtransmission cable; and

(VII) other technologies that enable the dynamic optimization of—

(aa) electric grid operations; and

(bb) energy system hardening;

(v) address technical and organizational communications obstacles that may impair getting energy systems back online after disasters;

(vi) improve protections against cyberattacks on—

(I) the energy system;

(II) natural gas systems; and

(III) petroleum product refining and distribution systems;

(vii) improve petroleum product emergency response and contingency plans impacting first responder and other mission-critical transportation fleets; and

(viii) address and improve critical infrastructure interdependencies, including with respect to energy sources, water, telecommunications, transportation, and food system delivery.

(C) CRITERIA.—The Secretary shall evaluate an application for a grant submitted under this subsection—

(i) on the basis of merit; and

(ii) using criteria identified by the Secretary, including—

(I) whether there exists demonstrated support for the plan from utilities, electric cooperatives, municipal utilities, and private-sector partners in the applicable State or region;

(II) whether transportation systems and delivered fuels are adequately addressed;

(III) whether the plan would provide for the dissemination of results obtained in carrying out the plan; and

(IV) the permanence of the infrastructure to be put in place by the plan.

(3) REGIONAL DIVERSITY.—To the maximum extent practicable, the Secretary shall ensure regional diversity among States that receive grants under this subsection, including participation by—

(A) rural States; and

(B) small States.

(4) BEST PRACTICES.—In carrying out the pilot program under this subsection, the Secretary shall—

(A) identify and collect information regarding best practices for strengthening the capability of States to improve the resilient,

secure, and flexible operation of the energy system; and

(B) develop a means to securely share with States those best practices, as available.

(5) REPORT.—Not later than 2 years after the date on which the pilot program is established under paragraph (1), and biennially thereafter for the duration of the program, the Secretary shall submit to Congress a report that identifies any technical, policy, or regulatory issues requiring legislative action to improve the resilience of—

(A) the electric grid;

(B) renewable energy systems;

(C) natural gas systems; and

(D) petroleum refining and distribution systems.

(6) TERMINATION.—The authority to carry out the pilot program under this subsection terminates on the date that is 5 years after the date on which the Secretary establishes the pilot program under paragraph (1).

(7) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary such sums as are necessary to carry out this subsection, subject to the condition that not more than \$20,000,000 may be made available to carry out this subsection for any 1 fiscal year.

(e) CONSULTATION AND COORDINATION.—In carrying out this section and the amendments made by this section, the Secretary shall—

(1) consult with—

(A) State public utility commissions;

(B) State energy offices;

(C) regional transmission organizations;

(D) electric and natural gas utilities;

(E) independent power producers;

(F) distributed energy providers;

(G) energy storage providers;

(H) transportation fuel providers;

(I) telecommunications providers;

(J) public interest organizations;

(K) any Department-sponsored entity involved in a support or advisory activity under Emergency Support Function 12 of the National Response Plan; and

(L) other appropriate stakeholders, as determined by the Secretary; and

(2) to the maximum extent practicable, use—

(A) existing programs at the Department; and

(B) resources available through the National Laboratories.

**SA 1389.** Mrs. SHAHEEN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

#### **SEC. \_\_\_\_ . FOREST INCENTIVES PROGRAM.**

(a) DEFINITIONS.—In this section:

(1) CARBON INCENTIVES CONTRACT; CONTRACT.—The term “carbon incentives contract” or “contract” means a 15- to 30-year contract that specifies—

(A) the eligible practices that will be undertaken;

(B) the acreage of eligible land on which the practices will be undertaken;

(C) the agreed rate of compensation per acre;

(D) a schedule to verify that the terms of the contract have been fulfilled; and

(E) such other terms as are determined necessary by the Secretary.

(2) CONSERVATION EASEMENT AGREEMENT; AGREEMENT.—The term “conservation easement agreement” or “agreement” means a permanent conservation easement that—

(A) covers eligible land that will not be converted for development;

(B) is enrolled under a carbon incentives contract; and

(C) is consistent with the guidelines for—

(i) the Forest Legacy Program established under section 7 of the Cooperative Forestry Assistance Act of 1978 (16 U.S.C. 2103c), subject to the condition that an eligible practice shall be considered to be a conservation value for purposes of such consistency; or

(ii) any other program approved by the Secretary for use under this section to provide consistency with Federal legal requirements for permanent conservation easements.

(3) ELIGIBLE LAND.—The term “eligible land” means forest land in the United States that is privately owned at the time of initiation of a carbon incentives contract or conservation easement agreement.

(4) ELIGIBLE PRACTICE.—

(A) IN GENERAL.—The term “eligible practice” means a forestry practice, including improved forest management that produces marketable forest products, that is determined by the Secretary to provide measurable increases in carbon sequestration and storage beyond customary practices on comparable land.

(B) INCLUSIONS.—The term “eligible practice” includes—

(i) afforestation on nonforested land, such as marginal crop or pasture land, windbreaks, shelterbelts, stream buffers, including working land and urban forests and parks, or other areas identified by the Secretary;

(ii) reforestation on forest land impacted by wildfire, pests, wind, or other stresses, including working land and urban forests and parks;

(iii) improved forest management, with appropriate crediting for the carbon benefits of harvested wood products, through practices such as improving regeneration after harvest, planting in understocked forests, reducing competition from slow-growing species, thinning to encourage growth, changing rotations to increase carbon storage, improving harvest efficiency or wood use; and

(iv) such other practices as the Secretary determines to be appropriate.

(5) FOREST INCENTIVES PROGRAM; PROGRAM.—The term “forest incentives program” or “program” means the forest incentives program established under subsection (b)(1).

(6) SECRETARY.—The term “Secretary” means the Secretary of Agriculture.

(b) SUPPLEMENTAL GREENHOUSE GAS EMISSION REDUCTIONS IN UNITED STATES.—

(1) IN GENERAL.—The Secretary shall establish a forest incentives program to achieve supplemental greenhouse gas emission reductions and carbon sequestration on private forest land of the United States through—

(A) carbon incentives contracts; and

(B) conservation easement agreements.

(2) PRIORITY.—In selecting projects under this subsection, the Secretary shall provide a priority for contracts and agreements—

(A) that sequester the most carbon on a per acre basis, with appropriate crediting for the carbon benefits of harvested wood products; and

(B) that create forestry jobs or protect habitats and achieve significant other environmental, economic, and social benefits.

(3) ELIGIBILITY.—

(A) IN GENERAL.—To participate in the program, an owner of eligible land shall—

(i) enter into a carbon incentives contract; and

(ii) fulfill such other requirements as the Secretary determines to be necessary.

(B) CONTINUED ELIGIBLE PRACTICES.—An owner of eligible land who has been carrying



out eligible practices on the eligible land shall not be barred from entering into a carbon incentives contract under this subsection to continue carrying out the eligible practices on the eligible land.

(C) DURATION OF CONTRACT.—A contract shall be for a term of not less than 15, nor more than 30, years, as determined by the owner of eligible land.

(D) COMPENSATION UNDER CONTRACT.—The Secretary shall determine the rate of compensation per acre under the contract so that the longer the term of the contract, the higher the rate of compensation.

(E) RELATIONSHIP TO OTHER PROGRAMS.—An owner or operator shall not be prohibited from participating in the program due to participation of the owner or operator in other Federal or State conservation assistance programs.

(4) COMPLIANCE.—In developing regulations for carbon incentives contracts under this subsection, the Secretary shall specify requirements to address whether the owner of eligible land has completed contract and agreement requirements.

(c) INCENTIVE PAYMENTS.—

(1) IN GENERAL.—The Secretary shall provide to owners of eligible land financial incentive payments for—

(A) eligible practices that measurably increase carbon sequestration and storage over a designated period on eligible land, with appropriate crediting for the carbon benefits of harvested wood products, as specified through a carbon incentives contract; and

(B) subject to paragraph (2), conservation easements on eligible land covered under a conservation easement agreement.

(2) COMPENSATION.—The Secretary shall determine the amount of compensation to be provided under a contract under this subsection based on the emissions reductions obtained or avoided and the duration of the reductions, with due consideration to prevailing carbon pricing as determined by any relevant or State compliance offset programs.

(3) NO CONSERVATION EASEMENT AGREEMENT REQUIRED.—Eligibility for financial incentive payments under a carbon incentives contract described in paragraph (1)(A) shall not require a conservation easement agreement.

(d) REGULATIONS.—Not later than 1 year after the date of enactment of this Act, the Secretary shall issue regulations that specify eligible practices and related compensation rates, standards, and guidelines as the basis for entering into the program with owners of eligible land.

(e) SET-ASIDE OF FUNDS FOR CERTAIN PURPOSES.—

(1) IN GENERAL.—At the discretion of the Secretary, a portion of program funds made available under this program for a fiscal year may be used—

(A) to develop forest carbon modeling and methodologies that will improve the projection of carbon gains for any forest practices made eligible under the program;

(B) to provide additional incentive payments for specified management activities that increase the adaptive capacity of land under a carbon incentives contract; and

(C) for the Forest Inventory and Analysis Program of the Forest Service to develop improved measurement and monitoring of forest carbon stocks.

(2) PROGRAM COMPONENTS.—In establishing the program, the Secretary shall provide that funds provided under this section shall not be substituted for, or otherwise used as a basis for reducing, funding authorized or appropriated under other programs to compensate owners of eligible land for activities that are not covered under the program.

(f) PROGRAM MEASUREMENT, MONITORING, VERIFICATION, AND REPORTING.—

(1) MEASUREMENT, MONITORING, AND VERIFICATION.—The Secretary shall establish and implement protocols that provide monitoring and verification of compliance with the terms of contracts and agreements.

(2) REPORTING REQUIREMENT.—At least annually, the Secretary shall submit to Congress a report that contains—

(A) an estimate of annual and cumulative reductions achieved as a result of the program, determined using standardized measures, including measures of economic efficiency;

(B) a summary of any changes to the program that will be made as a result of program measurement, monitoring, and verification;

(C) the total number of acres enrolled in the program by method; and

(D) a State-by-State summary of the data.

(3) AVAILABILITY OF REPORT.—Each report required by this subsection shall be available to the public through the website of the Department of Agriculture.

(4) PROGRAM ADJUSTMENTS.—At least once every 2 years the Secretary shall adjust eligible practices and compensation rates for future carbon incentives contracts based on the results of monitoring under paragraph (1) and reporting under paragraph (2), if determined necessary by the Secretary.

(5) ESTIMATING CARBON BENEFITS.—Any modeling, methodology, or protocol resource developed under this section—

(A) shall be suitable for estimating carbon benefits associated with eligible practices for the purpose of incentives under this section; and

(B) may be used for netting by States or emission sources under Federal programs relating to carbon emissions.

(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section such sums as are necessary.

#### SEC. \_\_\_\_ MATERIAL CHOICES IN BUILDINGS FOR SUPPLEMENTAL GREENHOUSE GAS EMISSION REDUCTIONS IN UNITED STATES.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE BUILDING.—The term “eligible building” means a nonresidential building used for commercial or State or local government purposes.

(2) ELIGIBLE PRODUCT.—The term “eligible product” means a commercial or industrial product, such as an intermediate, feedstock, or end product (other than food or feed), that is composed in whole or in part of biological products, including renewable agricultural and forestry materials used as structural building material.

(3) PROGRAM.—The term “program” means the greenhouse gas incentives program established under this section.

(4) SECRETARY.—The term “Secretary” means the Secretary of Agriculture.

(b) SUPPLEMENTAL GREENHOUSE GAS EMISSION REDUCTIONS IN BUILDINGS.—

(1) IN GENERAL.—The Secretary shall establish a greenhouse gas incentives program to achieve supplemental greenhouse gas emission reductions from material choices in buildings, based on the lifecycle assessment of the building materials.

(2) FINANCIAL INCENTIVE PAYMENTS.—The Secretary shall provide to owners of eligible buildings incentive payments for the use of eligible products in buildings for sequestering carbon based on a lifecycle assessment of the structural assemblies, as compared to a model building as a result of using eligible products in substitution for more energy-intensive materials in—

(A) new construction; or

(B) building renovation.

(c) PROGRAM REQUIREMENTS.—

(1) APPLICATIONS.—To be eligible to participate in the program, the owner of an eligible building shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

(2) COMPONENTS.—In establishing the program, the Secretary shall require that payments for activities under the program shall be—

(A) established at a rate not to exceed the net estimated benefit an owner of an eligible building would receive for similar practices under any federally established carbon offset program, taking into consideration the costs associated with the issuance of credits and compliance with reversal provisions;

(B) provided to owners of eligible buildings demonstrating at least a 20-percent reduction in carbon emissions potential, based on a lifecycle assessment of the structural assemblies, as compared to the structural assemblies of a model building, subject to the requirements that—

(i) the Secretary shall identify a model baseline nonresidential building—

(I) of common size and function; and

(II) having a service life of not less than 60 years; and

(ii) applicants shall evaluate the carbon emissions potential of the baseline building and the proposed building using the same lifecycle assessment software tool and data sets, which shall be compliant with the document numbered ISO 14044; and

(C) provided on certification by the owner of an eligible building and verification by the Secretary, after consultation with the Secretary of Energy, that—

(i) the eligible building meets the requirements of the applicable State commercial building energy efficiency code (as in effect on the date of the applicable permit of the eligible building); and

(ii) the State has made the certification required pursuant to section 304 of the Energy Conservation and Production Act (42 U.S.C. 6833).

(3) INCENTIVE PAYMENTS.—A participant in the program shall receive payment under the program on completion of construction or renovation of the applicable eligible building.

(d) REPORTS.—Not less frequently than once each year, the Secretary shall submit to Congress a report that contains—

(1) an estimate of annual and cumulative reductions achieved as a result of the program—

(A) determined by using lifecycle assessment software that is compliant with the document numbered ISO 14044; and

(B) expressed in terms of the total number of cars removed from the road;

(2) a summary of any changes to the program that will be made as a result of past implementation of the program; and

(3) the total number of buildings under carbon incentives contracts as of the date of the report.

(e) ANALYTICAL REQUIREMENTS.—For purposes of this section—

(1) any carbon emissions potential calculation shall—

(A) be performed in accordance with standard lifecycle assessment practice; and

(B) include removal and sequestration of carbon dioxide from the use of biobased products, as well as recycled content materials;

(2) a full lifecycle assessment shall be conducted taking into consideration all lifecycle stages, including—

(A) resource extraction and processing;

(B) product manufacturing;

(C) onsite construction of assemblies;

(D) transportation;

(E) maintenance and replacement cycles over an assumed eligible building service life of 60 years; and

(F) demolition;

(3) structural assemblies shall be considered to include columns, beams, girders, purlins, floor deck, roof, and structural envelope elements;

(4) primary materials shall be considered to include common products used as the structural system, such as wood, steel, concrete, or masonry; and

(5) the effects of recycling, reuse, or energy recovery beyond the boundaries of an applicable study system shall not be taken in account.

(F) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section.

**SA 1390.** Mrs. SHAHEEN submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle H of title I, insert the following:

**SEC. 18. RESEARCH AND DEPLOYMENT PLAN FOR ENHANCED INTEGRATION OF CLEAN DISTRIBUTED ENERGY WITH THE GRID.**

(a) FINDINGS.—Congress finds that—

(1) research by the Secretary and the Administrator of the Environmental Protection Agency has found that clean distributed energy technologies can create important values for both the host facility and the electric grid operator;

(2) the values described in paragraph (1) can include, for the host facility—

(A) energy bill savings;

(B) additional revenue from offering ancillary services to the electric grid operator;

(C) increased electric reliability in the event of grid outages; and

(D) improved electric power quality;

(3) the values described in paragraph (1) can include, for the electric grid operator—

(A) avoiding the need for transmission and distribution upgrade investments;

(B) enhanced grid stability by providing reactive power;

(C) voltage and frequency stabilization; and

(D) more reliable and stable operation of the grid by providing dispatchable energy to the grid during periods of insufficient capacity or supply; and

(4) new advances in intelligent sensing and simulation and control technologies offer the potential to enhance the benefits of clean distributed generation to both the host facility and the electric grid operator from dynamic, adaptive, and anticipatory response to changing grid conditions.

(b) DEFINITIONS.—In this section:

(1) ANCILLARY SERVICE.—The term “ancillary service” means those services necessary to support the transmission of electric power from seller to purchaser given the obligations of control areas and transmitting utilities within those control areas to maintain reliable operations of the interconnected transmission system.

(2) CLEAN DISTRIBUTED ENERGY.—The term “clean distributed energy” means energy technologies that are located on or near the customer site operating on the customer side of the electric meter and are interconnected with the electric grid, including—

(A) clean electric generation;

(B) customer electric efficiency measures;

(C) electric demand flexibility; and

(D) energy storage.

(3) GRID.—The term “grid” means the electric grid that is composed of both distribution and transmission lines, and associated facilities, including substations, sensors, and operational controls.

(4) INTELLIGENCE.—The term “intelligence” means any devices or technologies that manifest adaptive, anticipatory, and dynamic optimization behavior.

(c) RESEARCH AND DEPLOYMENT PLAN FOR ENHANCED INTEGRATION OF CLEAN DISTRIBUTED ENERGY WITH THE GRID.—

(1) IN GENERAL.—The Secretary shall carry out efforts for advancing the integration of clean distributed energy into electric grids.

(2) STUDY AND REPORT ON THE STATUS OF GRID INTEGRATION.—

(A) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary, after consultation with State public utility commissions, State energy offices, regional transmission organizations, electric and natural gas utilities, independent power producers, clean distributed energy providers, public interest organizations, and other appropriate stakeholders, shall conduct a study on the status of integration of clean distributed energy into the grid, identifying any issues that require additional research or regulatory development.

(B) INCLUSIONS.—In conducting the study under subparagraph (A), the Secretary shall—

(i) identify and quantify the benefits to all stakeholders of expanded integration of clean distributed energy resources into the grid;

(ii) identify any technical issues (including cybersecurity concerns) that require research to identify solutions; and

(iii) identify any regulatory barriers that inhibit the expanded integration of clean distributed energy resources into the grid.

(C) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the results of the study conducted under subparagraph (A).

(D) BEST PRACTICES.—Based on the findings of the report described in subparagraph (C), the Secretary shall establish and distribute to States best practices to encourage the integration of clean distributed energy into the grid.

(E) FUNDING.—The Secretary shall use unobligated funds of the Department to carry out this paragraph.

(3) RESEARCH INTO THE TECHNICAL BARRIERS TO THE INTEGRATION OF CLEAN DISTRIBUTED ENERGY WITH THE GRID.—

(A) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Secretary shall—

(i) issue a solicitation for research proposals to address the technical barriers identified in the report submitted under paragraph (2)(C); and

(ii) make grants to those applicants with research proposals selected by the Secretary in accordance with subparagraph (B).

(B) CRITERIA.—The Secretary shall select research proposals to receive a grant under this paragraph on the basis of merit, using criteria identified by the Secretary, including the likelihood that the research results will address critical barriers identified by the Secretary.

(C) FUNDING.—Beginning in the first full fiscal year following the date of enactment of this Act, and annually thereafter for 2 years, the Secretary may request funding as necessary to carry out this paragraph, but in no case shall funding exceed \$5,000,000 in any 1 fiscal year.

(4) CREATION OF A STAKEHOLDER WORKING GROUP.—

(A) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the

Secretary shall convene a working group (referred to in this paragraph as the “Group”) to address regulatory barriers to deployment of intelligent grid integration of clean distributed energy technologies.

(B) PURPOSE.—The purpose of the Group is to provide guidance on how to address the regulatory and economic factors that limit widespread integration of grid-level clean distributed energy use in order to advance the integration of clean distributed energy into electric grids.

(C) MEMBERSHIP.—The Group shall be composed of—

(i) representatives from—

(I) State public utility commissions;

(II) State energy offices;

(III) regional transmission organizations;

(IV) electric and natural gas utilities;

(V) independent power producers;

(VI) clean distributed energy providers; and

(VII) public interest organizations; and

(ii) any other appropriate stakeholders determined by the Secretary to have a material interest in the development, implementation, siting, and integration of clean distributed energy technology or systems into the electric grid.

(D) DUTIES.—The duties of the Group shall be—

(i) to review the regulatory barriers identified in the report prepared by the Secretary under paragraph (2)(C);

(ii) to identify any additional regulatory barriers that inhibit the installation of distributed energy; and

(iii) to recommend to the Secretary actions that should be considered to remove the barriers identified under clauses (i) and (ii).

(E) REPORT.—Not later than 3 years after the date of enactment of this Act, the Secretary shall prepare and submit to Congress a report based on the recommendations of the Group under subparagraph (D)(iii), to be made publicly available.

(F) FUNDING.—The Secretary may request funding as necessary to carry out this paragraph, but in no case shall funding exceed \$2,000,000 in any 1 fiscal year.

(5) DEMONSTRATIONS OF INTELLIGENT GRID INTEGRATION OF CLEAN DISTRIBUTED ENERGY SYSTEMS.—

(A) IN GENERAL.—Based on the findings in the reports conducted under this subsection and not later than 3 years after the date of enactment of this Act, the Secretary shall issue a solicitation for demonstration of integration of distributed energy resources into the grid.

(B) ELIGIBLE ENTITIES.—Any individual entity or group of entities may submit to the Secretary proposals for demonstration projects based on the solicitation described in subparagraph (A), including—

(i) State and local agencies;

(ii) public institutions;

(iii) private companies;

(iv) electric and natural gas utilities; and

(v) equipment manufacturers.

(C) GRANTS AUTHORIZED.—The Secretary may make grants, in amounts not to exceed a total of \$5,000,000, to eligible entities to carry out demonstration projects, to be selected based on—

(i) the technical merits of the demonstration project;

(ii) the likelihood that the demonstration project will address critical barriers identified by the Secretary under this subsection; and

(iii) the share of non-Federal funds for the demonstration project.

(D) FUNDING.—Beginning in the third full fiscal year following the date of enactment of this Act, and annually thereafter for 3 years, the Secretary may request funding as

necessary to carry out this paragraph, but in no case shall funding exceed \$15,000,000 in any 1 fiscal year.

(6) REPORT.—The Secretary annually shall submit to Congress a report that—

(A) describes the progress made in carrying out this subsection; and

(B) identifies any technical or regulatory issues that require legislative action.

**SA 1391.** Mr. KING (for himself, Mr. BURR, and Mr. CARPER) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title I, insert the following:

**SEC. 1. BATTERY AND CRITICAL MINERAL RECYCLING.**

(a) DEFINITION OF BATTERY.—In this section, the term “battery” means a battery that is—

(1) rechargeable; and

(2) electrochemical, including lithium ion and other chemistries.

(b) GRANTS.—

(1) BATTERY RECYCLING RESEARCH, DEVELOPMENT, AND DEMONSTRATION GRANTS.—

(A) IN GENERAL.—The Secretary shall award multiyear grants to eligible entities for research, development, and demonstration projects to create innovative and practical approaches to increase the reuse and recycling of batteries, including by addressing—

(i) recycling processes;

(ii) the development of methods to promote the design and production of batteries that take into full account and facilitate the dismantling, reuse, recovery, and recycling of battery components and materials;

(iii) strategies to increase consumer acceptance of, and participation in, the recycling of batteries; and

(iv) the integration of increased quantities of recycled critical minerals in batteries and other products to develop markets for recycled battery materials and critical minerals.

(B) ELIGIBLE ENTITIES.—The Secretary may award a grant under subparagraph (A) to—

(i) an institution of higher education;

(ii) a National Laboratory;

(iii) a Federal research agency;

(iv) a State research agency;

(v) a nonprofit organization;

(vi) an industrial entity;

(vii) a manufacturing entity;

(viii) a private battery-collection entity;

(ix) a State or municipal government entity;

(x) a battery retailer; or

(xi) a consortium of 2 or more entities described in clauses (i) through (x).

(C) APPLICATIONS.—

(i) IN GENERAL.—To be eligible to receive a grant under subparagraph (A), an eligible entity described in subparagraph (B) shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

(ii) CONTENTS.—An application submitted under clause (i) shall describe how the project will promote collaboration among—

(I) vehicle battery manufacturers;

(II) other battery manufacturers;

(III) battery material and equipment manufacturers;

(IV) battery recyclers, collectors, and refiners; and

(V) retailers.

(2) STATE AND LOCAL PROGRAMS.—

(A) IN GENERAL.—The Secretary shall establish a program under which the Secretary

shall award grants, on a competitive basis, to States and units of local government to assist in the establishment or enhancement of State battery collection, recycling, and reprocessing programs.

(B) NON-FEDERAL COST SHARE.—The non-Federal share of the cost of a project carried out using a grant under this paragraph shall be 50 percent of the cost of the project.

(C) REPORT.—Not later than 2 years after the date of enactment of this Act, and annually thereafter, the Secretary shall submit to Congress a report that describes the number of battery collection points established or enhanced, an estimate of jobs created, and the quantity of material collected as a result of the grants awarded under subparagraph (A).

(3) RETAILERS AS COLLECTION POINTS.—

(A) IN GENERAL.—The Secretary shall award grants, on a competitive basis, to retailers that sell batteries to establish and implement a system for the acceptance and collection of used batteries for reuse, recycling, or proper disposal.

(B) COLLECTION SYSTEM.—The system described in subparagraph (A) shall include take-back of used batteries at no cost to the consumer.

(C) LITHIUM-ION BATTERY RECYCLING PRIZE COMPETITION.—

(1) IN GENERAL.—The Secretary shall continue to carry out the existing Lithium-Ion Battery Recycling Prize competition of the Department established under section 24 of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3719).

(2) ADDITIONAL FUNDING FOR PILOT PROJECTS.—In addition to any other funds made available to the Secretary to carry out the competition described in paragraph (1), there is authorized to be appropriated to the Secretary to carry out Phase III of that competition \$10,000,000 for fiscal year 2021, to remain available until expended, which the Secretary may use—

(A) to increase the number of winners of Phase III of that competition;

(B) to increase the amount awarded to the winners of Phase III of that competition; or

(C) to carry out any other activity that is consistent with the goals of Phase III of that competition, as determined by the Secretary.

(d) BEST PRACTICES FOR COLLECTION OF BATTERIES.—

(1) IN GENERAL.—The Administrator of the Environmental Protection Agency (referred to in this subsection as the “Administrator”) shall develop best practices for the collection of batteries that may be cost-effectively implemented by States and units of local government.

(2) COORDINATION.—The Administrator shall develop best practices under paragraph (1) in coordination with State and local leaders and entities in relevant private sectors.

(3) REPORT.—Not later than 1 year after the date of enactment of this Act, the Administrator shall submit to Congress a report describing the best practices developed under this subsection.

(e) VOLUNTARY LABELING PROGRAM.—

(1) IN GENERAL.—There is established within the Department and the Environmental Protection Agency a voluntary program to promote battery recycling and identify collection points in order to reduce battery waste, improve collection, and reduce safety concerns through—

(A) voluntary labeling of batteries; or

(B) other forms of communication about the reuse and recycling of critical materials from batteries.

(2) DIVISION OF RESPONSIBILITIES.—Responsibilities under the program established by paragraph (1) shall be divided between the Secretary and the Administrator of the En-

vironmental Protection Agency (referred to in this subsection as the “Administrator”) in accordance with the terms of applicable agreements between the Secretary and the Administrator.

(f) TASK FORCE ON PRODUCER REQUIREMENTS.—

(1) IN GENERAL.—The Secretary shall convene a task force to develop an extended battery producer responsibility framework that—

(A) addresses battery recycling goals, cost structures for mandatory recycling, reporting requirements, product design, collection models, and transportation of collected materials;

(B) provides sufficient flexibility to allow battery producers to determine cost-effective strategies for compliance with the framework; and

(C) outlines regulatory pathways for effective recycling.

(2) TASK FORCE PARTICIPANTS.—The task force convened under paragraph (1) shall include—

(A) battery producers, retailers, recyclers, collectors, and refiners;

(B) States and municipalities; and

(C) other relevant stakeholders, as determined by the Secretary.

(3) REPORT.—Not later than 1 year after the date on which the Secretary convenes the task force under paragraph (1), the Secretary shall submit to Congress a report that—

(A) describes the extended producer responsibility framework developed by the task force;

(B) includes the recommendations of the task force on how best to implement a mandatory pay-in or other enforcement mechanism to ensure battery producers and sellers are contributing to the recycling of batteries; and

(C) suggests regulatory pathways for effective recycling.

(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$30,000,000 for each of fiscal years 2021 through 2025.

**SA 1392.** Mr. KING (for himself and Ms. ERNST) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle C of title II, add the following:

**SEC. 2307. WIND TECHNICIAN TRAINING GRANT PROGRAM.**

(a) IN GENERAL.—Title XI of the Energy Policy Act of 2005 (42 U.S.C. 16411 et seq.) is amended by adding at the end the following:

**“SEC. 1107. WIND TECHNICIAN TRAINING GRANT PROGRAM.**

“(a) DEFINITION OF ELIGIBLE ENTITY.—In this section, the term ‘eligible entity’ means a community college or technical school that offers a wind training program.

“(b) GRANT PROGRAM.—The Secretary shall establish a program under which the Secretary shall award grants, on a competitive basis, to eligible entities to purchase large pieces of wind component equipment (such as nacelles, towers, and blades) for use in training wind technician students.

“(c) FUNDING.—Of the amounts made available to the Secretary for administrative expenses to carry out other programs under the authority of the Secretary, the Secretary shall use to carry out this section \$2,000,000 for each of fiscal years 2021 through 2026.”.

(b) CLERICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005

(Public Law 109-58; 119 Stat. 601) is amended by inserting after the item relating to section 1106 the following:

“Sec. 1107. Wind technician training grant program.”.

**SEC. 2308. VETERANS IN WIND ENERGY.**

(a) IN GENERAL.—Title XI of the Energy Policy Act of 2005 (42 U.S.C. 16411 et seq.) (as amended by section 2307(a)) is amended by adding at the end the following:

**“SEC. 1108. VETERANS IN WIND ENERGY.**

“(a) IN GENERAL.—The Secretary shall establish a program to prepare veterans for careers in the wind energy industry that shall be modeled off of the Solar Ready Vets pilot program formerly administered by the Department of Energy and the Department of Defense.

“(b) FUNDING.—Of the amounts made available to the Secretary for administrative expenses to carry out other programs under the authority of the Secretary, the Secretary shall use to carry out this section \$2,000,000 for each of fiscal years 2021 through 2026.”.

(b) CLERICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 601) (as amended by section 2307(b)) is amended by inserting after the item relating to section 1107 the following:

“Sec. 1108. Veterans in wind energy.”.

**SEC. 2309. STUDY AND REPORT ON WIND TECHNICIAN WORKFORCE.**

(a) IN GENERAL.—The Secretary shall convene a task force comprised of 1 or more representatives of each of the stakeholders described in subsection (b) that shall—

(1) conduct a study to assess the needs of wind technicians in the workforce;

(2) create a comprehensive list that—

(A) lists each type of wind technician position available in the United States; and

(B) describes the skill sets required for each type of position listed under subparagraph (A); and

(3) not later than 1 year after the date of enactment of this Act, make publicly available and submit to Congress a report that—

(A) describes the results of that study;

(B) includes the comprehensive list described in paragraph (2); and

(C) provides recommendations—

(i) for creating a credentialing program that may be administered by community colleges, technical schools, and other training institutions; and

(ii) that reflect best practices for wind technician training programs, as identified by representatives of the wind industry.

(b) STAKEHOLDERS DESCRIBED.—The stakeholders referred to in subsection (a) are—

(1) the Department of Defense;

(2) the Department of Education;

(3) the Department;

(4) the Department of Labor;

(5) the Department of Veterans Affairs;

(6) technical schools and community colleges that have wind technician training programs; and

(7) the wind industry.

(c) FUNDING.—Of the amounts made available to the Secretary for administrative expenses to carry out other programs under the authority of the Secretary, the Secretary shall use to carry out this section \$500,000.

**SA 1393.** Ms. SINEMA submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

**TITLE IV—MISCELLANEOUS**

**SEC. 4001. NONNATIVE PLANT SPECIES REMOVAL GRANT PROGRAM.**

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE ENTITY.—The term “eligible entity” means a partnership between 2 or more entities that—

(A) shall include—

(i) at least 1 flood control district; and

(ii) at least 1 city, county, township, town, borough, parish, village, or other general purpose political subdivision of a State or Indian tribe (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304)); and

(B) may include any other entity (such as a nonprofit organization or institution of higher education), as determined by the Secretary.

(2) NONNATIVE PLANT SPECIES.—The term “nonnative plant species” means a plant species that—

(A) is nonnative or alien to an ecosystem; and

(B) if introduced to that ecosystem, will cause, or is likely to cause, economic harm, environmental harm, or harm to human health.

(3) SECRETARY.—The term “Secretary” means the Secretary of Agriculture.

(b) ESTABLISHMENT.—The Secretary shall establish a grant program to award grants, on a competitive basis, to eligible entities—

(1) to remove nonnative plant species in riparian areas that contribute to drought conditions;

(2) to replace those nonnative plant species with native plant species; and

(3) to maintain and monitor riparian areas in which nonnative plant species have been removed and replaced.

(c) APPLICATIONS.—

(1) IN GENERAL.—To be eligible to receive a grant under this section, an eligible entity shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require, including—

(A) a plan for how the eligible entity will use grant funds to carry out the activities described in paragraphs (1) through (3) of subsection (b);

(B) a description of the manner in which the eligible entity has carried out the consultation required under paragraph (2); and

(C) information demonstrating that each native plant species described in subsection (b)(2) will—

(i) reduce flood risk;

(ii) improve hydrology and water storage capacities; or

(iii) reduce fire hazard; and

(ii) protect and restore rivers and streams and associated riparian habitats, including fish and wildlife resources that are dependent on those habitats.

(2) CONSULTATION.—An eligible entity seeking a grant under this section shall consult with local stakeholders, including conservation groups, to create the plan described in paragraph (1)(A).

(d) REPORT.—An eligible entity that receives a grant under this section shall submit to the Secretary a report at such time, in such manner, and containing such information as the Secretary may require, including information on methodology and outcomes of nonnative plant species removal and replacement efforts.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$10,000,000 for fiscal year 2021 and each fiscal year thereafter.

**SA 1394.** Mr. MERKLEY submitted an amendment intended to be proposed by him to the bill S. 2657, to support inno-

vation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

Strike section 1802.

**SA 1395.** Mr. MERKLEY submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle C of title II, add the following:

**SEC. 2307. GOOD JOBS FOR 21ST CENTURY ENERGY.**

(a) DEPARTMENT OF LABOR CERTIFICATION OF QUALIFIED ENTITIES.—

(1) DEFINITIONS.—In this subsection:

(A) APPLICABLE CONSTRUCTION PROJECT.—The term “applicable construction project”, with respect to an entity, means construction by the entity of any property described in section 45L, 48D, or 179D of the Internal Revenue Code of 1986.

(B) COVERED PROJECT LABOR AGREEMENT.—The term “covered project labor agreement” means a project labor agreement that—

(i) binds all contractors and subcontractors on the construction project through the inclusion of appropriate specifications in all relevant solicitation provisions and contract documents;

(ii) allows all contractors and subcontractors to compete for contracts and subcontracts without regard to whether they are otherwise a party to a collective bargaining agreement;

(iii) contains guarantees against strikes, lockouts, and other similar job disruptions;

(iv) sets forth effective, prompt, and mutually binding procedures for resolving labor disputes arising during the covered project labor agreement; and

(v) provides other mechanisms for labor-management cooperation on matters of mutual interest and concern, including productivity, quality of work, safety, and health.

(C) PROJECT LABOR AGREEMENT.—The term “project labor agreement” means a pre-hire collective bargaining agreement with one or more labor organizations that establishes the terms and conditions of employment for a specific construction project and is described in section 8(f) of the National Labor Relations Act (29 U.S.C. 158(f)).

(D) QUALIFIED ENTITY.—The term “qualified entity” means an entity that the Secretary of Labor certifies as a qualified entity in accordance with paragraph (2).

(E) REGISTERED APPRENTICESHIP PROGRAM.—The term “registered apprenticeship program” has the meaning given the term in section 171 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3226).

(2) CERTIFICATION OF QUALIFIED ENTITIES.—

(A) IN GENERAL.—The Secretary of Labor shall establish a process for certifying entities that submit an application under subparagraph (B) as qualified entities for purposes of the amendments made by subsections (b), (c), and (d).

(B) APPLICATION PROCESS.—

(i) IN GENERAL.—An entity seeking certification as a qualified entity under this paragraph shall submit an application to the Secretary of Labor at such time, in such manner, and containing such information as the Secretary of Labor may reasonably require, including information to demonstrate compliance with the requirements under subparagraph (C).

(ii) REQUESTS FOR ADDITIONAL INFORMATION.—Not later than 1 year after receiving an application from an entity under clause (i)—

(I) the Secretary of Labor may request additional information from the entity in order to determine whether the entity is in compliance with the requirements under subparagraph (C); and

(II) the entity shall provide such additional information.

(iii) DETERMINATION DEADLINE.—The Secretary of Labor shall make a determination on whether to certify an entity under this paragraph not later than—

(I) in a case in which such Secretary requests additional information described in clause (ii)(I), 1 year after such Secretary receives such additional information from the entity; or

(II) in a case that is not described in subclause (I), 1 year after the date on which the entity submits the application under clause (i).

(iv) PRE-CERTIFICATION REMEDIES.—The Secretary of Labor shall consider any corrective actions taken by an entity seeking certification under this paragraph to remedy an administrative merits determination, arbitral award or decision, or civil judgment identified under subparagraph (C)(i)(IV) and shall impose as a condition of certification any additional remedies necessary to avoid further or repeated violations.

(C) LABOR STANDARDS REQUIREMENTS.—

(I) IN GENERAL.—The Secretary of Labor shall require an entity, as a condition of certification under this paragraph, to satisfy each of the following requirements:

(I) The entity shall ensure that all laborers and mechanics employed by contractors and subcontractors in the performance of any applicable construction project shall be paid wages at rates not less than those prevailing on projects of a similar character in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the “Davis-Bacon Act”).

(II) The entity shall give preference in hiring to workers who—

(aa) have been previously employed in the fossil fuel industry;

(bb) are members of deindustrialized communities; or

(cc) are members of communities with a significant presence of fossil fuel infrastructure or operations.

(III) The entity shall be a party to, or require contractors and subcontractors in the performance of any applicable construction project to consent to, a covered project labor agreement.

(IV) The entity, and all contractors and subcontractors in performance of any applicable construction project, shall represent in the application submitted under subparagraph (B) whether there has been any administrative merits determination, arbitral award or decision, or civil judgment, as defined in guidance issued by the Secretary of Labor, rendered against the entity in the preceding 3 years for violations of—

(aa) the Fair Labor Standards Act of 1938 (29 U.S.C. 201 et seq.);

(bb) the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.);

(cc) the Migrant and Seasonal Agricultural Worker Protection Act (29 U.S.C. 1801 et seq.);

(dd) the National Labor Relations Act (29 U.S.C. 151 et seq.);

(ee) subchapter IV of chapter 31 of title 40, United States Code (commonly known as the “Davis-Bacon Act”);

(ff) chapter 67 of title 41, United States Code (commonly known as the “Service Contract Act”);

(gg) Executive Order 11246 (42 U.S.C. 2000e note; relating to equal employment opportunity);

(hh) section 503 of the Rehabilitation Act of 1973 (29 U.S.C. 793);

(ii) section 4212 of title 38, United States Code;

(jj) the Family and Medical Leave Act of 1993 (29 U.S.C. 2601 et seq.);

(kk) title VII of the Civil Rights Act of 1964 (42 U.S.C. 2000e et seq.);

(ll) the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.);

(mm) the Age Discrimination in Employment Act of 1967 (29 U.S.C. 621 et seq.);

(nn) Executive Order 13658 (79 Fed. Reg. 9851; relating to establishing a minimum wage for contractors); or

(oo) equivalent State laws, as defined in guidance issued by the Secretary of Labor.

(V) The entity, and all contractors and subcontractors in the performance of any applicable construction project, shall not require mandatory arbitration for any dispute involving a worker engaged in a service for the entity.

(VI) The entity, and all contractors and subcontractors in the performance of any applicable construction project, shall consider an individual performing any service in such performance as an employee (and not an independent contractor) of the entity, contractor, or subcontractor, respectively, unless—

(aa) the individual is free from control and direction in connection with the performance of the service, both under the contract for the performance of the service and in fact;

(bb) the service is performed outside the usual course of the business of the entity, contractor, or subcontractor, respectively; and

(cc) the individual is customarily engaged in an independently established trade, occupation, profession, or business of the same nature as that involved in such service.

(VII) The entity shall prohibit all contractors and subcontractors in the performance of any applicable construction project from hiring employees through a temporary staffing agency unless the relevant State workforce agency certifies that temporary employees are necessary to address an acute, short-term labor demand.

(VIII) The entity shall require all contractors, subcontractors, successors in interest of the entity, and other entities that may acquire the entity, in the performance or acquisition of any applicable construction project, to have an explicit neutrality policy on any issue involving the organization of employees of the entity, and all contractors and subcontractors in the performance of any applicable construction project, for purposes of collective bargaining.

(IX) The entity shall, for each skilled craft employed on any applicable construction project, demonstrate an ability to use and commit to use individuals enrolled in a registered apprenticeship program, which such individuals shall, to the greatest extent practicable, constitute not less than 20 percent of the individuals working on such project.

(X) The entity, and all contractors and subcontractors in the performance of any applicable construction project, shall not request or otherwise consider the criminal history of an applicant for employment before extending a conditional offer to the applicant, unless—

(aa) a background check is otherwise required by law;

(bb) the position is for a Federal law enforcement officer (as defined in section 115(c) of title 18, United States Code) position; or

(cc) the Secretary of Labor, in consultation with the Secretary of Energy, certifies that precluding criminal history prior to the

conditional offer would pose a threat to national security.

(i) DAVIS-BACON ACT.—The Secretary of Labor shall have, with respect to the labor standards described in clause (i)(I), the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.

(D) PERIOD OF VALIDITY FOR CERTIFICATIONS.—A certification made under this paragraph shall be in effect for a period of 5 years. An entity may reapply to the Secretary of Labor for an additional certification under this paragraph in accordance with the application process under subparagraph (B).

(E) REVOCATION OF QUALIFIED ENTITY STATUS.—The Secretary of Labor may revoke the certification of an entity under this paragraph as a qualified entity at any time in which the Secretary of Labor determines the entity is no longer in compliance with subparagraph (C).

(3) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection \$10,000,000 for fiscal year 2021 and each fiscal year thereafter.

(b) JOBS IN ENERGY CREDIT.—

(1) IN GENERAL.—Subpart E of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 is amended by inserting after section 48C the following new section:

“SEC. 48D. JOBS IN ENERGY CREDIT.

“(a) INVESTMENT CREDIT FOR QUALIFIED PROPERTY.—For purposes of section 46, the Jobs in Energy credit for any taxable year in which the taxpayer has been certified as a qualified entity (as defined in subsection (e)) is an amount equal to 10 percent of the qualified investment for such taxable year with respect to—

“(1) any qualified facility,

“(2) qualified carbon capture and sequestration equipment, and

“(3) energy storage property.

“(b) QUALIFIED INVESTMENT WITH RESPECT TO ANY QUALIFIED FACILITY.—

“(1) IN GENERAL.—For purposes of subsection (a)(1), the qualified investment with respect to any qualified facility for any taxable year is the basis of any qualified property placed in service by the taxpayer during such taxable year which is part of a qualified facility.

“(2) QUALIFIED PROPERTY.—The term ‘qualified property’ means property—

“(A) which is—

“(i) tangible personal property, or

“(ii) other tangible property (not including a building or its structural components), but only if such property is used as an integral part of the qualified facility,

“(B) with respect to which depreciation (or amortization in lieu of depreciation) is allowable,

“(C) which is constructed, reconstructed, erected, or acquired by the taxpayer, and

“(D) the original use of which commences with the taxpayer.

“(3) QUALIFIED FACILITY.—For purposes of this section, the term ‘qualified facility’ means a facility which is—

“(A)(i) used for the generation of electricity from qualified energy resources (as such term is defined in section 45(c)(1)), or

“(ii) described in section 638(a)(1) of the Energy Policy Act of 2005 (42 U.S.C. 16014(a)(1)), and

“(B) originally placed in service after December 31, 2021.

“(c) QUALIFIED INVESTMENT WITH RESPECT TO QUALIFIED CARBON CAPTURE AND SEQUESTRATION EQUIPMENT.—

“(1) IN GENERAL.—For purposes of subsection (a)(2), the qualified investment with respect to qualified carbon capture and sequestration equipment for any taxable year

is the basis of any qualified carbon capture and sequestration equipment placed in service by the taxpayer during such taxable year.

“(2) QUALIFIED CARBON CAPTURE AND SEQUESTRATION EQUIPMENT.—The term ‘qualified carbon capture and sequestration equipment’ means property—

“(A) installed at a facility placed in service before January 1, 2021, which—

“(i) produces electricity, or

“(ii) emits greenhouse gases as a result of industrial processes,

“(B) which results in the elimination of carbon dioxide emissions from the facility through the capture and disposal or utilization of qualified carbon dioxide (as defined in paragraph (3)),

“(C) with respect to which depreciation is allowable,

“(D) which is constructed, reconstructed, erected, or acquired by the taxpayer, and

“(E) the original use of which commences with the taxpayer.

“(3) QUALIFIED CARBON DIOXIDE.—The term ‘qualified carbon dioxide’ means carbon dioxide captured from an industrial source which—

“(A) would otherwise be released into the atmosphere as industrial emission of greenhouse gas,

“(B) is measured at the source of capture and verified at the point of disposal or utilization,

“(C)(i) is disposed of by the taxpayer in secure geological storage (as such term is defined under section 45Q(f)(2)), or

“(ii) utilized by the taxpayer in a manner described in section 45Q(f)(5), and

“(D) is captured and disposed or utilized within the United States (within the meaning of section 638(1)) or a possession of the United States (within the meaning of section 638(2)).

“(d) QUALIFIED INVESTMENT WITH RESPECT TO ENERGY STORAGE PROPERTY.—

“(1) IN GENERAL.—For purposes of subsection (a)(3), the qualified investment with respect to energy storage property for any taxable year is the basis of any energy storage property placed in service by the taxpayer during such taxable year.

“(2) ENERGY STORAGE PROPERTY.—The term ‘energy storage property’ means property—

“(A) which receives, stores, and delivers electricity, or energy for conversion to electricity, provided that such electricity is—

“(i) sold by the taxpayer to an unrelated person, or

“(ii) in the case of a facility which is equipped with a metering device which is owned and operated by an unrelated person, sold or consumed by the taxpayer,

“(B) with respect to which depreciation is allowable,

“(C) which is constructed, reconstructed, erected, or acquired by the taxpayer,

“(D) the original use of which commences with the taxpayer, and

“(E) which is placed in service after December 31, 2021.

“(e) QUALIFIED ENTITY.—

“(1) IN GENERAL.—For purposes of this section, the term ‘qualified entity’ means an entity which has been certified by the Secretary of Labor as being in compliance with all of the applicable requirements under section 2307(a) of the American Energy Innovation Act of 2020.

“(2) AGGREGATION RULE.—All persons which are treated as a single employer under subsections (a) and (b) of section 52 shall be treated as a single taxpayer.

“(3) REQUIREMENT FOR CERTIFICATION PRIOR TO CONSTRUCTION.—For purposes of this section, an entity shall not be considered a qualified entity unless such entity—

“(A) has been certified by the Secretary of Labor as being in compliance with all of the

applicable requirements described in paragraph (1) prior to the date with respect to which construction of the property begins, and

“(B) maintains such certification for the entirety of the period beginning on the date described in subparagraph (A) and ending on the date in which the property is placed in service.”.

(2) CONFORMING AMENDMENTS.—

(A) Section 46 of such Code is amended—

(i) by striking “and” at the end of paragraph (5),

(ii) by striking the period at the end of paragraph (6) and inserting “, and”, and

(iii) by adding at the end the following new paragraph:

“(7) the Jobs in Energy credit.”.

(B) Section 49(a)(1)(C) of such Code is amended—

(i) by striking “and” at the end of clause (iv),

(ii) by striking the period at the end of clause (v) and inserting a comma, and

(iii) by adding at the end the following new clauses:

“(vi) the basis of any qualified property which is part of a qualified facility under section 48D,

“(vii) the basis of any qualified carbon capture and sequestration equipment under section 48D, and

“(viii) the basis of any energy storage property under section 48D.”.

(C) The table of sections for subpart E of part IV of subchapter A of chapter 1 of such Code is amended by inserting after the item relating to section 48C the following new item:

“48D. Jobs in Energy credit.”.

(3) EFFECTIVE DATE.—The amendments made by this subsection shall apply to property placed in service after December 31, 2021.

(c) EXTENSION AND ENHANCEMENT OF NEW ENERGY EFFICIENT HOME CREDIT.—

(1) EXTENSION.—Subsection (g) of section 45L of the Internal Revenue Code of 1986 is amended by striking “December 31, 2020” and inserting “December 31, 2030”.

(2) INCREASE IN CREDIT FOR QUALIFIED ENTITIES.—Subsection (a) of such section is amended by adding at the end the following:

“(3) ADJUSTMENT FOR QUALIFIED ENTITIES.—In the case of any taxable year in which the eligible contractor has been certified as a qualified entity (as defined in section 48D(e)), paragraph (2) shall be applied—

“(A) in subparagraph (A) of such paragraph, by substituting ‘\$2,200’ for ‘\$2,000’, and

“(B) in subparagraph (B) of such paragraph, by substituting ‘\$1,100’ for ‘\$1,000’.”.

(3) EFFECTIVE DATE.—The amendments made by this subsection shall apply to any qualified new energy efficient home acquired after December 31, 2021.

(d) EXTENSION AND ENHANCEMENT OF ENERGY EFFICIENT COMMERCIAL BUILDING DEDUCTION.—

(1) EXTENSION.—Subsection (h) of section 179D of the Internal Revenue Code of 1986 is amended by striking “December 31, 2020” and inserting “December 31, 2030”.

(2) INCREASE IN DEDUCTION FOR QUALIFIED ENTITIES.—Subsection (d) of such section is amended by adding at the end the following:

“(7) ADJUSTMENT FOR QUALIFIED ENTITIES.—In the case of any energy efficient commercial building property placed in service during any taxable year, if such property was installed by an entity which is certified as a qualified entity (as defined in section 48D(e)) for such taxable year, subsection (b)(1) shall be applied by substituting ‘\$2.00’ for ‘\$1.80’ in subparagraph (A) thereof.”.

(3) EFFECTIVE DATE.—The amendments made by this subsection shall apply to any

property placed in service after December 31, 2021.

(e) CLEAN ENERGY MANUFACTURING INITIATIVE.—

(1) IN GENERAL.—The Secretary shall establish a Clean Energy Manufacturing Initiative within the Department—

(A) to increase the competitiveness of the United States in manufacturing clean energy technologies;

(B) to increase the competitiveness of the United States across the manufacturing sector by—

(i) boosting energy productivity; and

(ii) leveraging clean affordable domestic energy resources and feedstocks; and

(C) to develop manufacturing supply chains—

(i) for the clean energy economy;

(ii) that prioritize family-sustaining jobs; and

(iii) that prioritize the development of manufacturing facilities in deindustrialized communities.

(2) CLEAN JOBS WORKFORCE HUB.—

(A) IN GENERAL.—As part of the Clean Energy Manufacturing Initiative established under paragraph (1), the Secretary shall establish a clean jobs workforce hub under which the Secretary shall convene the entities described in subparagraph (B) to work together to train and provide direct assistance to underserved communities in accessing renewable energy-related jobs.

(B) ENTITIES DESCRIBED.—The entities referred to in subparagraph (A) are—

(i) labor organizations;

(ii) renewable energy employers and industry;

(iii) frontline and deindustrialized communities; and

(iv) any other community, industry, or public sector stakeholders, as determined by the Secretary.

(C) FUNDING.—Of the funding authorized under paragraph (3) for each fiscal year, the Secretary shall use to carry out this paragraph \$25,000,000 each fiscal year.

(3) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out this subsection \$100,000,000 for fiscal year 2021 and each fiscal year thereafter.

(f) JOB CREATION THROUGH ENERGY EFFICIENT MANUFACTURING.—

(1) DEFINITIONS.—In this subsection:

(A) ENERGY MANAGEMENT PLAN.—The term “energy management plan” means a plan established under paragraph (2)(C)(v).

(B) PROGRAM.—The term “program” means the Financing Energy Efficient Manufacturing Program established under paragraph (2)(A).

(C) PROGRAM MANAGER.—The term “program manager” means a qualified entity that receives a grant under paragraph (2)(A).

(D) PROJECT.—The term “project” means an energy efficiency improvement project carried out by a small- or medium-sized manufacturer using grant funds distributed by a project manager.

(E) QUALIFIED ENTITY.—The term “qualified entity” means—

(i) a State energy office;

(ii) a nonprofit organization that—

(I) is focused on providing energy efficiency or renewable energy services; and

(II) receives funding from a State, Tribe, or utility;

(iii) an electric cooperative group; and

(iv) an entity with a public-private partnership under the Hollings Manufacturing Extension Partnership established under section 25(b) of the National Institute of Standards and Technology Act (15 U.S.C. 278k(b)).

(F) SMALL- OR MEDIUM-SIZED MANUFACTURER.—The term “small- or medium-sized



manufacturer” means a manufacturing establishment—

(i) classified in Sector 31, 32, or 33 in the North American Industry Classification System; and

(ii) that employs not more than 750 employees.

(2) FINANCING ENERGY EFFICIENT MANUFACTURING PROGRAM.—

(A) ESTABLISHMENT.—The Secretary shall establish a program, to be known as the “Financing Energy Efficient Manufacturing Program” to provide grants to qualified entities to fund energy efficiency improvement projects in the manufacturing sector.

(B) GRANT APPLICATIONS; SELECTION OF GRANT RECIPIENTS.—

(i) GRANT APPLICATIONS.—

(I) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, qualified entities desiring a grant under subparagraph (A) shall submit to the Secretary an application in such manner and containing such information as the Secretary may require, including a description of—

(aa) how the qualified entity will work with small- and medium-sized manufacturers to assess the most promising opportunities for energy efficiency improvements;

(bb) how the qualified entity will work with small- and medium-sized manufacturers and, if appropriate, licensed engineers to establish an energy management plan for the small- or medium-sized manufacturer to carry out a project;

(cc) the methods and cost-sharing plans the qualified entity will use to distribute funds to small- and medium-sized manufacturers to subsidize the costs of carrying out a project;

(dd) the standards by which the qualified entity will set energy efficiency goals for a project that will result in meaningful reductions in electricity or natural gas use by the small- or medium-sized manufacturer carrying out the project;

(ee) how the qualified entity will provide support to the small- or medium-sized manufacturer carrying out a project during the implementation of the energy management plan;

(ff)(AA) any history of the qualified entity of working collaboratively with the regional technical assistance programs of the Department; and

(BB) how the qualified entity plans to involve the regional technical assistance programs in the activities to be funded by a grant; and

(gg) how the qualified entity will collect measurements throughout the implementation of the energy management plan—

(AA) to demonstrate how energy efficiency improvements are being achieved; and

(BB) to maximize opportunities for project success.

(II) PARTNERSHIPS.—Two or more qualified entities may form a partnership to apply, and act as program manager, for a grant under this paragraph.

(i) SELECTION OF GRANT RECIPIENTS.—

(I) IN GENERAL.—Not later than 90 days after the date on which the Secretary receives an application under clause (i), the Secretary shall—

(aa) review the application;

(bb) provide the applicant with an opportunity to respond to any questions of the Secretary regarding the application; and

(cc) select or deny the applicant based on the criteria described in subclause (II).

(II) SELECTION CRITERIA.—

(aa) IN GENERAL.—The Secretary shall select for grants under this paragraph qualified entities that demonstrate a history of successfully implementing energy efficiency improvement programs for small- and medium-sized manufacturers.

(bb) PRIORITY.—In making selections under item (aa), the Secretary shall give priority to qualified entities that demonstrate—

(AA) effective methods for reducing barriers to entry that might otherwise prevent small- and medium-sized manufacturers from participating in the subgrant program under subparagraph (C);

(BB) flexibility in addressing the needs of different small- and medium-sized manufacturers; and

(CC) a commitment to hiring for projects contractors that comply with the labor requirements described in subparagraph (D)(ii).

(C) SUBGRANTS FOR ENERGY EFFICIENCY IMPROVEMENTS.—

(i) IN GENERAL.—A qualified entity (including a partnership of 1 or more qualified entities under subparagraph (B)(i)(II)) that receives a grant under subparagraph (A) shall act as a program manager to distribute subgrants to small- and medium-sized manufacturers located in the State in which the program manager is located to carry out projects—

(I) to improve the energy efficiency of the small- or medium-sized manufacturer; and

(II) to develop technologies to reduce electricity or natural gas use by the small- or medium-sized manufacturer.

(ii) APPLICATIONS.—A small- or medium-sized manufacturer desiring a subgrant under clause (i) shall submit to the program manager an application at such time, in such manner, and containing such information as the program manager may require, including a proposal describing the project to be carried out using the subgrant funds.

(iii) PRIORITY.—In selecting small- or medium-sized manufacturers for subgrants under this subparagraph, the program manager shall give priority to small- or medium-sized manufacturers that commit to hiring for projects contractors that comply with the labor requirements described in subparagraph (D)(ii).

(iv) ELIGIBILITY REQUIREMENTS.—To be eligible to receive a subgrant under clause (i), a small- or medium-sized manufacturer shall be a private, nongovernmental entity.

(v) ENERGY MANAGEMENT PLANS.—Each small- or medium-sized manufacturer receiving a subgrant under clause (i), in consultation with the program manager and, if appropriate, 1 or more licensed engineers, shall establish an energy management plan for the small- or medium-sized manufacturer to carry out the project.

(vi) EFFECT ON TITLE TO PROPERTY.—The receipt of Federal funds under this subparagraph shall not prohibit an entity that purchased equipment or other property using those funds from owning sole, permanent title to the equipment or other property.

(D) CONTRACTORS.—

(i) IN GENERAL.—Program managers and small- or medium-sized manufacturers may hire, if necessary, contractors to perform work relating to the installation, repair, or maintenance of equipment used under a project.

(ii) LABOR REQUIREMENTS.—In an application for a grant or subgrant under this paragraph, a program manager or a small- or medium-sized manufacturer, respectively, shall commit to hiring contractors that are certified by the Secretary of Labor under subsection (a) as being in compliance with all of the applicable requirements under that subsection.

(E) AMERICAN IRON, STEEL, AND MANUFACTURED PRODUCTS.—

(i) DEFINITIONS.—In this subparagraph:

(I) IRON OR STEEL MANUFACTURED PRODUCT.—The term “iron or steel manufactured product” includes any construction material or end product (as those terms are defined in subpart 25.003 of the Federal Acquisition

Regulation) that does not otherwise qualify as an iron or steel product, including—

(aa) an electrical component;

(bb) a non-ferrous building material, including—

(AA) aluminum and polyvinylchloride;

(BB) glass;

(CC) fiber optics;

(DD) plastic;

(EE) wood;

(FF) masonry;

(GG) rubber;

(HH) manufactured stone; and

(II) any other non-ferrous metals; and

(cc) any unmanufactured construction material.

(II) PRODUCED IN THE UNITED STATES.—

(aa) IN GENERAL.—The term “produced in the United States”—

(AA) with respect to an iron or steel product or an iron or steel manufactured product, means that all manufacturing processes for, and materials and components of, the iron or steel product or iron or steel manufactured product, from the initial melting stage through the application of coatings, occurred in the United States; and

(BB) with respect to an iron or steel manufactured product, means that—

(CC) the iron or steel manufactured product was manufactured in the United States; and

(DD) the cost of the components of the iron or steel manufactured product that were mined, produced, or manufactured in the United States is greater than 60 percent of the total cost of the components of the iron or steel manufactured product.

(bb) EXCLUSIONS.—The term “produced in the United States”, with respect to an iron or steel product or an iron or steel manufactured product, does not include an iron or steel product or an iron or steel manufactured product the materials and components of which were manufactured—

(AA) abroad from semi-finished steel or iron from the United States; or

(BB) in the United States from semi-finished steel or iron of foreign origin.

(i) REQUIREMENT.—Funds made available under the program may not be used for a project unless all of the iron and steel products and iron and steel manufactured products used in the project are produced in the United States.

(iii) WAIVER.—

(I) IN GENERAL.—On request of the recipient of a grant under the program, the Secretary may grant for the project of the recipient of the grant a waiver of the requirement described in clause (ii) if the Secretary finds that—

(aa) the application of clause (ii) would be inconsistent with the public interest;

(bb) iron or steel products or iron or steel manufactured products are not produced in the United States—

(AA) in sufficient and reasonably available quantities; or

(BB) of a satisfactory quality; or

(cc) the inclusion of iron or steel products or iron or steel manufactured products produced in the United States would increase the cost of the overall project by greater than 25 percent.

(II) PUBLIC NOTICE.—On receipt of a request for a waiver under subclause (I), the Secretary shall—

(aa) make available to the public, including by electronic means, including on the official public website of the Department, on an informal basis, a copy of the request and all information available to the Secretary relating to the request; and

(bb) provide for informal public input on the request for a period of not fewer than 15 days before making with respect to the request the finding described in subclause (I).

## (F) REPORTING REQUIREMENTS.—

(i) IN GENERAL.—Each program manager shall—

(I) determine what data shall be required—  
(aa) to be collected by or from each small- or medium-sized manufacturer receiving a subgrant under subparagraph (C); and

(bb) to be submitted to the program manager to permit analysis of the subgrant program under subparagraph (C); and

(II) develop metrics to determine the success of the subgrant program under subparagraph (C).

(ii) PROVISION OF DATA.—As a condition of receiving a subgrant under subparagraph (C), a small- or medium-sized manufacturer shall provide to the program manager relevant data, as determined by the program manager under clause (i)(I).

(iii) PROPRIETARY INFORMATION.—In carrying out this paragraph, each program manager, as appropriate, shall provide for the protection of proprietary information and intellectual property rights.

## (G) FUNDING.—

(i) IN GENERAL.—Out of amounts made available to the Secretary and not otherwise obligated, the Secretary shall use to carry out this paragraph not more than \$600,000,000.

(ii) REQUIREMENTS FOR PROGRAM MANAGERS.—A program manager shall use not greater than 7 percent of the grant funds received by the program manager, at the discretion of the program manager—

(I) to hire and train staff to assist the program manager in administering the subgrant program of the program manager; and

(II) to market the subgrant program to small- and medium-sized manufacturers.

(iii) MANAGEMENT AND OVERSIGHT.—The Secretary may use not greater than 0.25 percent of the funds made available under clause (i) to carry out subparagraph (E).

(g) INCENTIVES FOR INNOVATIVE TECHNOLOGIES.—Section 1703(b) of the Energy Policy Act of 2005 (42 U.S.C. 16513(b)) is amended—

(1) by redesignating paragraphs (1) through (10) as subparagraphs (A) through (J), respectively, and indenting appropriately;

(2) in the matter preceding subparagraph (A) (as so redesignated), by striking “Projects” and inserting the following:

“(1) IN GENERAL.—Projects”; and

(3) by adding at the end the following:

“(2) PRIORITY.—In making guarantees under this section, the Secretary shall give priority to projects proposed by applicants that commit to hiring contractors that have been certified by the Secretary of Labor under section 2307(a) of the American Energy Innovation Act of 2020 as being in compliance with all of the applicable requirements under that section.”.

**SA 1396.** Mr. BENNET submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. . CLEAN AIR, HEALTHY KIDS.**

(a) EXECUTIVE ORDER, FINAL RULES, AND PROPOSED RULES TO HAVE NO FORCE OR EFFECT.—

(1) EXECUTIVE ORDER.—Executive Order 13783 (42 U.S.C. 13201 note; relating to promoting energy independence and economic growth)—

(A) is null and void;

(B) shall have no force or effect; and

(C) may not be implemented, administered, enforced, or carried out by any Federal agency, including—

(i) the Office of Management and Budget;  
(ii) the Council of Economic Advisers;  
(iii) the Council on Environmental Quality;

(iv) the Environmental Protection Agency;  
(v) the Department of the Interior; and  
(vi) any other agency directed to implement the Executive Order.

## (2) FEDERAL RULES.—

## (A) FINAL RULES.—

(i) IN GENERAL.—On and after the date of enactment of this Act, the following rules are null and void:

(I) The final rule issued by the Administrator of the Environmental Protection Agency entitled “Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations” (84 Fed. Reg. 32520 (July 8, 2019)).

(II) The final rule issued by the Director of the Bureau of Land Management entitled “Waste Prevention, Production Subject to Royalties, and Resource Conservation; Delay and Suspension of Certain Requirements” (82 Fed. Reg. 58050 (December 8, 2017)).

(III) The final rule of the Secretary of Energy entitled “Energy Conservation Program: Definition for General Service Lamps” (84 Fed. Reg. 46661 (September 5, 2019)).

(IV) The final rule of the Administrator of the Environmental Protection Agency entitled “Adopting Requirements in Emission Guidelines for Municipal Solid Waste Landfills” (84 Fed. Reg. 44547 (August 26, 2019)).

(ii) EFFECT.—On and after the date of enactment of this Act, the portions of the Code of Federal Regulations amended by the rules described in clause (i) shall be in effect as if the amendments made by those rules had not been made.

(B) PROPOSED RULES.—The applicable agency may not finalize the following rules:

(i) The proposed rule issued by the Administrator of the Environmental Protection Agency entitled “Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review” (August 28, 2019).

(ii) The proposed rule issued by the Administrator of the Environmental Protection Agency and the Administrator of the National Highway Traffic Safety Administration entitled “The Safer Affordable Fuel-Efficient (SAFE) Vehicle Rules for Model Years 2021–2026 Passenger Cars and Light Trucks” (83 Fed. Reg. 42986 (August 24, 2018)).

(iii) The proposed determination of the Secretary of Energy entitled “Energy Conservation Program: Energy Conservation Standards for General Service Incandescent Lamps” (84 Fed. Reg. 46830 (September 5, 2019)).

(3) CLEAN AIR ACT WAIVERS.—Notwithstanding any other provision of law—

(A) any rescission of a waiver granted to the State of California to enforce emissions standards under the Clean Air Act (42 U.S.C. 7401 et seq.)—

(i) is null and void; and

(ii) shall have no force or effect; and

(B) on and after the date of enactment of this Act, the Administrator of the Environmental Protection Agency may not rescind a waiver granted to the State of California to enforce emissions standards under the Clean Air Act (42 U.S.C. 7401 et seq.).

(b) NO FEDERAL FUNDS AVAILABLE.—No Federal funds made available for any fiscal year may be used to implement, administer, enforce, or carry out—

(1) the Executive Order described in subsection (a)(1);

(2) a final rule or direct final rule described in subsection (a)(2)(A)(i);

(3) a proposed rule or a proposed determination described in subsection (a)(2)(B); or  
(4) a rescission of a waiver described in subsection (a)(3).

(c) SAVINGS PROVISION.—Nothing in this section shall be construed to impair any authority granted to the President.

**SA 1397.** Mr. WYDEN submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

**TITLE IV—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986****SEC. 4001. MODIFICATION OF LIMITATIONS ON NEW QUALIFIED PLUG-IN ELECTRIC DRIVE MOTOR VEHICLE CREDIT.**

(a) IN GENERAL.—Subsection (e) of section 30D of the Internal Revenue Code of 1986 is amended to read as follows:

“(e) LIMITATION ON NUMBER OF NEW QUALIFIED PLUG-IN ELECTRIC DRIVE MOTOR VEHICLES ELIGIBLE FOR CREDIT.—

“(1) IN GENERAL.—In the case of any new qualified plug-in electric drive motor vehicle sold after the date of the enactment of the American Energy Innovation Act of 2020—

“(A) if such vehicle is sold during the transition period, the amount determined under subsection (b)(2) shall be reduced by \$500, and

“(B) if such vehicle is sold during the phaseout period, only the applicable percentage of the credit otherwise allowable under subsection (a) shall be allowed.

“(2) TRANSITION PERIOD.—For purposes of this subsection, the transition period is the period subsequent to the first date on which the number of new qualified plug-in electric drive motor vehicles manufactured by the manufacturer of the vehicle referred to in paragraph (1) sold for use in the United States after December 31, 2009, is at least 200,000.

## “(3) PHASEOUT PERIOD.—

“(A) IN GENERAL.—For purposes of this subsection, the phaseout period is the period beginning with the second calendar quarter following the calendar quarter which includes the first date on which the number of new qualified plug-in electric drive motor vehicles manufactured by the manufacturer of the vehicle referred to in paragraph (1) sold for use in the United States after December 31, 2009, is at least 600,000.

“(B) APPLICABLE PERCENTAGE.—For purposes of paragraph (1)(B), the applicable percentage is—

“(i) 50 percent for the first calendar quarter of the phaseout period, and

“(ii) 0 percent for each calendar quarter thereafter.

“(C) EXCLUSION OF SALE OF CERTAIN VEHICLES.—

“(i) IN GENERAL.—For purposes of subparagraph (A), any new qualified plug-in electric drive motor vehicle manufactured by the manufacturer of the vehicle referred to in paragraph (1) which was sold during the exclusion period shall not be included for purposes of determining the number of such vehicles sold.

“(ii) EXCLUSION PERIOD.—For purposes of this subparagraph, the exclusion period is the period—

“(I) beginning on the first date on which the number of new qualified plug-in electric drive motor vehicles manufactured by the manufacturer of the vehicle referred to in paragraph (1) sold for use in the United States after December 31, 2009, is at least 200,000, and

“(II) ending on the date of the enactment of the American Energy Innovation Act of 2020.

“(4) CONTROLLED GROUPS.—Rules similar to the rules of section 30B(f)(4) shall apply for purposes of this subsection.”.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to vehicles sold after the date of the enactment of this Act.

#### SEC. 4002. EXTENSION OF CREDIT FOR NEW QUALIFIED FUEL CELL MOTOR VEHICLES.

(a) IN GENERAL.—Section 30B(k)(1) of the Internal Revenue Code of 1986 is amended by striking “December 31, 2020” and inserting “December 31, 2024”.

(b) EFFECTIVE DATE.—The amendments made by this section shall apply to property purchased after December 31, 2020.

#### SEC. 4003. EXTENSION OF ENERGY CREDIT FOR OFFSHORE WIND FACILITIES.

(a) IN GENERAL.—Section 48(a)(5) of the Internal Revenue Code of 1986 is amended by adding at the end the following:

“(F) QUALIFIED OFFSHORE WIND FACILITIES.—

“(i) IN GENERAL.—In the case of any qualified offshore wind facility—

“(I) subparagraph (C)(ii) shall be applied by substituting ‘January 1 of the applicable year (as determined under subparagraph (F)(ii))’ for ‘January 1, 2021’.

“(II) subparagraph (E) shall not apply, and

“(III) for purposes of this paragraph, section 45(d)(1) shall be applied by substituting ‘January 1 of the applicable year (as determined under section 48(a)(5)(F)(ii))’ for ‘January 1, 2021’.

“(ii) APPLICABLE YEAR.—

“(I) IN GENERAL.—For purposes of this subparagraph, the term ‘applicable year’ means the later of—

“(aa) calendar year 2025, or

“(bb) the calendar year subsequent to the first calendar year in which the Secretary, in consultation with the Secretary of Energy, determines that the United States has increased its offshore wind capacity by not less than 3,000 megawatts as compared to such capacity on January 1, 2021.

“(II) EXCLUSION OF CERTAIN FACILITIES.—For purposes of subclause (I)(bb), the Secretary shall not include any increase in offshore wind capacity which is attributable to any facility the construction of which began before January 1, 2021.

“(iii) QUALIFIED OFFSHORE WIND FACILITY.—For purposes of this subparagraph, the term ‘qualified offshore wind facility’ means a qualified facility described in paragraph (1) of section 45(d) which is located in the inland navigable waters of the United States, including the Great Lakes, or in the coastal waters of the United States, including the territorial seas of the United States, the exclusive economic zone of the United States, and the outer Continental Shelf of the United States.

“(iv) REPORT ON OFFSHORE WIND CAPACITY.—On January 15, 2025, and annually thereafter until the calendar year described in clause (ii)(I)(bb), the Secretary, in consultation with the Secretary of Energy, shall issue a report to be made available to the public which discloses the increase in the offshore wind capacity of the United States, as measured in total megawatts, since January 1, 2021.”.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to periods after December 31, 2016, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).

#### SEC. 4004. ENERGY CREDIT FOR ENERGY STORAGE TECHNOLOGIES.

(a) IN GENERAL.—Subclause (II) of section 48(a)(2)(A)(i) of the Internal Revenue Code of 1986 is amended by striking “paragraph (3)(A)(i)” and inserting “clause (i) or (viii) of paragraph (3)(A)”.

(b) ENERGY STORAGE TECHNOLOGIES.—Subparagraph (A) of section 48(a)(3) of the Internal Revenue Code of 1986 is amended by striking “or” at the end of clause (vi), by adding “or” at the end of clause (vii), and by adding at the end the following new clause: “(viii) equipment which receives, stores, and delivers energy using batteries, compressed air, pumped hydropower, hydrogen storage (including hydrolysis), thermal energy storage, regenerative fuel cells, flywheels, capacitors, superconducting magnets, or other technologies identified by the Secretary in consultation with the Secretary of Energy, and which has a capacity of not less than 5 kilowatt hours.”.

(c) PHASEOUT OF CREDIT.—Paragraph (6) of section 48(a) of the Internal Revenue Code of 1986 is amended—

(1) by striking “ENERGY” in the heading and inserting “AND ENERGY STORAGE”; and

(2) by striking “paragraph (3)(A)(i)” both places it appears and inserting “clause (i) or (viii) of paragraph (3)(A)”.

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2019.

#### SEC. 4005. RESIDENTIAL ENERGY EFFICIENT PROPERTY CREDIT FOR BATTERY STORAGE TECHNOLOGY.

(a) IN GENERAL.—Subsection (a) of section 25D of the Internal Revenue Code of 1986 is amended by striking “and” at the end of paragraph (4), by inserting “and” after the comma at the end of paragraph (5), and by adding at the end the following new paragraph:

“(6) the qualified battery storage technology expenditures.”.

(b) QUALIFIED BATTERY STORAGE TECHNOLOGY EXPENDITURE.—Subsection (d) of section 25D of the Internal Revenue Code of 1986 is amended by adding at the end the following new paragraph:

“(6) QUALIFIED BATTERY STORAGE TECHNOLOGY EXPENDITURE.—The term ‘qualified battery storage technology expenditure’ means an expenditure for battery storage technology which—

“(A) is installed on or in connection with a dwelling unit located in the United States and used as a residence by the taxpayer, and

“(B) has a capacity of not less than 3 kilowatt hours.”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to expenditures paid or incurred in taxable years beginning after December 31, 2019.

#### SEC. 4006. RESIDENTIAL ENERGY-EFFICIENT PROPERTY CREDIT FOR BIOMASS FUEL PROPERTY EXPENDITURES.

(a) ALLOWANCE OF CREDIT.—Section 25D(a) of the Internal Revenue Code of 1986, as amended by section 4005(a), is amended—

(1) in paragraph (5), by striking “and” at the end,

(2) in paragraph (6), by adding “and” at the end, and

(3) by inserting after paragraph (6) the following:

“(7) the qualified biomass fuel property expenditures.”.

(b) QUALIFIED BIOMASS FUEL PROPERTY EXPENDITURES.—Section 25D(d) of such Code, as amended by section 4005(b), is amended by adding at the end the following new paragraph:

“(7) QUALIFIED BIOMASS FUEL PROPERTY EXPENDITURE.—

“(A) IN GENERAL.—The term ‘qualified biomass fuel property expenditure’ means an expenditure for property—

“(i) which uses the burning of biomass fuel to heat a dwelling unit located in the United States and used as a residence by the taxpayer, or to heat water for use in such a dwelling unit, and

“(ii) which has a thermal efficiency rating of at least 75 percent (measured by the higher heating value of the fuel).

“(B) BIOMASS FUEL.—For purposes of this section, the term ‘biomass fuel’ means any plant-derived fuel available on a renewable or recurring basis, including agricultural crops and trees, wood and wood waste and residues, plants (including aquatic plants), grasses, residues, and fibers. Such term includes densified biomass fuels such as wood pellets.”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to expenditures paid or incurred in taxable years beginning after December 31, 2019.

#### SEC. 4007. INVESTMENT CREDIT FOR WASTE HEAT TO POWER PROPERTY.

(a) IN GENERAL.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986, as amended by section 4004(b), is amended—

(1) at the end of clause (vii), by striking “or”;

(2) at the end of clause (viii), by inserting “or” after the comma; and

(3) by adding at the end the following:

“(ix) waste heat to power property.”.

(b) DEFINITIONS AND LIMITATIONS.—Section 48(c) of the Internal Revenue Code of 1986 is amended by adding at the end the following:

“(5) WASTE HEAT TO POWER PROPERTY.—

“(A) IN GENERAL.—The term ‘waste heat to power property’ means property—

“(i) comprising a system which generates electricity through the recovery of a qualified waste heat resource, and

“(ii) the construction of which begins before January 1, 2025.

“(B) QUALIFIED WASTE HEAT RESOURCE.—The term ‘qualified waste heat resource’ means—

“(i) exhaust heat or flared gas from an industrial process that does not have, as its primary purpose, the production of electricity, and

“(ii) a pressure drop in any gas for an industrial or commercial process.

“(C) LIMITATIONS.—

“(i) IN GENERAL.—For purposes of subsection (a)(1), the basis of any waste heat to power property taken into account under this section shall not exceed the excess of—

“(I) the basis of such property, over

“(II) the fair market value of comparable property which does not have the capacity to capture and convert a qualified waste heat resource to electricity.

“(ii) CAPACITY LIMITATION.—The term ‘waste heat to power property’ shall not include any property comprising a system if such system has a capacity in excess of 50 megawatts.”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to periods after the date of enactment of this Act, in taxable years ending after such date, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).

#### SEC. 4008. ENHANCING ENERGY CREDIT FOR GEOTHERMAL ENERGY.

(a) IN GENERAL.—Section 48(a)(2)(A)(i)(II) of the Internal Revenue Code of 1986, as amended by section 4004, is amended by striking “clause (i) or (viii) of paragraph (3)(A)” and inserting “clause (i), (iii), or (viii) of paragraph (3)(A)”.

(b) PHASEOUT OF CREDIT.—Paragraph (6) of section 48(a) of the Internal Revenue Code of 1986, as amended by section 4004, is amended—

(1) by striking “AND ENERGY STORAGE” in the heading and inserting “, ENERGY STORAGE, AND GEOTHERMAL ENERGY”; and

(2) by striking “clause (i) or (viii) of paragraph (3)(A)” both places it appears and inserting “clause (i), (iii), or (viii) of paragraph (3)(A)”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2019.

#### SEC. 4009. EXTENSION OF RENEWABLE ELECTRICITY PRODUCTION CREDIT.

(a) IN GENERAL.—The following provisions of section 45(d) of the Internal Revenue Code of 1986 are each amended by striking “January 1, 2021” each place it appears and inserting “January 1, 2024”:

- (1) Paragraph (2)(A).
- (2) Paragraph (3)(A).
- (3) Paragraph (4)(B).
- (4) Paragraph (6).
- (5) Paragraph (7).
- (6) Paragraph (9).
- (7) Paragraph (11)(B).

(b) EXTENSION OF ELECTION TO TREAT QUALIFIED FACILITIES AS ENERGY PROPERTY.—Section 48(a)(5)(C)(ii) of the Internal Revenue Code of 1986 is amended by striking “January 1, 2021” and inserting “January 1, 2024”.

(c) APPLICATION OF EXTENSION TO WIND FACILITIES.—

(1) IN GENERAL.—Section 45(d)(1) of the Internal Revenue Code of 1986 is amended by striking “January 1, 2021” and inserting “January 1, 2024”.

(2) APPLICATION OF PHASEOUT PERCENTAGE.—

(A) IN GENERAL.—Section 45(b)(5)(D) of such Code is amended by striking “January 1, 2021” and inserting “January 1, 2024”.

(B) TREATMENT AS ENERGY PROPERTY.—Section 48(a)(5)(E)(iv) of such Code is amended by striking “January 1, 2021” and inserting “January 1, 2024”.

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2020.

#### SEC. 4010. EXTENSION OF ENERGY CREDIT.

(a) EXTENSIONS.—Section 48 of the Internal Revenue Code of 1986 is amended—

(1) in subsection (a)—

(A) in paragraph (2)(A)(i)(II), by striking “January 1, 2022” and inserting “January 1, 2025”, and

(B) in paragraph (3)(A)—

(i) in clause (ii), by striking “January 1, 2022” and inserting “January 1, 2025”, and

(ii) in clause (vii), by striking “January 1, 2022” and inserting “January 1, 2025”, and

(2) in subsection (c)—

(A) in paragraph (1)(D), by striking “January 1, 2022” and inserting “January 1, 2025”,

(B) in paragraph (2)(D), by striking “January 1, 2022” and inserting “January 1, 2025”,

(C) in paragraph (3)(A)(iv), by striking “January 1, 2022” and inserting “January 1, 2025”, and

(D) in paragraph (4)(C), by striking “January 1, 2022” and inserting “January 1, 2025”.

(b) PHASEOUTS.—

(1) SOLAR ENERGY, ENERGY STORAGE, AND GEOTHERMAL ENERGY PROPERTY.—Section 48(a)(6) of the Internal Revenue Code of 1986, as amended by section 4004, is amended—

(A) in subparagraph (A)—

(i) by striking “January 1, 2022, the energy percentage” and inserting “January 1, 2025, the energy percentage”,

(ii) in clause (i), by striking “after December 31, 2019, and before January 1, 2021” and inserting “after December 31, 2022, and before January 1, 2024”, and

(iii) in clause (ii), by striking “after December 31, 2020, and before January 1, 2022” and inserting “after December 31, 2023, and before January 1, 2025”, and

(B) in subparagraph (B), by striking “begins before January 1, 2022, and which is not placed in service before January 1, 2024” and inserting “begins before January 1, 2025, and which is not placed in service before January 1, 2027”.

(2) FIBER-OPTIC SOLAR, QUALIFIED FUEL CELL, AND QUALIFIED SMALL WIND ENERGY PROPERTY.—Section 48(a)(7) of such Code is amended—

(A) in subparagraph (A)—

(i) in clause (i), by striking “after December 31, 2019, and before January 1, 2021” and inserting “after December 31, 2022, and before January 1, 2024”, and

(ii) in clause (ii), by striking “after December 31, 2020, and before January 1, 2022” and inserting “after December 31, 2023, and before January 1, 2025”, and

(B) in subparagraph (B), by striking “January 1, 2024” and inserting “January 1, 2027”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to periods after December 31, 2019.

#### SEC. 4011. PERMANENT EXTENSION OF ENERGY EFFICIENT COMMERCIAL BUILDINGS DEDUCTION.

(a) IN GENERAL.—Section 179D of the Internal Revenue Code of 1986 is amended by striking subsection (h).

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to property placed in service after December 31, 2020.

#### SEC. 4012. UPDATING NEW ENERGY EFFICIENT HOME CREDIT.

(a) IN GENERAL.—Section 45L of the Internal Revenue Code of 1986 is amended—

(1) in subsection (a)(2)—

(A) in subparagraph (A), by striking “\$2,000” and inserting “\$2,500”; and

(B) in subparagraph (B), by inserting “or (4)” after “paragraph (3)”; and

(2) in subsection (b)—

(A) in paragraph (2)(B), by striking “this section” and inserting “the American Energy Innovation Act of 2020”; and

(B) by adding at the end the following:

“(5) 2018 IECC.—

“(A) IN GENERAL.—The term ‘2018 IECC’ means the 2018 International Energy Conservation Code, as such Code (including supplements) is in effect on the date of the enactment of the American Energy Innovation Act of 2020.

“(B) SPECIAL RULE.—For purposes of subsection (c)(1)(B)(i)(I), in determining whether a dwelling unit has been constructed in accordance with the standards of chapter 4 of the 2018 IECC by achieving a level of energy efficiency which meets Section R406.4 (N1106.4) of such Code, such determination shall be made without accounting for on-site energy generation.”;

(3) by striking subsection (c) and inserting the following:

“(c) ENERGY SAVING REQUIREMENTS.—A dwelling unit meets the energy saving requirements of this subsection if such unit—

“(1)(A) is certified—

“(i) to have a level of annual heating and cooling energy consumption which is at least 60 percent below the annual level of heating and cooling energy consumption of a comparable dwelling unit—

“(I) which is constructed in accordance with the standards of chapter 4 of the 2006 International Energy Conservation Code, as such Code (including supplements) is in effect on January 1, 2006, and

“(II) for which the heating and cooling equipment efficiencies correspond to the minimum allowed under the regulations established by the Department of Energy pursuant to the National Appliance Energy Conservation Act of 1987 and in effect at the time of completion of construction, and

“(ii) to have building envelope component improvements account for at least 1/5 of such 60 percent, or

“(B) is certified—

“(i) to have a level of annual energy consumption which is at least 15 percent below the annual level of energy consumption of a comparable dwelling unit—

“(I) which is constructed in accordance with the standards of chapter 4 of the 2018 IECC, and

“(II) which meets the requirements described in subparagraph (A)(i)(II), and

“(ii) to have building envelope component improvements account for at least 1/5 of such 15 percent,

“(2) is a manufactured home which—

“(A) conforms to Federal Manufactured Home Construction and Safety Standards (part 3280 of title 24, Code of Federal Regulations), and

“(B) meets the requirements described in subparagraph (A) or (B) of paragraph (1),

“(3) meets the requirements established by the Administrator of the Environmental Protection Agency under the Energy Star Labeled Homes program, or

“(4) is a manufactured home which—

“(A) conforms to the standards described in paragraph (2)(A), and

“(B) meets the requirements described in paragraph (3).”; and

(4) in subsection (g), by striking “December 31, 2020” and inserting “December 31, 2022”.

(b) EFFECTIVE DATE.—The amendments made by this section shall apply to qualified new energy efficient homes acquired after December 31, 2020.

#### SEC. 4013. UPDATING CREDIT FOR NONBUSINESS ENERGY PROPERTY.

(a) IN GENERAL.—Section 25C of the Internal Revenue Code of 1986 is amended—

(1) in subsection (a)(1), by striking “10 percent” and inserting “15 percent”,

(2) in subsection (b)—

(A) in paragraph (1)—

(i) by striking “\$500” and inserting “\$1,200”, and

(ii) by striking “December 31, 2005” and inserting “December 31, 2019”, and

(B) by striking paragraphs (2) and (3) and inserting the following:

“(2) LIMITATION ON INSULATION MATERIAL OR SYSTEM.—In the case of amounts paid or incurred for components described in subsection (c)(3)(A) by any taxpayer for any taxable year, the credit allowed under this section with respect to such amounts for such year shall not exceed the excess (if any) of \$600 over the aggregate credits allowed under this section with respect to such amounts for all prior taxable years ending after December 31, 2019.

“(3) LIMITATION ON WINDOWS.—

“(A) IN GENERAL.—

“(i) ENERGY STAR MOST EFFICIENT.—In the case of amounts paid or incurred by any taxpayer for any taxable year for components described in subsection (c)(3)(B) which meet the most efficient certification under applicable Energy Star program requirements, the credit allowed under this section with respect to such amounts for such year shall not exceed the excess (if any) of \$600 over the aggregate credits allowed under this section with respect to such amounts for all prior taxable years ending after December 31, 2019.

“(ii) ENERGY STAR.—In the case of amounts paid or incurred by any taxpayer for any taxable year for components described in subsection (c)(3)(B) which do not meet the most efficient certification under applicable Energy Star program requirements, the credit allowed under this section with respect to such amounts for such year shall not exceed the excess (if any) of \$200 over the aggregate

credits allowed under this section with respect to such amounts for all prior taxable years ending after December 31, 2019.

“(B) ELECTION.—

“(i) IN GENERAL.—For purposes of any amounts paid or incurred by any taxpayer for components described in subsection (c)(3)(B), the credit allowed under this section shall only be allowed for components described in clause (i) of subparagraph (A) or clause (ii) of such subparagraph, but not both, as elected by the taxpayer during the first taxable year in which such credit is being claimed by the taxpayer.

“(ii) IRREVOCABILITY.—The Secretary shall, through such rules, regulations, and procedures as are determined appropriate, establish procedures for making an election under this subparagraph, which shall require that—

“(I) any election made by the taxpayer shall be irrevocable, and

“(II) such election shall remain in effect for all subsequent taxable years.

“(4) LIMITATION ON DOORS.—In the case of amounts paid or incurred for components described in subsection (c)(3)(C) by any taxpayer for any taxable year, the credit allowed under this section with respect to such amounts for such year shall not exceed—

“(A) the excess (if any) of \$500 over the aggregate credits allowed under this section with respect to such amounts for all prior taxable years ending after December 31, 2019, or

“(B) \$250 for each exterior door.

“(5) LIMITATION ON RESIDENTIAL ENERGY PROPERTY EXPENDITURES.—The amount of the credit allowed under this section by reason of subsection (a)(2) shall not exceed—

“(A) in the case of any energy-efficient building property—

“(i) for any item of property described in subparagraph (A), (B), or (C) of subsection (d)(3), \$600, and

“(ii) for any item of property described in subparagraph (D) or (E) of such subsection, \$400, and

“(B) in the case of any qualified natural gas, propane, or oil furnace or hot water boiler (as defined in subsection (d)(4)), an amount equal to—

“(i) \$600 for a hot water boiler, and

“(ii) in the case of a furnace, an amount equal to the sum of—

“(I) \$300, plus

“(II) if the taxpayer is converting from a non-condensing furnace to a condensing furnace, \$300.”,

(3) in subsection (c)—

(A) in paragraph (2)—

(i) by striking subparagraphs (A) and (B) and inserting the following:

“(A) applicable Energy Star program requirements, in the case of an exterior window, a skylight, or an exterior door, and”,

(ii) by redesignating subparagraph (C) as subparagraph (B), and

(iii) in subparagraph (B), as so redesignated, by striking “2009 International” and all that follows through “Act of 2009” and inserting “2015 IECC (as defined in section 45L(b)(5))”.

(B) in paragraph (3)—

(i) in subparagraph (B), by adding “and” at the end,

(ii) in subparagraph (C), by striking “, and” and inserting a period, and

(iii) by striking subparagraph (D), and

(C) by adding at the end the following new paragraph:

“(5) LABOR COSTS.—The term ‘qualified energy efficiency improvements’ includes expenditures for labor costs properly allocable to the onsite preparation, assembly, or original installation of any energy efficient building envelope component.”,

(4) in subsection (d)—

(A) in paragraph (2)(A)—

(i) in clause (i), by adding “or” at the end,

(ii) in clause (ii), by striking “, or” and inserting a period, and

(iii) by striking clause (iii),

(B) in paragraph (3)—

(i) by striking subparagraph (A) and inserting the following:

“(A) an electric heat pump water heater which, in the standard Department of Energy test procedure, yields a uniform energy factor of at least 3.0.”,

(ii) in subparagraph (B), by striking “January 1, 2009” and inserting “the date of enactment of the American Energy Innovation Act of 2020”.

(iii) in subparagraph (C), by striking “January 1, 2009” and inserting “the date of enactment of the American Energy Innovation Act of 2020”.

(iv) by striking subparagraph (D) and inserting the following:

“(D) a natural gas, propane, or oil water heater which, in the standard Department of Energy test procedure, yields—

“(i) in the case of a storage tank water heater—

“(I) in the case of a medium-draw water heater, a uniform energy factor of not less than 0.78, and

“(II) in the case of a high-draw water heater, a uniform energy factor of not less than 0.80, and

“(ii) in the case of a tankless water heater—

“(I) in the case of a medium-draw water heater, a uniform energy factor of not less than 0.87, and

“(II) in the case of a high-draw water heater, a uniform energy factor of not less than 0.90, and”, and

(v) in subparagraph (E), by striking “of at least 75 percent” and inserting the following:

“(as determined pursuant to the applicable list published by the Environmental Protection Agency for certified wood stoves, hydronic heaters, or forced-air furnaces) of at least—

“(i) in the case of any stove placed in service before January 1, 2021, 73 percent, and

“(ii) in the case of any stove placed in service after December 31, 2020, 75 percent.”.

(C) in paragraph (4), by striking “not less than 95” and inserting the following: “not less than—

“(A) in the case of a furnace, 97 percent, and

“(B) in the case of a hot water boiler, 95 percent.”.

(D) by striking paragraph (5), and

(E) by redesignating paragraph (6) as paragraph (5),

(5) in subsection (e), by adding the following new paragraphs at the end:

“(4) INSTALLATION STANDARDS.—The terms ‘energy efficient building envelope component’ and ‘qualified energy property’ shall not include any components or property which are not installed according to any applicable Air Conditioning Contractors of America Quality Installation standards which are in effect at the time that such components or property are placed in service.

“(5) REPLACEMENT OF TERMINATED STANDARDS.—In the case of any standard, requirement, or criteria applicable to any energy efficient building envelope component or qualified energy property which is terminated after the date of enactment of the American Energy Innovation Act of 2020, the Secretary, in consultation with the Secretary of Energy, shall identify a similar standard, requirement, or criteria for purposes of determining the eligibility of any such component or property for purposes of credit allowed under this section.”.

(6) in subsection (g)(2), by striking “December 31, 2020” and inserting “December 31, 2024”.

(b) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2020.

**SEC. 4014. GREEN ENERGY PUBLICLY TRADED PARTNERSHIPS.**

(a) IN GENERAL.—Section 7704(d)(1)(E) is amended—

(1) by striking “income and gains derived from the exploration” and inserting “income and gains derived from—

“(i) the exploration”,

(2) by inserting “or” before “industrial source”,

(3) by striking “, or the transportation or storage” and all that follows and inserting the following:

“(ii) the generation of electric power or thermal energy exclusively using any qualified energy resource (as defined in section 45(c)(1)),

“(iii) the operation of energy property (as defined in section 48(a)(3), determined without regard to any date by which the construction of the facility is required to begin),

“(iv) in the case of a facility described in paragraph (3) or (7) of section 45(d) (determined without regard to any placed in service date or date by which construction of the facility is required to begin), the accepting or processing of open-loop biomass or municipal solid waste,

“(v) the storage of electric power or thermal energy exclusively using energy property that is energy storage property (as defined in section 48(c)(5)),

“(vi) the generation, storage, or distribution of electric power or thermal energy exclusively using energy property that is combined heat and power system property (as defined in section 48(c)(3), determined without regard to subparagraph (B)(iii) thereof and without regard to any date by which the construction of the facility is required to begin),

“(vii) the transportation or storage of any fuel described in subsection (b), (c), (d), or (e) of section 6426,

“(viii) the conversion of renewable biomass (as defined in subparagraph (I) of section 211(o)(1) of the Clean Air Act (as in effect on the date of the enactment of this clause)) into renewable fuel (as defined in subparagraph (J) of such section as so in effect), or the storage or transportation of such fuel,

“(ix) the production, storage, or transportation of any fuel which—

“(I) uses as its primary feedstock carbon oxides captured from an anthropogenic source or the atmosphere,

“(II) does not use as its primary feedstock carbon oxide which is deliberately released from naturally occurring subsurface springs, and

“(III) is determined by the Secretary, after consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, to achieve a reduction of not less than a 60 percent in lifecycle greenhouse gas emissions (as defined in section 211(o)(1)(H) of the Clean Air Act, as in effect on the date of the enactment of this clause) compared to baseline lifecycle greenhouse gas emissions (as defined in section 211(o)(1)(C) of such Act, as so in effect),

“(x) the generation of electric power from, a qualifying gasification project (as defined in section 48B(c)(1) without regard to subparagraph (C)) that is described in section 48(d)(1)(B), or

“(xi) in the case of a qualified facility (as defined in section 45Q(d), without regard to any date by which construction of the facility is required to begin) not less than 50 percent (30 percent in the case of a facility placed in service before January 1, 2020) of the total carbon oxide production of which is

qualified carbon oxide (as defined in section 45Q(c))—

“(I) the generation, availability for such generation, or storage of electric power at such facility, or

“(II) the capture of carbon dioxide by such facility.”.

(b) **EFFECTIVE DATE.**—The amendments made by this section apply to taxable years beginning after December 31, 2019.

**SEC. 4015. EXTENSION OF CREDIT FOR RESIDENTIAL ENERGY EFFICIENT PROPERTY.**

(a) **EXTENSION.**—Section 25D(h) of the Internal Revenue Code of 1986 is amended by striking “December 31, 2021” and inserting “December 31, 2024”.

(b) **APPLICABLE PERCENTAGE.**—Section 25D(g) of the Internal Revenue Code of 1986 is amended—

(1) in paragraph (1), by striking “January 1, 2020” and inserting “January 1, 2023”;

(2) in paragraph (2), by striking “after December 31, 2019, and before January 1, 2021” and inserting “after December 31, 2022, and before January 1, 2024”;

(3) in paragraph (3), by striking “after December 31, 2020, and before January 1, 2022” and inserting “after December 31, 2023, and before January 1, 2025”.

(c) **EFFECTIVE DATE.**—The amendments made by this section shall apply to property placed in service after December 31, 2019.

**SA 1398.** Ms. DUCKWORTH (for herself, Mr. BENNET, Mr. CRAPO, and Mr. DURBIN) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle C of title II, add the following:

**SEC. 23. ENERGY-READY VETS PROGRAM.**

(a) **IN GENERAL.**—Title XI of the Energy Policy Act of 2005 (42 U.S.C. 16411 et seq.) is amended by adding at the end the following:

**“SEC. 1107. ENERGY-READY VETS PROGRAM.**

“(a) **PURPOSE.**—The purpose of this section is to ensure that veterans have the credentials and training necessary to secure careers in the energy industry.

“(b) **DEFINITIONS.**—In this section:

“(1) **ACTIVE MILITARY, NAVAL, OR AIR SERVICE.**—The term ‘active military, naval, or air service’ has the meaning given such term in section 101 of title 38, United States Code.

“(2) **ELIGIBLE PARTICIPANT.**—The term ‘eligible participant’ means a veteran who—

“(A) was discharged or released from service in the active military, naval, or air service during the most recent 1-year period; or

“(B)(i) was discharged or released from service in the active military, naval, or air service during the 2-year period immediately preceding the most recent 1-year period; and

“(ii) receives the approval of the Secretary to participate in the program.

“(3) **PROGRAM.**—The term ‘program’ means the Energy-Ready Vets Program established under subsection (c)(1).

“(4) **UNIFORMED SERVICES.**—The term ‘uniformed services’ has the meaning given such term in section 10(a) of title 10, United States Code.

“(5) **VETERAN.**—The term ‘veteran’ has the meaning given such term in section 101 of title 38, United States Code.

“(c) **ESTABLISHMENT; IMPLEMENTATION.**—

“(1) **ESTABLISHMENT.**—The Secretary shall establish a program, to be known as the ‘Energy-Ready Vets Program’, to prepare eligible participants for careers in the energy industry.

“(2) **IMPLEMENTATION.**—The Secretary shall ensure that the program is implemented by

an administrator, to be appointed by the Secretary from among individuals with experience relating to military service.

“(d) **ADMINISTRATION OF PROGRAM.**—

“(1) **IN GENERAL.**—The Secretary, in partnership with the Secretary of Defense, shall carry out the program through the SkillBridge program of the Department of Defense, under which the Secretary shall provide standardized training courses, based, to the maximum extent practicable, on existing industry-recognized certification and training programs, to prepare eligible participants in the program for careers in the energy industry, including—

“(A) in the solar energy industry, careers—

“(i) as solar photovoltaic system installers;

“(ii) as solar technicians;

“(iii) as system inspectors; and

“(iv) in other areas relating to the solar energy industry;

“(B) in the wind energy industry, careers—

“(i) in wind energy operations;

“(ii) in wind energy development;

“(iii) in wind energy manufacturing;

“(iv) as wind energy technicians;

“(v) in the support of all parts of the wind energy supply chain; and

“(vi) in other areas relating to the wind energy industry;

“(C) in the cybersecurity sector of the energy industry, careers in—

“(i) cybersecurity preparedness;

“(ii) cyber incident response and recovery;

“(iii) grid modernization, security, and maintenance;

“(iv) resilience planning; and

“(v) other areas relating to the cybersecurity sector of the energy industry;

“(D) careers in other low-carbon emissions sectors or zero-emissions sectors of the energy industry identified by the Secretary; and

“(E) careers in sectors that plan, develop, construct, maintain, and expand energy industry infrastructure.

“(2) **PROGRAM REQUIREMENTS.**—

“(A) **IN GENERAL.**—In carrying out the program, the Secretary shall ensure that the courses described in paragraph (1)—

“(i) provide—

“(I) job training;

“(II) employment skills training, including providing comprehensive wraparound support services to eligible participants that—

“(aa) enhance the training experience and promote the professional development of eligible participants; and

“(bb) help eligible participants transition into the workforce; and

“(III) opportunities for internships of not longer than 180 days; and

“(ii) are carried out primarily through—

“(I) internships; or

“(II) applied, work-based training.

“(B) **EXAM REQUIREMENT.**—As a requirement for completing a course described in paragraph (1), the Secretary shall require each eligible participant in the course to earn an applicable industry-recognized entry-level certificate or other credential.

“(e) **RECOGNITION OF ENTITIES.**—The Secretary and the administrator of the program appointed under subsection (c)(2), working jointly, shall establish and carry out a program to recognize commercial entities that hire eligible participants who receive certifications or other credentials under the program, based on the proportion that—

“(1) the number of such eligible participants hired by the commercial entity; bears to

“(2) the number of such eligible participants hired by all commercial entities.

“(f) **ESTABLISHMENT OF INDUSTRY-RECOGNIZED CERTIFICATION AND TRAINING PROGRAMS.**—For purposes of subsection (d), if an

appropriate industry-recognized certification and training program does not exist, the Secretary shall establish a grant program to assist the industry in developing such an industry-recognized certification and training program.

“(g) **REPORT.**—Not later than 1 year after the date on which the program is established, and annually thereafter, the Secretary shall submit to Congress a report describing the activities carried out under, and accomplishments of, the program, including—

“(1) the number of veterans enrolled in the program;

“(2) the regional distribution of those veterans;

“(3) the cost of certification under the program;

“(4) the rate of job placement;

“(5) the rate of job retention; and

“(6) the average salaries of veterans who were enrolled in the program.”.

(b) **CLERICAL AMENDMENT.**—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 601) is amended by inserting after the item relating to section 1106 the following:

“Sec. 1107. Energy-Ready Vets Program.”.

**SA 1399.** Ms. DUCKWORTH (for herself, Mr. WYDEN, and Mr. MARKEY) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. . DEFINITION OF PERSON.**

Section 211(a)(2) of the Energy Reorganization Act of 1974 (42 U.S.C. 5851(a)(2)) is amended—

(1) by redesignating subparagraphs (A) through (G) as clauses (i) through (vii), respectively, and indenting the clauses appropriately;

(2) in the matter preceding clause (i) (as so redesignated), by striking the paragraph designation and all that follows through “includes—” and inserting the following:

“(2) **DEFINITIONS.**—In this section:

“(A) **EMPLOYER.**—The term ‘employer’ includes—”; and

(3) by adding at the end the following:

“(B) **PERSON.**—The term ‘person’ includes—

“(i) a person (as defined in section 11 of the Atomic Energy Act of 1954 (42 U.S.C. 2014));

“(ii) the Commission; and

“(iii) the Department of Energy.”.

**SA 1400.** Mr. TILLIS (for himself and Mr. BURR) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle D of title I, add the following:

**SEC. 14. HIGH EFFICIENCY GAS TURBINES.**

(a) **IN GENERAL.**—The Secretary, acting through the Assistant Secretary for Fossil Energy (referred to in this section as the “Secretary”), shall carry out a multiyear, multiphase program (referred to in this section as the “program”) of research, development, and technology demonstration to improve the efficiency of gas turbines used in power generation systems and aviation.

(b) **PROGRAM ELEMENTS.**—The program shall—

(1) support first-of-a-kind engineering and detailed gas turbine design for small-scale



and utility-scale electric power generation, including—

(A) high temperature materials, including superalloys, coatings, and ceramics;

(B) improved heat transfer capability;

(C) manufacturing technology required to construct complex 3-dimensional geometry parts with improved aerodynamic capability;

(D) combustion technology to produce higher firing temperature while lowering nitrogen oxide and carbon monoxide emissions per unit of output;

(E) advanced controls and systems integration;

(F) advanced high performance compressor technology; and

(G) validation facilities for the testing of components and subsystems;

(2) include technology demonstration through component testing, subscale testing, and full-scale testing in existing fleets;

(3) include field demonstrations of the developed technology elements to demonstrate technical and economic feasibility;

(4) assess overall combined cycle and simple cycle system performance;

(5) increase fuel flexibility by enabling gas turbines to operate with high proportions of hydrogen or other renewable gas fuels;

(6) enhance foundational knowledge needed for low-emission combustion systems that can work in high-pressure, high-temperature environments required for high-efficiency cycles;

(7) increase operational flexibility by reducing turbine start-up times and improving the ability to accommodate flexible power demand; and

(8) include any other elements necessary to achieve the goals described in subsection (c), as determined by the Secretary in consultation with private industry.

(c) PROGRAM GOALS.—

(1) IN GENERAL.—The goals of the program shall be—

(A) in phase I, to develop a conceptual design of, and to develop and demonstrate the technology required for—

(i) advanced high efficiency gas turbines to achieve, on a lower heating value basis—

(I) a combined cycle efficiency of not less than 65 percent; or

(II) a simple cycle efficiency of not less than 47 percent; and

(ii) aviation gas turbines to achieve a 25 percent reduction in fuel burn by improving fuel efficiency to existing best-in-class turbo-fan engines; and

(B) in phase II, to develop a conceptual design of advanced high efficiency gas turbines that can achieve, on a lower heating value basis—

(i) a combined cycle efficiency of not less than 67 percent; or

(ii) a simple cycle efficiency of not less than 50 percent.

(2) ADDITIONAL GOALS.—If a goal described in paragraph (1) has been achieved, the Secretary, in consultation with private industry and the National Academy of Sciences, may develop additional goals or phases for advanced gas turbine research and development.

(d) FINANCIAL ASSISTANCE.—

(1) IN GENERAL.—The Secretary may provide financial assistance, including grants, to carry out the program.

(2) PROPOSALS.—Not later than 180 days after the date of enactment of this Act, the Secretary shall solicit proposals from industry, small businesses, universities, and other appropriate parties for conducting activities under this section.

(3) CONSIDERATIONS.—In selecting proposed projects to receive financial assistance under this section, the Secretary shall give special consideration to the extent to which the proposed project will—

(A) stimulate the creation or increased retention of jobs in the United States; and

(B) promote and enhance technology leadership in the United States.

(4) COMPETITIVE AWARDS.—The Secretary shall provide financial assistance under this section on a competitive basis, with an emphasis on technical merit.

(5) COST SHARING.—Section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352) shall apply to financial assistance provided under this section.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$50,000,000 for each of fiscal years 2021 through 2025.

**SA 1401.** Mr. DAINES (for himself and Mr. BARRASSO) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title II, add the following:

#### Subtitle D—Miscellaneous

#### SEC. 24. ELIMINATION OF AN ADMINISTRATIVE FEE UNDER THE MINERAL LEASING ACT.

(a) IN GENERAL.—Section 35 of the Mineral Leasing Act (30 U.S.C. 191) is amended—

(1) in subsection (a), in the first sentence, by striking “, subject to the provisions of subsection (b),”;

(2) by striking subsection (b);

(3) by redesignating subsections (c) and (d) as subsections (b) and (c), respectively;

(4) in subsection (b)(3)(B)(ii) (as so redesignated), by striking “subsection (d)” and inserting “subsection (c)”;

(5) in subsection (c)(3)(A)(ii) (as so redesignated), by striking “subsection (c)(2)(B)” and inserting “subsection (b)(2)(B)”.

(b) CONFORMING AMENDMENTS.—

(1) Section 6(a) of the Mineral Leasing Act for Acquired Lands (30 U.S.C. 355(a)) is amended—

(A) in the first sentence, by striking “Subject to the provisions of section 35(b) of the Mineral Leasing Act (30 U.S.C. 191(b)), all” and inserting “All”; and

(B) in the second sentence, by striking “of the Act of February 25, 1920 (41 Stat. 450; 30 U.S.C. 191)” and inserting “of the Mineral Leasing Act (30 U.S.C. 191)”.

(2) Section 20(a) of the Geothermal Steam Act of 1970 (30 U.S.C. 1019(a)) is amended in the matter preceding paragraph (1), in the second sentence, by striking “the provisions of subsection (b) of section 35 of the Mineral Leasing Act (30 U.S.C. 191(b)) and”.

(3) Section 205(f) of the Federal Oil and Gas Royalty Management Act of 1982 (30 U.S.C. 1735(f)) is amended by striking the fourth, fifth, and sixth sentences.

**SA 1402.** Mr. DAINES submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### TITLE IV—MISCELLANEOUS

#### SEC. 4001. ADJUSTMENT FOR LOW-POPULATION UNITS OF GENERAL LOCAL GOVERNMENT.

Section 6903(c) of title 31, United States Code, is amended—

(1) in paragraph (1), by striking “4,999” and inserting “999”; and

(2) in paragraph (2)—

(A) in the matter preceding the table, by striking “5,000” and inserting “1,000”; and

(B) by striking the table and inserting the following:

<b>“If equals—</b>	<b>population</b>	<b>the limitation is equal to the population times—</b>
1,000	.....	\$254.40
2,000	.....	\$230.66
3,000	.....	\$212.00
4,000	.....	\$198.43
5,000	.....	\$186.56
6,000	.....	\$174.71
7,000	.....	\$164.50
8,000	.....	\$152.67
9,000	.....	\$142.45
10,000	.....	\$130.55
11,000	.....	\$127.22
12,000	.....	\$123.83
13,000	.....	\$118.73
14,000	.....	\$115.34
15,000	.....	\$111.92
16,000	.....	\$110.24
17,000	.....	\$108.51
18,000	.....	\$106.85
19,000	.....	\$105.16
20,000	.....	\$103.51
21,000	.....	\$101.76
22,000	.....	\$100.07
23,000	.....	\$100.07
24,000	.....	\$98.37
25,000	.....	\$96.69
26,000	.....	\$94.98
27,000	.....	\$94.98
28,000	.....	\$94.98
29,000	.....	\$93.31
30,000	.....	\$93.31
31,000	.....	\$91.59
32,000	.....	\$91.59
33,000	.....	\$89.88
34,000	.....	\$89.88
35,000	.....	\$88.17
36,000	.....	\$88.17
37,000	.....	\$86.48
38,000	.....	\$86.48
39,000	.....	\$84.82
40,000	.....	\$84.82
41,000	.....	\$83.09
42,000	.....	\$81.42
43,000	.....	\$81.42
44,000	.....	\$79.69
45,000	.....	\$79.69
46,000	.....	\$78.03
47,000	.....	\$78.03
48,000	.....	\$76.33
49,000	.....	\$76.33
50,000	.....	\$74.63.”.

**SA 1403.** Mr. BARRASSO (for himself and Mr. CRAMER) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title II, add the following:

#### Subtitle D—Miscellaneous

#### SEC. 24. STATE AND TRIBAL AUTHORITY FOR HYDRAULIC FRACTURING REGULATION.

The Mineral Leasing Act (30 U.S.C. 181 et seq.) is amended—

(1) by redesignating section 44 as section 45; and

(2) by adding after section 43 the following:

**“SEC. 44. STATE AND TRIBAL AUTHORITY FOR HYDRAULIC FRACTURING REGULATION.**

“(a) IN GENERAL.—In this section:

“(1) HYDRAULIC FRACTURING DEFINED.—The term ‘hydraulic fracturing’ means the process of creating small cracks or fractures in underground geological formations for well stimulation purposes of bringing hydrocarbons into the wellbore and to the surface for capture.

“(2) SECRETARY.—The term ‘Secretary’ means the Secretary of the Interior.

“(b) ENFORCEMENT OF FEDERAL REGULATIONS.—The Secretary shall not enforce any Federal regulation, guidance, or permit requirement regarding hydraulic fracturing relating to oil, gas, or geothermal production activities on or under any land in any State that has regulations, guidance, or permit requirements for that activity.

“(c) STATE AUTHORITY.—The Secretary shall defer to State regulations, guidance, and permit requirements for all activities regarding hydraulic fracturing relating to oil, gas, or geothermal production activities on Federal land.

“(d) TRANSPARENCY OF STATE REGULATIONS.—

“(1) IN GENERAL.—Each State shall submit to the Bureau of Land Management a copy of the regulations of the State that apply to hydraulic fracturing operations on Federal land, including the regulations that require disclosure of chemicals used in hydraulic fracturing operations.

“(2) AVAILABILITY.—The Secretary shall make available to the public on the website of the Secretary the regulations submitted under paragraph (1).

“(e) TRIBAL AUTHORITY ON TRUST LAND.—The Secretary shall not enforce any Federal regulation, guidance, or permit requirement with respect to hydraulic fracturing on any land held in trust or restricted status for the benefit of a federally recognized Indian Tribe or a member of a federally recognized Indian Tribe, except with the express consent of the beneficiary on whose behalf the land is held in trust or restricted status.”.

**SA 1404.** Mr. BARRASSO (for himself and Mr. CRAMER) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle H of title I, add the following:

**SEC. 18. ACTION ON APPLICATIONS TO EXPORT NATURAL GAS.**

(a) DECISION DEADLINE.—For proposals that must also obtain authorization from the Federal Energy Regulatory Commission or the United States Maritime Administration to site, construct, expand, or operate liquefied natural gas export facilities, the Secretary shall issue a final decision on any application for the authorization to export natural gas under section 3(a) of the Natural Gas Act (15 U.S.C. 717b(a)) not later than 45 days after the later of—

(1) the conclusion of the review to site, construct, expand, or operate the liquefied natural gas export facilities required by the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); and

(2) the date of enactment of this Act.

(b) CONCLUSION OF REVIEW.—For purposes of subsection (a), review required by the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) shall be considered concluded when the lead agency—

(1) for a project requiring an Environmental Impact Statement, publishes a Final Environmental Impact Statement;

(2) for a project for which an Environmental Assessment has been prepared, publishes a Finding of No Significant Impact; or

(3) determines that an application is eligible for a categorical exclusion pursuant to National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) implementing regulations.

(c) JUDICIAL ACTION.—

(1) JURISDICTION.—The United States Court of Appeals for the District of Columbia Cir-

cuit or the circuit in which the liquefied natural gas export facility will be located pursuant to an application described in subsection (a) shall have original and exclusive jurisdiction over any civil action for the review of—

(A) an order issued by the Secretary with respect to the application; or

(B) the failure of the Secretary to issue a final decision on the application.

(2) ORDER TO ISSUE DECISION.—If the Court in a civil action described in paragraph (1) finds that the Secretary has failed to issue a decision on the application as required under subsection (a), the Court shall order the Secretary to issue the decision not later than 30 days after the order of the Court.

(3) EXPEDITED CONSIDERATION.—The Court shall set any civil action brought under this subsection for expedited consideration and shall set the matter on the docket as soon as practical after the filing date of the initial pleading.

(4) APPEALS.—In the case of an application described in subsection (a) for which a petition for review has been filed—

(A) upon motion by an applicant, the matter shall be transferred to the United States Court of Appeals for the District of Columbia Circuit or the circuit in which a liquefied natural gas export facility will be located pursuant to an application described in section 3(a) of the Natural Gas Act (15 U.S.C. 717b(a)); and

(B) the provisions of this section shall apply.

**SA 1405.** Ms. MURKOWSKI submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 457, line 1, strike “2025” and insert “2026”.

**SA 1406.** Mr. BARRASSO (for himself, Mr. WHITEHOUSE, Mrs. CAPITO, Mr. CARPER, Mr. CRAMER, Mr. SCHATZ, Mr. INHOFE, Mr. VAN HOLLEN, Mr. ENZI, Ms. SMITH, Mr. DAINES, Mr. COONS, Mr. DURBIN, Mr. HOEVEN, and Ms. HASSAN) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in subtitle D of title I, insert the following:

**SEC. 14. UTILIZING SIGNIFICANT EMISSIONS WITH INNOVATIVE TECHNOLOGIES.**

(a) SHORT TITLE.—This section may be cited as the “Utilizing Significant Emissions with Innovative Technologies Act” or the “USE IT Act”.

(b) RESEARCH, INVESTIGATION, TRAINING, AND OTHER ACTIVITIES.—Section 103 of the Clean Air Act (42 U.S.C. 7403) is amended—

(1) in subsection (c)(3), in the first sentence of the matter preceding subparagraph (A), by striking “precursors” and inserting “precursors”; and

(2) in subsection (g)—

(A) by redesignating paragraphs (1) through (4) as subparagraphs (A) through (D), respectively, and indenting appropriately;

(B) in the undesignated matter following subparagraph (D) (as so redesignated)—

(i) in the second sentence, by striking “The Administrator” and inserting the following:

“(5) COORDINATION AND AVOIDANCE OF DUPLICATION.—The Administrator”; and

(ii) in the first sentence, by striking “Nothing” and inserting the following:

“(4) EFFECT OF SUBSECTION.—Nothing”;

(C) in the matter preceding subparagraph (A) (as so redesignated)—

(i) in the third sentence, by striking “Such program” and inserting the following:

“(3) PROGRAM INCLUSIONS.—The program under this subsection”;

(ii) in the second sentence—

(I) by inserting “States, institutions of higher education,” after “scientists,”; and

(II) by striking “Such strategies and technologies shall be developed” and inserting the following:

“(2) PARTICIPATION REQUIREMENT.—Such strategies and technologies described in paragraph (1) shall be developed”; and

(iii) in the first sentence, by striking “In carrying out” and inserting the following:

“(1) IN GENERAL.—In carrying out”;

(D) by adding at the end the following:

“(6) CERTAIN CARBON DIOXIDE ACTIVITIES.—

“(A) IN GENERAL.—In carrying out paragraph (3)(A) with respect to carbon dioxide, the Administrator shall carry out the activities described in each of subparagraphs (B), (C), (D), and (E).

“(B) DIRECT AIR CAPTURE RESEARCH.—

“(i) DEFINITIONS.—In this subparagraph:

“(I) BOARD.—The term ‘Board’ means the Direct Air Capture Technology Advisory Board established by clause (iii)(I).

“(II) DILUTE.—The term ‘dilute’ means a concentration of less than 1 percent by volume.

“(III) DIRECT AIR CAPTURE.—

“(aa) IN GENERAL.—The term ‘direct air capture’, with respect to a facility, technology, or system, means that the facility, technology, or system uses carbon capture equipment to capture carbon dioxide directly from the air.

“(bb) EXCLUSION.—The term ‘direct air capture’ does not include any facility, technology, or system that captures carbon dioxide—

“(AA) that is deliberately released from a naturally occurring subsurface spring; or

“(BB) using natural photosynthesis.

“(IV) INTELLECTUAL PROPERTY.—The term ‘intellectual property’ means—

“(aa) an invention that is patentable under title 35, United States Code; and

“(bb) any patent on an invention described in item (aa).

“(ii) TECHNOLOGY PRIZES.—

“(I) IN GENERAL.—Not later than 1 year after the date of enactment of the USE IT Act, the Administrator, in consultation with the Secretary of Energy, shall establish a program to provide, and shall provide, financial awards on a competitive basis for direct air capture from media in which the concentration of carbon dioxide is dilute.

“(II) DUTIES.—In carrying out this clause, the Administrator shall—

“(aa) subject to subclause (III), develop specific requirements for—

“(AA) the competition process; and

“(BB) the demonstration of performance of approved projects;

“(bb) offer financial awards for a project designed—

“(AA) to the maximum extent practicable, to capture more than 10,000 tons of carbon dioxide per year; and

“(BB) to operate in a manner that would be commercially viable in the foreseeable future (as determined by the Board); and

“(cc) to the maximum extent practicable, make financial awards to geographically diverse projects, including at least—

“(AA) 1 project in a coastal State; and

“(BB) 1 project in a rural State.

“(III) PUBLIC PARTICIPATION.—In carrying out subclause (II)(aa), the Administrator shall—

“(aa) provide notice of and, for a period of not less than 60 days, an opportunity for public comment on, any draft or proposed version of the requirements described in subclause (II)(aa); and

“(bb) take into account public comments received in developing the final version of those requirements.

“(iii) DIRECT AIR CAPTURE TECHNOLOGY ADVISORY BOARD.—

“(I) ESTABLISHMENT.—There is established an advisory board to be known as the ‘Direct Air Capture Technology Advisory Board’.

“(II) COMPOSITION.—The Board shall be composed of 9 members appointed by the Administrator, who shall provide expertise in—

“(aa) climate science;

“(bb) physics;

“(cc) chemistry;

“(dd) biology;

“(ee) engineering;

“(ff) economics;

“(gg) business management; and

“(hh) such other disciplines as the Administrator determines to be necessary to achieve the purposes of this subparagraph.

“(III) TERM; VACANCIES.—

“(aa) TERM.—A member of the Board shall serve for a term of 6 years.

“(bb) VACANCIES.—A vacancy on the Board—

“(AA) shall not affect the powers of the Board; and

“(BB) shall be filled in the same manner as the original appointment was made.

“(IV) INITIAL MEETING.—Not later than 30 days after the date on which all members of the Board have been appointed, the Board shall hold the initial meeting of the Board.

“(V) MEETINGS.—The Board shall meet at the call of the Chairperson or on the request of the Administrator.

“(VI) QUORUM.—A majority of the members of the Board shall constitute a quorum, but a lesser number of members may hold hearings.

“(VII) CHAIRPERSON AND VICE CHAIRPERSON.—The Board shall select a Chairperson and Vice Chairperson from among the members of the Board.

“(VIII) COMPENSATION.—Each member of the Board may be compensated at not to exceed the daily equivalent of the annual rate of basic pay in effect for a position at level V of the Executive Schedule under section 5316 of title 5, United States Code, for each day during which the member is engaged in the actual performance of the duties of the Board.

“(IX) DUTIES.—The Board shall advise the Administrator on carrying out the duties of the Administrator under this subparagraph.

“(X) FACAs.—The Federal Advisory Committee Act (5 U.S.C. App.) shall apply to the Board.

“(iv) INTELLECTUAL PROPERTY.—

“(I) IN GENERAL.—As a condition of receiving a financial award under this subparagraph, an applicant shall agree to vest the intellectual property of the applicant derived from the technology in 1 or more entities that are incorporated in the United States.

“(II) RESERVATION OF LICENSE.—The United States—

“(aa) may reserve a nonexclusive, nontransferable, irrevocable, paid-up license, to have practiced for or on behalf of the United States, in connection with any intellectual property described in subclause (I); but

“(bb) shall not, in the exercise of a license reserved under item (aa), publicly disclose proprietary information relating to the license.

“(III) TRANSFER OF TITLE.—Title to any intellectual property described in subclause (I) shall not be transferred or passed, except to an entity that is incorporated in the United

States, until the expiration of the first patent obtained in connection with the intellectual property.

“(v) AUTHORIZATION OF APPROPRIATIONS.—

“(I) IN GENERAL.—Of the amounts authorized to be appropriated for the Environmental Protection Agency, \$35,000,000 shall be available to carry out this subparagraph, to remain available until expended.

“(II) REQUIREMENT.—Research carried out using amounts made available under subclause (I) may not duplicate research funded by the Department of Energy.

“(vi) TERMINATION OF AUTHORITY.—The Board and all authority provided under this subparagraph shall terminate not later than 10 years after the date of enactment of the USE IT Act.

“(C) CARBON DIOXIDE UTILIZATION RESEARCH.—

“(i) DEFINITION OF CARBON DIOXIDE UTILIZATION.—In this subparagraph, the term ‘carbon dioxide utilization’ refers to technologies or approaches that lead to the use of carbon dioxide—

“(I) through the fixation of carbon dioxide through photosynthesis or chemosynthesis, such as through the growing of algae or bacteria;

“(II) through the chemical conversion of carbon dioxide to a material or chemical compound in which the carbon dioxide is securely stored; or

“(III) through the use of carbon dioxide for any other purpose for which a commercial market exists, as determined by the Administrator.

“(ii) PROGRAM.—The Administrator, in consultation with the Secretary of Energy, shall carry out a research and development program for carbon dioxide utilization to promote existing and new technologies that transform carbon dioxide generated by industrial processes into a product of commercial value, or as an input to products of commercial value.

“(iii) TECHNICAL AND FINANCIAL ASSISTANCE.—Not later than 2 years after the date of enactment of the USE IT Act, in carrying out this subsection, the Administrator, in consultation with the Secretary of Energy, shall support research and infrastructure activities relating to carbon dioxide utilization by providing technical assistance and financial assistance in accordance with clause (iv).

“(iv) ELIGIBILITY.—To be eligible to receive technical assistance and financial assistance under clause (iii), a carbon dioxide utilization project shall—

“(I) have access to an emissions stream generated by a stationary source within the United States that is capable of supplying not less than 250 metric tons per day of carbon dioxide for research;

“(II) have access to adequate space for a laboratory and equipment for testing small-scale carbon dioxide utilization technologies, with onsite access to larger test bays for scale-up; and

“(III) have existing partnerships with institutions of higher education, private companies, States, or other government entities.

“(v) COORDINATION.—In supporting carbon dioxide utilization projects under this paragraph, the Administrator shall consult with the Secretary of Energy, and, as appropriate, with the head of any other relevant Federal agency, States, the private sector, and institutions of higher education to develop methods and technologies to account for the carbon dioxide emissions avoided by the carbon dioxide utilization projects.

“(vi) AUTHORIZATION OF APPROPRIATIONS.—

“(I) IN GENERAL.—Of the amounts authorized to be appropriated for the Environmental Protection Agency, \$50,000,000 shall

be available to carry out this subparagraph, to remain available until expended.

“(II) REQUIREMENT.—Research carried out using amounts made available under subclause (I) may not duplicate research funded by the Department of Energy.

“(D) DEEP SALINE FORMATION REPORT.—

“(i) DEFINITION OF DEEP SALINE FORMATION.—

“(I) IN GENERAL.—In this subparagraph, the term ‘deep saline formation’ means a formation of subsurface geographically extensive sedimentary rock layers saturated with waters or brines that have a high total dissolved solids content and that are below the depth where carbon dioxide can exist in the formation as a supercritical fluid.

“(II) CLARIFICATION.—In this subparagraph, the term ‘deep saline formation’ does not include oil and gas reservoirs.

“(ii) REPORT.—In consultation with the Secretary of Energy, and, as appropriate, with the head of any other relevant Federal agency and relevant stakeholders, not later than 1 year after the date of enactment of the USE IT Act, the Administrator shall prepare, submit to Congress, and make publicly available a report that includes—

“(I) a comprehensive identification of potential risks and benefits to project developers associated with increased storage of carbon dioxide captured from stationary sources in deep saline formations, using existing research;

“(II) recommendations, if any, for managing the potential risks identified under subclause (I), including potential risks unique to public land; and

“(III) recommendations, if any, for Federal legislation or other policy changes to mitigate any potential risks identified under subclause (I).

“(E) REPORT ON CARBON DIOXIDE NON-REGULATORY STRATEGIES AND TECHNOLOGIES.—

“(i) IN GENERAL.—Not less frequently than once every 2 years, the Administrator shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that describes—

“(I) the recipients of assistance under subparagraphs (B) and (C); and

“(II) a plan for supporting additional non-regulatory strategies and technologies that could significantly prevent carbon dioxide emissions or reduce carbon dioxide levels in the air, in conjunction with other Federal agencies.

“(ii) INCLUSIONS.—The plan submitted under clause (i) shall include—

“(I) a methodology for evaluating and ranking technologies based on the ability of the technologies to cost effectively reduce carbon dioxide emissions or carbon dioxide levels in the air; and

“(II) a description of any nonair-related environmental or energy considerations regarding the technologies.

“(F) GAO REPORT.—The Comptroller General of the United States shall submit to Congress a report that—

“(i) identifies all Federal grant programs in which a purpose of a grant under the program is to perform research on carbon capture and utilization technologies, including direct air capture technologies; and

“(ii) examines the extent to which the Federal grant programs identified pursuant to clause (i) overlap or are duplicative.”.

(c) REPORT.—Not later than 1 year after the date of enactment of this Act, the Administrator of the Environmental Protection Agency (referred to in this section as the “Administrator”) shall submit to Congress a report describing how funds appropriated to the Administrator during the 5 most recent

fiscal years have been used to carry out section 103 of the Clean Air Act (42 U.S.C. 7403), including a description of—

(1) the amount of funds used to carry out specific provisions of that section; and

(2) the practices used by the Administrator to differentiate funding used to carry out that section, as compared to funding used to carry out other provisions of law.

(d) **INCLUSION OF CARBON CAPTURE INFRASTRUCTURE PROJECTS.**—Section 41001(6) of the FAST Act (42 U.S.C. 4370m(6)) is amended—

(1) in subparagraph (A)—

(A) in the matter preceding clause (i), by inserting “carbon capture,” after “manufacturing,”;

(B) in clause (i)(III), by striking “or” at the end;

(C) by redesignating clause (ii) as clause (iii); and

(D) by inserting after clause (i) the following:

“(ii) is covered by a programmatic plan or environmental review developed for the primary purpose of facilitating development of carbon dioxide pipelines; or”;

(2) by adding at the end the following:

“(C) **INCLUSION.**—For purposes of subparagraph (A), construction of infrastructure for carbon capture includes construction of—

“(i) any facility, technology, or system that captures, utilizes, or sequesters carbon dioxide emissions, including projects for direct air capture (as defined in paragraph (6)(B)(i) of section 103(g) of the Clean Air Act (42 U.S.C. 7403(g)); and

“(ii) carbon dioxide pipelines.”.

(e) **DEVELOPMENT OF CARBON CAPTURE, UTILIZATION, AND SEQUESTRATION REPORT, PERMITTING GUIDANCE, AND REGIONAL PERMITTING TASK FORCE.**—

(1) **DEFINITIONS.**—In this subsection:

(A) **CARBON CAPTURE, UTILIZATION, AND SEQUESTRATION PROJECTS.**—The term “carbon capture, utilization, and sequestration projects” includes projects for direct air capture (as defined in paragraph (6)(B)(i) of section 103(g) of the Clean Air Act (42 U.S.C. 7403(g))).

(B) **EFFICIENT, ORDERLY, AND RESPONSIBLE.**—The term “efficient, orderly, and responsible” means, with respect to development or the permitting process for carbon capture, utilization, and sequestration projects and carbon dioxide pipelines, a process that is completed in an expeditious manner while maintaining environmental, health, and safety protections.

(2) **REPORT.**—

(A) **IN GENERAL.**—Not later than 180 days after the date of enactment of this Act, the Chair of the Council on Environmental Quality (referred to in this section as the “Chair”), in consultation with the Administrator of the Environmental Protection Agency, the Secretary of Energy, the Secretary of the Interior, the Executive Director of the Federal Permitting Improvement Council, and the head of any other relevant Federal agency (as determined by the President), shall prepare a report that—

(i) compiles all existing relevant Federal permitting and review information and resources for project applicants, agencies, and other stakeholders interested in the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines, including—

(I) the appropriate points of interaction with Federal agencies;

(II) clarification of the permitting responsibilities and authorities among Federal agencies; and

(III) best practices and templates for permitting;

(ii) inventories current or emerging activities that transform captured carbon dioxide

into a product of commercial value, or as an input to products of commercial value;

(iii) inventories existing initiatives and recent publications that analyze or identify priority carbon dioxide pipelines needed to enable efficient, orderly, and responsible development of carbon capture, utilization, and sequestration projects at increased scale;

(iv) identifies gaps in the current Federal regulatory framework for the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines; and

(v) identifies Federal financing mechanisms available to project developers.

(B) **SUBMISSION; PUBLICATION.**—The Chair shall—

(i) submit the report under subparagraph (A) to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives; and

(ii) as soon as practicable, make the report publicly available.

(3) **GUIDANCE.**—

(A) **IN GENERAL.**—After submission of the report under paragraph (2)(B), but not later than 1 year after the date of enactment of this Act, the Chair shall submit guidance consistent with that report to all relevant Federal agencies that—

(i) facilitates reviews associated with the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines; and

(ii) supports the efficient, orderly, and responsible development of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines.

(B) **REQUIREMENTS.**—

(i) **IN GENERAL.**—The guidance under subparagraph (A) shall address requirements under—

(I) the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);

(II) the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.);

(III) the Clean Air Act (42 U.S.C. 7401 et seq.);

(IV) the Safe Drinking Water Act (42 U.S.C. 300f et seq.);

(V) the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);

(VI) division A of subtitle III of title 54, United States Code (formerly known as the “National Historic Preservation Act”);

(VII) the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.);

(VIII) the Act of June 8, 1940 (16 U.S.C. 668 et seq.) (commonly known as the “Bald and Golden Eagle Protection Act”); and

(IX) any other Federal law that the Chair determines to be appropriate.

(ii) **ENVIRONMENTAL REVIEWS.**—The guidance under subparagraph (A) shall include direction to States and other interested parties for the development of programmatic environmental reviews under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) for carbon capture, utilization, and sequestration projects and carbon dioxide pipelines.

(iii) **PUBLIC INVOLVEMENT.**—The guidance under subparagraph (A) shall be subject to the public notice, comment, and solicitation of information procedures under section 1506.6 of title 40, Code of Federal Regulations (or a successor regulation).

(C) **SUBMISSION; PUBLICATION.**—The Chair shall—

(i) submit the guidance under subparagraph (A) to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives; and

(ii) as soon as practicable, make the guidance publicly available.

(D) **EVALUATION.**—The Chair shall—

(i) periodically evaluate the reports of the task forces under paragraph (4)(E) and, as necessary, revise the guidance under subparagraph (A); and

(ii) each year, submit to the Committee on Environment and Public Works of the Senate, the Committee on Energy and Commerce of the House of Representatives, and relevant Federal agencies a report that describes any recommendations for legislation, rules, revisions to rules, or other policies that would address the issues identified by the task forces under paragraph (4)(E).

(4) **TASK FORCE.**—

(A) **ESTABLISHMENT.**—Not later than 18 months after the date of enactment of this Act, the Chair shall establish not less than 2 task forces, which shall each cover a different geographical area with differing demographic, land use, or geological issues—

(i) to identify permitting and other challenges and successes that permitting authorities and project developers and operators face; and

(ii) to improve the performance of the permitting process and regional coordination for the purpose of promoting the efficient, orderly, and responsible development of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines.

(B) **MEMBERS AND SELECTION.**—

(i) **IN GENERAL.**—The Chair shall—

(I) develop criteria for the selection of members to each task force; and

(II) select members for each task force in accordance with subclause (I) and clause (ii).

(ii) **MEMBERS.**—Each task force—

(I) shall include not less than 1 representative of each of—

(aa) the Environmental Protection Agency;

(bb) the Department of Energy;

(cc) the Department of the Interior;

(dd) any other Federal agency the Chair determines to be appropriate;

(ee) any State that requests participation in the geographical area covered by the task force;

(ff) developers or operators of carbon capture, utilization, and sequestration projects or carbon dioxide pipelines; and

(gg) nongovernmental membership organizations, the primary mission of which concerns protection of the environment; and

(II) at the request of a Tribal or local government, may include a representative of—

(aa) not less than 1 local government in the geographical area covered by the task force; and

(bb) not less than 1 Tribal government in the geographical area covered by the task force.

(C) **MEETINGS.**—

(i) **IN GENERAL.**—Each task force shall meet not less than twice each year.

(ii) **JOINT MEETING.**—To the maximum extent practicable, the task forces shall meet collectively not less than once each year.

(D) **DUTIES.**—Each task force shall—

(i) inventory existing or potential Federal and State approaches to facilitate reviews associated with the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines, including best practices that—

(I) avoid duplicative reviews;

(II) engage stakeholders early in the permitting process; and

(III) make the permitting process efficient, orderly, and responsible;

(ii) develop common models for State-level carbon dioxide pipeline regulation and oversight guidelines that can be shared with States in the geographical area covered by the task force;

(iii) provide technical assistance to States in the geographical area covered by the task

force in implementing regulatory requirements and any models developed under clause (ii);

(iv) inventory current or emerging activities that transform captured carbon dioxide into a product of commercial value, or as an input to products of commercial value;

(v) identify any priority carbon dioxide pipelines needed to enable efficient, orderly, and responsible development of carbon capture, utilization, and sequestration projects at increased scale;

(vi) identify gaps in the current Federal and State regulatory framework and in existing data for the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines;

(vii) identify Federal and State financing mechanisms available to project developers; and

(viii) develop recommendations for relevant Federal agencies on how to develop and research technologies that—

(I) can capture carbon dioxide; and  
(II) would be able to be deployed within the region covered by the task force, including any projects that have received technical or financial assistance for research under paragraph (6) of section 103(g) of the Clean Air Act (42 U.S.C. 7403(g)).

(E) REPORT.—Each year, each task force shall prepare and submit to the Chair and to the other task forces a report that includes—

(i) any recommendations for improvements in efficient, orderly, and responsible issuance or administration of Federal permits and other Federal authorizations required under a law described in paragraph (3)(B)(i); and  
(ii) any other nationally relevant information that the task force has collected in carrying out the duties under subparagraph (D).

(F) EVALUATION.—Not later than 5 years after the date of enactment of this Act, the Chair shall—

(i) reevaluate the need for the task forces; and

(ii) submit to Congress a recommendation as to whether the task forces should continue.

**SA 1407.** Ms. MURKOWSKI submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

Strike all after the enacting clause and insert the following:

#### SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “American Energy Innovation Act of 2020”.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.  
Sec. 2. Definitions.

#### TITLE I—INNOVATION

##### Subtitle A—Efficiency

#### PART I—ENERGY SAVINGS AND INDUSTRIAL COMPETITIVENESS

##### SUBPART A—BUILDINGS

#### CHAPTER 1—BUILDING EFFICIENCY

Sec. 1001. Commercial building energy consumption information sharing.  
Sec. 1002. Energy efficiency materials pilot program.  
Sec. 1003. Coordination of energy retrofit assistance for schools.  
Sec. 1004. Grants for energy efficiency improvements and renewable energy improvements at public school facilities.  
Sec. 1005. Smart Building Acceleration.

#### CHAPTER 2—WORKER TRAINING AND CAPACITY BUILDING

Sec. 1011. Building training and assessment centers.  
Sec. 1012. Career skills training.

##### SUBPART B—INDUSTRIAL EFFICIENCY AND COMPETITIVENESS

Sec. 1021. Purposes.  
Sec. 1022. Future of Industry program and industrial research and assessment centers.  
Sec. 1023. CHP Technical Assistance Partnership Program.  
Sec. 1024. Sustainable manufacturing initiative.  
Sec. 1025. Conforming amendments.

##### SUBPART C—FEDERAL AGENCY ENERGY EFFICIENCY

Sec. 1031. Energy and water performance requirements for Federal buildings.  
Sec. 1032. Federal Energy Management Program.  
Sec. 1033. Use of energy and water efficiency measures in Federal buildings.  
Sec. 1034. Federal building energy efficiency performance standards; certification system and level for green buildings.  
Sec. 1035. Energy-efficient and energy-saving information technologies.  
Sec. 1036. High-performance green Federal buildings.  
Sec. 1037. Energy efficient data centers.

##### SUBPART D—REBATES AND CERTIFICATIONS

Sec. 1041. Third-Party Certification Under Energy Star Program.  
Sec. 1042. Extended Product System Rebate Program.  
Sec. 1043. Energy Efficient Transformer Rebate Program.

##### SUBPART E—MISCELLANEOUS

Sec. 1051. Advance appropriations required.

##### PART II—WEATHERIZATION

Sec. 1101. Weatherization Assistance Program.

##### Subtitle B—Renewable Energy

Sec. 1201. Hydroelectric production incentives and efficiency improvements.  
Sec. 1202. Marine energy research and development.  
Sec. 1203. Advanced geothermal innovation leadership.  
Sec. 1204. Wind energy research and development.  
Sec. 1205. Solar energy research and development.

##### Subtitle C—Energy Storage

Sec. 1301. Better energy storage technology.  
Sec. 1302. Bureau of Reclamation pumped storage hydropower development.

##### Subtitle D—Carbon Capture, Utilization, and Storage

Sec. 1401. Fossil energy.  
Sec. 1402. Establishment of coal and natural gas technology program.  
Sec. 1403. Carbon storage validation and testing.  
Sec. 1404. Carbon utilization program.  
Sec. 1405. Carbon removal.

##### Subtitle E—Nuclear

Sec. 1501. Light water reactor sustainability program.  
Sec. 1502. Nuclear energy research, development, and demonstration.  
Sec. 1503. Advanced fuels development.  
Sec. 1504. Nuclear science and engineering support.  
Sec. 1505. University Nuclear Leadership Program.  
Sec. 1506. Versatile, reactor-based fast neutron source.

Sec. 1507. Advanced nuclear reactor research and development goals.

Sec. 1508. Nuclear energy strategic plan.  
Sec. 1509. Advanced nuclear fuel security program.

Sec. 1510. International nuclear energy cooperation.

Sec. 1511. Integrated Energy Systems Program.

##### Subtitle F—Industrial Technologies

##### PART I—INNOVATION

Sec. 1601. Purpose.  
Sec. 1602. Coordination of research and development of energy efficient technologies for industry.  
Sec. 1603. Industrial emissions reduction technology development program.  
Sec. 1604. Industrial Technology Innovation Advisory Committee.  
Sec. 1605. Technical assistance program to implement industrial emissions reduction.

##### PART II—SMART MANUFACTURING

Sec. 1611. Definitions.  
Sec. 1612. Development of national smart manufacturing plan.  
Sec. 1613. Leveraging existing agency programs to assist small and medium manufacturers.  
Sec. 1614. Leveraging smart manufacturing infrastructure at National Laboratories.  
Sec. 1615. State manufacturing leadership.  
Sec. 1616. Report.

##### Subtitle G—Vehicles

Sec. 1701. Objectives.  
Sec. 1702. Coordination and nonduplication.  
Sec. 1703. Authorization of appropriations.  
Sec. 1704. Reporting.  
Sec. 1705. Vehicle research and development.  
Sec. 1706. Medium- and heavy-duty commercial and transit vehicles program.  
Sec. 1707. Class 8 truck and trailer systems demonstration.  
Sec. 1708. Technology testing and metrics.  
Sec. 1709. Nonroad systems pilot program.  
Sec. 1710. Repeal of existing authorities.

##### Subtitle H—Department of Energy

Sec. 1801. Veterans' health initiative.  
Sec. 1802. Small scale LNG access.  
Sec. 1803. Appalachian energy for national security.  
Sec. 1804. Energy and water for sustainability.  
Sec. 1805. Technology transitions.  
Sec. 1806. Energy Technology Commercialization Fund cost-sharing.  
Sec. 1807. State loan eligibility.  
Sec. 1808. ARPA-E reauthorization.  
Sec. 1809. Adjusting strategic petroleum reserve mandated drawdowns.

#### TITLE II—SUPPLY CHAIN SECURITY

##### Subtitle A—Mineral Security

Sec. 2101. Mineral security.  
Sec. 2102. Rare earth element advanced coal technologies.

##### Subtitle B—Cybersecurity and Grid Security and Modernization

**PART I—CYBERSECURITY AND GRID SECURITY**  
Sec. 2201. Incentives for advanced cybersecurity technology investment.  
Sec. 2202. Rural and municipal utility advanced cybersecurity grant and technical assistance program.  
Sec. 2203. State energy security plans.  
Sec. 2204. Enhancing grid security through public-private partnerships.  
Sec. 2205. Enhanced grid security.

##### PART II—GRID MODERNIZATION

Sec. 2210. Grid storage program.  
Sec. 2211. Technology demonstration on the distribution system.

- Sec. 2212. Micro-grid and hybrid micro-grid systems program.
- Sec. 2213. Electric grid architecture, scenario development, and modeling.
- Sec. 2214. Voluntary model pathways.
- Sec. 2215. Performance metrics for electricity infrastructure providers.
- Sec. 2216. Voluntary State, regional, and local electricity distribution planning.
- Sec. 2217. Authorization of appropriations.
- Subtitle C—Workforce Development
- Sec. 2301. Definitions.
- Sec. 2302. Addressing insufficient compensation of employees and other personnel of the Federal Energy Regulatory Commission.
- Sec. 2303. Report on the authority of the Secretary to implement flexible compensation models.
- Sec. 2304. 21st Century Energy Workforce Advisory Board.
- Sec. 2305. National Laboratory jobs access pilot program.
- Sec. 2306. Clean energy workforce pilot program.

#### TITLE III—CODE MAINTENANCE

- Sec. 3001. Repeal of off-highway motor vehicles study.
- Sec. 3002. Repeal of methanol study.
- Sec. 3003. Repeal of state utility regulatory assistance.
- Sec. 3004. Repeal of authorization of appropriations provision.
- Sec. 3005. Repeal of residential energy efficiency standards study.
- Sec. 3006. Repeal of weatherization study.
- Sec. 3007. Repeal of report to Congress.
- Sec. 3008. Repeal of survey of energy saving potential.
- Sec. 3009. Repeal of report by General Services Administration.
- Sec. 3010. Repeal of intergovernmental energy management planning and coordination workshops.
- Sec. 3011. Repeal of Inspector General audit survey and President's Council on Integrity and Efficiency report to Congress.
- Sec. 3012. Repeal of procurement and identification of energy efficient products program.
- Sec. 3013. Repeal of photovoltaic energy program.
- Sec. 3014. Repeal of national action plan for demand response.
- Sec. 3015. Repeal of energy auditor training and certification.
- Sec. 3016. Repeal of national coal policy study.
- Sec. 3017. Repeal of study on compliance problem of small electric utility systems.
- Sec. 3018. Repeal of study of socioeconomic impacts of increased coal production and other energy development.
- Sec. 3019. Repeal of study of the use of petroleum and natural gas in combustors.
- Sec. 3020. Repeal of authorization of appropriations.
- Sec. 3021. Repeal of submission of reports.
- Sec. 3022. Repeal of electric utility conservation plan.
- Sec. 3023. Emergency Energy Conservation repeals.
- Sec. 3024. Energy Security Act repeals.
- Sec. 3025. Nuclear Safety Research, Development, and Demonstration Act of 1980 repeals.
- Sec. 3026. Repeal of Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989.
- Sec. 3027. Repeal of hydrogen research, development, and demonstration program.

- Sec. 3028. Repeal of study on alternative fuel use in nonroad vehicles and engines.
- Sec. 3029. Repeal of low interest loan program for small business fleet purchases.
- Sec. 3030. Repeal of technical and policy analysis for replacement fuel demand and supply information.
- Sec. 3031. Repeal of 1992 Report on Climate Change.
- Sec. 3032. Repeal of Director of Climate Protection establishment.
- Sec. 3033. Repeal of 1994 report on global climate change emissions.
- Sec. 3034. Repeal of telecommuting study.
- Sec. 3035. Repeal of advanced buildings for 2005 program.
- Sec. 3036. Repeal of Energy Research, Development, Demonstration, and Commercial Application Advisory Board.
- Sec. 3037. Repeal of study on use of energy futures for fuel purchase.
- Sec. 3038. Repeal of energy subsidy study.
- Sec. 3039. Elimination and consolidation of certain America COMPETES programs.
- Sec. 3040. Repeal of prior limitation on compensation of the Secretary of the Interior.

#### SEC. 2. DEFINITIONS.

In this Act:

- (1) DEPARTMENT.—The term “Department” means the Department of Energy.
- (2) NATIONAL LABORATORY.—The term “National Laboratory” has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).
- (3) SECRETARY.—Unless otherwise specified, the term “Secretary” means the Secretary of Energy.

#### TITLE I—INNOVATION

##### Subtitle A—Efficiency

#### PART I—ENERGY SAVINGS AND INDUSTRIAL COMPETITIVENESS

##### Subpart A—Buildings

#### CHAPTER 1—BUILDING EFFICIENCY

##### SEC. 1001. COMMERCIAL BUILDING ENERGY CONSUMPTION INFORMATION SHARING.

- (a) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, the Administrator of the Energy Information Administration (referred to in this section as the “Administrator”) and the Administrator of the Environmental Protection Agency shall sign, and submit to Congress, an information sharing agreement (referred to in this section as the “agreement”) relating to commercial building energy consumption data.
- (b) CONTENT OF AGREEMENT.—The agreement shall—
  - (1) provide that the Administrator shall have access to building-specific data in the Portfolio Manager database of the Environmental Protection Agency;
  - (2) describe the manner in which the Administrator shall incorporate appropriate data (including the data described in subsection (c)) into any Commercial Buildings Energy Consumption Survey (referred to in this section as “CBECS”) published after the date of enactment of this Act for the purpose of analyzing and estimating building population, size, location, activity, energy usage, and any other relevant building characteristic; and
  - (3) describe and compare—
    - (A) the methodologies that the Energy Information Administration, the Environmental Protection Agency, and State and local government managers use to maximize the quality, reliability, and integrity of data collected through CBECS, the Portfolio Man-

ager database of the Environmental Protection Agency, and State and local building energy disclosure laws (including regulations), respectively, and the manner in which those methodologies can be improved; and

(B) consistencies and variations in data for buildings that were captured in the 2012 CBECS cycle and in the Portfolio Manager database of the Environmental Protection Agency.

(c) DATA.—The data referred in subsection (b)(2) includes data that—

(1) is collected through the Portfolio Manager database of the Environmental Protection Agency;

(2) is required to be publicly available on the internet under State and local government building energy disclosure laws (including regulations); and

(3) includes information on private sector buildings that are not less than 250,000 square feet.

(d) PROTECTION OF INFORMATION.—In carrying out the agreement, the Administrator and the Administrator of the Environmental Protection Agency shall protect information in accordance with—

(1) section 552(b)(4) of title 5, United States Code (commonly known as the “Freedom of Information Act”);

(2) subchapter III of chapter 35 of title 44, United States Code; and

(3) any other applicable law (including regulations).

#### SEC. 1002. ENERGY EFFICIENCY MATERIALS PILOT PROGRAM.

(a) DEFINITIONS.—In this section:

(1) APPLICANT.—The term “applicant” means a nonprofit organization that applies for a grant under this section.

(2) ENERGY-EFFICIENCY MATERIAL.—

(A) IN GENERAL.—The term “energy-efficiency material” means a material (including a product, equipment, or system) the installation of which results in a reduction in use by a nonprofit organization of energy or fuel.

(B) INCLUSIONS.—The term “energy-efficiency material” includes—

(i) a roof or lighting system or component of the system;

(ii) a window;

(iii) a door, including a security door;

(iv) a heating, ventilation, or air conditioning system or component of the system (including insulation and wiring and plumbing improvements needed to serve a more efficient system); and

(v) a renewable energy generation or heating system, including a solar, photovoltaic, wind, geothermal, or biomass (including wood pellet) system or component of the system.

(3) NONPROFIT BUILDING.—

(A) IN GENERAL.—The term “nonprofit building” means a building operated and owned by an organization that is described in section 501(c)(3) of the Internal Revenue Code of 1986 and exempt from tax under section 501(a) of such Code.

(B) INCLUSIONS.—The term “nonprofit building” includes a building described in subparagraph (A) that is—

(i) a hospital;

(ii) a youth center;

(iii) a school;

(iv) a social-welfare program facility;

(v) a faith-based organization; or

(vi) any other nonresidential and non-commercial structure.

(b) ESTABLISHMENT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall establish a pilot program to award grants for the purpose of providing nonprofit buildings with energy-efficiency materials.

(c) GRANTS.—



(1) IN GENERAL.—The Secretary may award grants under the program established under subsection (b).

(2) APPLICATION.—The Secretary may award a grant under paragraph (1) if an applicant submits to the Secretary an application at such time, in such form, and containing such information as the Secretary may prescribe.

(3) CRITERIA FOR GRANT.—In determining whether to award a grant under paragraph (1), the Secretary shall apply performance-based criteria, which shall give priority to applicants based on—

- (A) the energy savings achieved;
- (B) the cost-effectiveness of the use of energy-efficiency materials;
- (C) an effective plan for evaluation, measurement, and verification of energy savings; and
- (D) the financial need of the applicant.

(4) LIMITATION ON INDIVIDUAL GRANT AMOUNT.—Each grant awarded under this section shall not exceed \$200,000.

(d) REPORT.—Not later than January 1, 2023, the Secretary shall submit to Congress a report on the pilot program established under subsection (b) that describes—

- (1) the net reduction in energy use and energy costs under the pilot program; and
- (2) for each recipient of a grant under the pilot program—

- (A) the geographic location of the recipient; and
- (B) the size of the organization of the recipient.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$10,000,000 for each of fiscal years 2021 through 2025, to remain available until expended.

#### SEC. 1003. COORDINATION OF ENERGY RETROFITTING ASSISTANCE FOR SCHOOLS.

(a) DEFINITION OF SCHOOL.—In this section, the term “school” means—

- (1) an elementary school or secondary school (as defined in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801));
- (2) an institution of higher education (as defined in section 102(a) of the Higher Education Act of 1965 (20 U.S.C. 1002(a)));
- (3) a school of the defense dependents’ education system under the Defense Dependents’ Education Act of 1978 (20 U.S.C. 921 et seq.) or established under section 2164 of title 10, United States Code;
- (4) a school operated by the Bureau of Indian Education;
- (5) a tribally controlled school (as defined in section 5212 of the Tribally Controlled Schools Act of 1988 (25 U.S.C. 2511)); and
- (6) a Tribal College or University (as defined in section 316(b) of the Higher Education Act of 1965 (20 U.S.C. 1059c(b))).

(b) DESIGNATION OF LEAD AGENCY.—The Secretary, acting through the Office of Energy Efficiency and Renewable Energy, shall act as the lead Federal agency for coordinating and disseminating information on existing Federal programs and assistance that may be used to help initiate, develop, and finance energy efficiency, renewable energy, and energy retrofitting projects for schools.

(c) REQUIREMENTS.—In carrying out coordination and outreach under subsection (b), the Secretary shall—

(1) in consultation and coordination with the appropriate Federal agencies, carry out a review of existing programs and financing mechanisms (including revolving loan funds and loan guarantees) available in or from the Department of Agriculture, the Department, the Department of Education, the Department of the Treasury, the Internal Revenue Service, the Environmental Protection Agency, and other appropriate Federal agencies with jurisdiction over energy financing

and facilitation that are currently used or may be used to help initiate, develop, and finance energy efficiency, renewable energy, and energy retrofitting projects for schools;

(2) establish a Federal cross-departmental collaborative coordination, education, and outreach effort to streamline communication and promote available Federal opportunities and assistance described in paragraph (1), for energy efficiency, renewable energy, and energy retrofitting projects that enables States, local educational agencies, and schools—

- (A) to use existing Federal opportunities more effectively; and
- (B) to form partnerships with Governors, State energy programs, local educational, financial, and energy officials, State and local government officials, nonprofit organizations, and other appropriate entities, to support the initiation of the projects;

(3) provide technical assistance for States, local educational agencies, and schools to help develop and finance energy efficiency, renewable energy, and energy retrofitting projects—

- (A) to increase the energy efficiency of buildings or facilities;
- (B) to install systems that individually generate energy from renewable energy resources;
- (C) to establish partnerships to leverage economies of scale and additional financing mechanisms available to larger clean energy initiatives; or
- (D) to promote—

- (i) the maintenance of health, environmental quality, and safety in schools, including the ambient air quality, through energy efficiency, renewable energy, and energy retrofitting projects; and
- (ii) the achievement of expected energy savings and renewable energy production through proper operations and maintenance practices;

(4) develop and maintain a single online resource website with contact information for relevant technical assistance and support staff in the Office of Energy Efficiency and Renewable Energy for States, local educational agencies, and schools to effectively access and use Federal opportunities and assistance described in paragraph (1) to develop energy efficiency, renewable energy, and energy retrofitting projects; and

(5) establish a process for recognition of schools that—

- (A) have successfully implemented energy efficiency, renewable energy, and energy retrofitting projects; and
- (B) are willing to serve as resources for other local educational agencies and schools to assist initiation of similar efforts.

(d) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the implementation of this section.

#### SEC. 1004. GRANTS FOR ENERGY EFFICIENCY IMPROVEMENTS AND RENEWABLE ENERGY IMPROVEMENTS AT PUBLIC SCHOOL FACILITIES.

(a) DEFINITIONS.—In this section:

- (1) ELIGIBLE ENTITY.—The term “eligible entity” means a consortium of—
  - (A) 1 local educational agency; and
  - (B) 1 or more—
    - (i) schools;
    - (ii) nonprofit organizations;
    - (iii) for-profit organizations; or
    - (iv) community partners that have the knowledge and capacity to partner and assist with energy improvements.
- (2) ENERGY IMPROVEMENT.—The term “energy improvement” means—

(A) any improvement, repair, renovation, or installation to a school, including school grounds, that will result in a direct reduction in school energy costs, including im-

provements to building envelope, air conditioning, ventilation, heating system, domestic hot water heating, compressed air systems, distribution systems, lighting, power systems, and controls;

(B) any improvement, repair, renovation, or installation that—

(i) leads to an improvement in teacher and student health, including indoor air quality, daylighting, ventilation, electrical lighting, green roofs, outdoor gardens, and acoustics; and

(ii) results in a reduction in school energy costs as described in subparagraph (A);

(C) the installation of renewable energy technologies (such as wind power, photovoltaics, solar thermal systems, geothermal energy, hydrogen-fueled systems, biomass-based systems, biofuels, anaerobic digesters, and hydropower) that provide power to a school;

(D) the installation of zero-emissions vehicle infrastructure on school grounds for exclusive use of school buses, school fleets, or students, or for the general public; and

(E) the purchase or lease of zero-emissions vehicles, including school buses, fleet vehicles, and other operational vehicles.

(3) LOCAL EDUCATIONAL AGENCY.—The term “local educational agency” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

(4) PARTNERING LOCAL EDUCATIONAL AGENCY.—The term “partnering local educational agency”, when used with respect to an eligible entity, means the local educational agency participating in the eligible entity.

(5) ZERO-EMISSIONS VEHICLE INFRASTRUCTURE.—The term “zero-emissions vehicle infrastructure” means infrastructure used to charge or fuel—

(A) a zero-emission vehicle (as defined in section 88.102-94 of title 40, Code of Federal Regulations (or successor regulation)); or

(B) a vehicle that does not produce exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions.

(b) AUTHORITY.—From amounts made available for grants under this section, the Secretary shall award competitive grants to eligible entities to make energy improvements authorized by this section.

(c) APPLICATIONS.—

(1) IN GENERAL.—An eligible entity desiring a grant under this section shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

(2) CONTENTS.—The application submitted under paragraph (1) shall include each of the following:

(A) A needs assessment of the current condition of the school and facilities that are to receive the energy improvements.

(B) A draft work plan of what the eligible entity proposes to achieve at the school and a description of the energy improvements to be carried out.

(C) A description of the capacity of the eligible entity to provide services and comprehensive support to make the energy improvements.

(D) An assessment of the applicant’s expected needs of the eligible entity for operation and maintenance training funds, and a plan for use of those funds, if any.

(E) An assessment of the expected energy, safety, and health benefits of the energy improvements.

(F) A lifecycle cost estimate of the proposed energy improvements.

(G) An identification of other resources that are available to carry out the activities

for which funds are requested under this section, including the availability of utility programs and public benefit funds.

(d) **PRIORITY.**—In awarding grants under this section, the Secretary shall give a priority to eligible entities—

(1) that have renovation, repair, and improvement funding needs; and

(2)(A) that serve a high percentage, as determined by the Secretary, of students who are eligible for a free or reduced price lunch under the Richard B. Russell National School Lunch Act (42 U.S.C. 1751 et seq.) (which may be calculated for students in a high school (as defined by section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801)) using data from the schools that feed into the high school); or

(B) with a participating local educational agency designated with a school district locale code of 41, 42, or 43, as determined by the National Center for Education Statistics in consultation with the Bureau of the Census.

(e) **COMPETITIVE CRITERIA.**—The competitive criteria used by the Secretary to award grants under this section shall include the following:

(1) The difference between the fiscal capacity of the eligible entity to carry out, and the needs of the partnering local educational agency for, energy improvements at school facilities, including—

(A) the current and historic ability of the partnering local educational agency to raise funds for construction, renovation, modernization, and major repair projects for schools;

(B) whether the partnering local educational agency has been able to issue bonds or receive other funds to support current infrastructure needs of the partnering local educational agency; and

(C) the bond rating of the partnering local educational agency.

(2) The likelihood that the partnering local educational agency or eligible entity will maintain in good condition, and operate, the energy improvements at any facility the improvement of which is assisted.

(3) The potential energy, health, and safety benefits from the proposed energy improvements, considering factors including the degree of efficiency, energy savings, and renewable energy generation in proportion to school facility size and usage.

(f) **USE OF GRANT AMOUNTS.**—

(1) **IN GENERAL.**—An eligible entity receiving a grant under this section shall use the grant amounts only to make the energy improvements described in the application, subject to the other provisions of this subsection.

(2) **OPERATION AND MAINTENANCE TRAINING.**—An eligible entity receiving a grant under this section may use not more than 5 percent of the grant amounts for operation and maintenance training for energy efficiency and renewable energy improvements (such as maintenance staff and teacher training, education, and preventative maintenance training).

(3) **AUDIT.**—An eligible entity receiving a grant under this section may use funds under the grant for a third-party investigation and analysis for energy improvements (such as energy audits and existing building commissioning).

(4) **CONTINUING EDUCATION.**—An eligible entity receiving a grant under this section may use not more than 3 percent of the grant amounts to develop a continuing education curriculum relating to energy improvements.

(g) **CONTRACTING REQUIREMENTS.**—

(1) **DAVIS-BACON.**—Any laborer or mechanic employed by any contractor or subcontractor in the performance of work on any

energy improvements funded by a grant under this section shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor under subchapter IV of chapter 31 of title 40, United States Code (commonly referred to as the “Davis-Bacon Act”).

(2) **COMPETITION.**—Each eligible entity receiving a grant under this section shall ensure that, if the eligible entity uses grant funds to carry out repair or renovation through a contract, any such contract process—

(A) ensures the maximum number of qualified bidders, including small, minority, and women-owned businesses, through full and open competition; and

(B) gives priority to businesses located in, or resources common to, the State or the geographical area in which the project is carried out.

(h) **REPORTING.**—Each eligible entity receiving a grant under this section shall submit to the Secretary, at such time as the Secretary may require, a report describing the use of such funds for energy improvements, the estimated cost savings realized by those energy improvements, the results of any audit, the use of any utility programs and public benefit funds, and the use of performance tracking for energy improvements.

(i) **BEST PRACTICES.**—

(1) **IN GENERAL.**—The Secretary shall develop and publish guidelines and best practices for activities carried out under this section.

(2) **DEVELOPMENT.**—In carrying out paragraph (1), the Secretary shall—

(A) establish minimum technical requirements for the conduct of energy audits and indoor environmental quality assessments; and

(B) make publicly accessible on the website of the Department a brief annual report on the implementation of this section.

(3) **TECHNICAL ASSISTANCE.**—The Secretary may provide technical assistance to eligible entities to implement the guidelines and best practices developed under paragraph (1).

(j) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to carry out this section \$100,000,000 for each of fiscal years 2021 through 2025.

#### SEC. 1005. SMART BUILDING ACCELERATION.

(a) **DEFINITIONS.**—In this section:

(1) **PROGRAM.**—The term “program” means the Federal Smart Building Program established under subsection (b)(1).

(2) **SMART BUILDING.**—The term “smart building” means a building, or collection of buildings, with an energy system that—

(A) is flexible and automated;

(B) has extensive operational monitoring and communication connectivity, allowing remote monitoring and analysis of all building functions;

(C) takes a systems-based approach in integrating the overall building operations for control of energy generation, consumption, and storage;

(D) communicates with utilities and other third-party commercial entities, if appropriate;

(E) protects the health and safety of occupants and workers; and

(F) is cybersecure.

(3) **SMART BUILDING ACCELERATOR.**—The term “smart building accelerator” means an initiative that is designed to demonstrate specific innovative policies and approaches—

(A) with clear goals and a clear timeline; and

(B) that, on successful demonstration, would accelerate investment in energy efficiency.

(b) **FEDERAL SMART BUILDING PROGRAM.**—

(1) **ESTABLISHMENT.**—Not later than 1 year after the date of enactment of this Act, the Secretary shall, in consultation with the Administrator of General Services, establish a program to be known as the “Federal Smart Building Program”—

(A) to implement smart building technology; and

(B) to demonstrate the costs and benefits of smart buildings.

(2) **SELECTION.**—

(A) **IN GENERAL.**—The Secretary shall coordinate the selection of not fewer than 1 building from among each of several key Federal agencies, as described in paragraph (4), to compose an appropriately diverse set of smart buildings based on size, type, and geographic location.

(B) **INCLUSION OF COMMERCIALY OPERATED BUILDINGS.**—In making selections under subparagraph (A), the Secretary may include buildings that are owned by the Federal Government but are commercially operated.

(3) **TARGETS.**—Not later than 18 months after the date of enactment of this Act, the Secretary shall establish targets for the number of smart buildings to be commissioned and evaluated by key Federal agencies by 3 years and 6 years after the date of enactment of this Act.

(4) **FEDERAL AGENCY DESCRIBED.**—The key Federal agencies referred to in paragraph (2)(A) shall include buildings operated by—

(A) the Department of the Army;

(B) the Department of the Navy;

(C) the Department of the Air Force;

(D) the Department;

(E) the Department of the Interior;

(F) the Department of Veterans Affairs; and

(G) the General Services Administration.

(5) **REQUIREMENT.**—In implementing the program, the Secretary shall leverage existing financing mechanisms including energy savings performance contracts, utility energy service contracts, and annual appropriations.

(6) **EVALUATION.**—Using the guidelines of the Federal Energy Management Program relating to whole-building evaluation, measurement, and verification, the Secretary shall evaluate the costs and benefits of the buildings selected under paragraph (2), including an identification of—

(A) which advanced building technologies—

(i) are most cost-effective; and

(ii) show the most promise for—

(I) increasing building energy savings;

(II) increasing service performance to building occupants;

(III) reducing environmental impacts; and

(IV) establishing cybersecurity; and

(B) any other information the Secretary determines to be appropriate.

(7) **AWARDS.**—The Secretary may expand awards made under the Federal Energy Management Program and the Better Building Challenge to recognize specific agency achievements in accelerating the adoption of smart building technologies.

(c) **SURVEY OF PRIVATE SECTOR SMART BUILDINGS.**—

(1) **SURVEY.**—The Secretary shall conduct a survey of privately owned smart buildings throughout the United States, including commercial buildings, laboratory facilities, hospitals, multifamily residential buildings, and buildings owned by nonprofit organizations and institutions of higher education.

(2) **SELECTION.**—From among the smart buildings surveyed under paragraph (1), the Secretary shall select not fewer than 1 building each from an appropriate range of building sizes, types, and geographic locations.

(3) **EVALUATION.**—Using the guidelines of the Federal Energy Management Program relating to whole-building evaluation, measurement, and verification, the Secretary

shall evaluate the costs and benefits of the buildings selected under paragraph (1), including an identification of—

(A) which advanced building technologies and systems—

- (i) are most cost-effective; and
- (ii) show the most promise for—
  - (I) increasing building energy savings;
  - (II) increasing service performance to building occupants;
  - (III) reducing environmental impacts; and
  - (IV) establishing cybersecurity; and
- (B) any other information the Secretary determines to be appropriate.

(d) LEVERAGING EXISTING PROGRAMS.—

(1) BETTER BUILDING CHALLENGE.—As part of the Better Building Challenge of the Department, the Secretary, in consultation with major private sector property owners, shall develop smart building accelerators to demonstrate innovative policies and approaches that will accelerate the transition to smart buildings in the public, institutional, and commercial buildings sectors.

(2) RESEARCH AND DEVELOPMENT.—

(A) IN GENERAL.—The Secretary shall conduct research and development to address key barriers to the integration of advanced building technologies and to accelerate the transition to smart buildings.

(B) INCLUSION.—The research and development conducted under subparagraph (A) shall include research and development on—

(i) achieving whole-building, systems-level efficiency through smart system and component integration;

(ii) improving physical components, such as sensors and controls, to be adaptive, anticipatory, and networked;

(iii) reducing the cost of key components to accelerate the adoption of smart building technologies;

(iv) data management, including the capture and analysis of data and the interoperability of the energy systems;

(v) protecting against cybersecurity threats and addressing security vulnerabilities of building systems or equipment;

(vi) business models, including how business models may limit the adoption of smart building technologies and how to support transactive energy;

(vii) integration and application of combined heat and power systems and energy storage for resiliency;

(viii) characterization of buildings and components;

(ix) consumer and utility protections;

(x) continuous management, including the challenges of managing multiple energy systems and optimizing systems for disparate stakeholders; and

(xi) other areas of research and development, as determined appropriate by the Secretary.

(e) REPORT.—Not later than 2 years after the date of enactment of this Act, and every 2 years thereafter until a total of 3 reports have been made, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce and the Committee on Science, Space, and Technology of the House of Representatives a report on—

(1) the establishment of the Federal Smart Building Program and the evaluation of Federal smart buildings under subsection (b);

(2) the survey and evaluation of private sector smart buildings under subsection (c); and

(3) any recommendations of the Secretary to further accelerate the transition to smart buildings.

## CHAPTER 2—WORKER TRAINING AND CAPACITY BUILDING

### SEC. 1011. BUILDING TRAINING AND ASSESSMENT CENTERS.

(a) IN GENERAL.—The Secretary shall provide grants to institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) and Tribal Colleges or Universities (as defined in section 316(b) of that Act (20 U.S.C. 1059c(b))) to establish building training and assessment centers—

(1) to identify opportunities for optimizing energy efficiency and environmental performance in buildings;

(2) to promote the application of emerging concepts and technologies in commercial and institutional buildings;

(3) to train engineers, architects, building scientists, building energy permitting and enforcement officials, and building technicians in energy-efficient design and operation;

(4) to assist institutions of higher education and Tribal Colleges or Universities in training building technicians;

(5) to promote research and development for the use of alternative energy sources and distributed generation to supply heat and power for buildings, particularly energy-intensive buildings; and

(6) to coordinate with and assist State-accredited technical training centers, community colleges, Tribal Colleges or Universities, and local offices of the National Institute of Food and Agriculture and ensure appropriate services are provided under this section to each region of the United States.

(b) COORDINATION AND NONDUPLICATION.—

(1) IN GENERAL.—The Secretary shall coordinate the program with the industrial research and assessment centers program and with other Federal programs to avoid duplication of effort.

(2) COLLOCATION.—To the maximum extent practicable, building, training, and assessment centers established under this section shall be collocated with Industrial Assessment Centers.

(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$10,000,000, to remain available until expended.

### SEC. 1012. CAREER SKILLS TRAINING.

(a) DEFINITION OF ELIGIBLE ENTITY.—In this section, the term “eligible entity” means a nonprofit partnership that—

(1) includes the equal participation of industry, including public or private employers, and labor organizations, including joint labor-management training programs;

(2) may include workforce investment boards, community-based organizations, qualified service and conservation corps, educational institutions, small businesses, cooperatives, State and local veterans agencies, and veterans service organizations; and

(3) demonstrates—

(A) experience in implementing and operating worker skills training and education programs;

(B) the ability to identify and involve in training programs carried out under this section, target populations of individuals who would benefit from training and be actively involved in activities relating to energy efficiency and renewable energy industries; and

(C) the ability to help individuals achieve economic self-sufficiency.

(b) ESTABLISHMENT.—The Secretary shall award grants to eligible entities to pay the Federal share of associated career skills training programs under which students concurrently receive classroom instruction and on-the-job training for the purpose of obtaining an industry-related certification to install energy efficient buildings technologies.

(c) FEDERAL SHARE.—The Federal share of the cost of carrying out a career skills training program described in subsection (a) shall be 50 percent.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$10,000,000, to remain available until expended.

### Subpart B—Industrial Efficiency and Competitiveness

#### SEC. 1021. PURPOSES.

The purposes of this subpart are—

(1) to establish a clear and consistent authority for industrial efficiency programs of the Department;

(2) to accelerate the deployment of technologies and practices that will increase industrial energy efficiency and improve productivity;

(3) to accelerate the development and demonstration of technologies that will assist the deployment goals of the industrial efficiency programs of the Department and increase manufacturing efficiency;

(4) to stimulate domestic economic growth and improve industrial productivity and competitiveness;

(5) to meet the future workforce needs of industry; and

(6) to strengthen partnerships between Federal and State governmental agencies and the private and academic sectors.

#### SEC. 1022. FUTURE OF INDUSTRY PROGRAM AND INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.

(a) FUTURE OF INDUSTRY PROGRAM.—Section 452 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17111) is amended—

(1) by striking the section heading and inserting the following: “**FUTURE OF INDUSTRY PROGRAM**”;

(2) in subsection (a)(2)—

(A) by redesignating subparagraph (E) as subparagraph (F); and

(B) by inserting after subparagraph (D) the following:

“(E) water and wastewater treatment facilities, including systems that treat municipal, industrial, and agricultural waste; and”;

(3) by striking subsection (e); and

(4) by redesignating subsection (f) as subsection (e).

(b) INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—Subtitle D of title IV of the Energy Independence and Security Act of 2007 (42 U.S.C. 17111 et seq.) is amended by adding at the end the following:

#### “SEC. 454. INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.

“(a) DEFINITIONS.—In this section:

“(1) ENERGY SERVICE PROVIDER.—The term ‘energy service provider’ means—

“(A) any business providing technology or services to improve the energy efficiency, water efficiency, power factor, or load management of a manufacturing site or other industrial process in an energy-intensive industry (as defined in section 452(a)); and

“(B) any utility operating under a utility energy service project.

“(2) INDUSTRIAL RESEARCH AND ASSESSMENT CENTER.—The term ‘industrial research and assessment center’ means—

“(A) an institution of higher education-based industrial research and assessment center that is funded by the Secretary under subsection (b); and

“(B) an industrial research and assessment center at a trade school, community college, or union training program that is funded by the Secretary under subsection (f).

“(b) INSTITUTION OF HIGHER EDUCATION-BASED INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—

“(1) IN GENERAL.—The Secretary shall provide funding to institution of higher education-based industrial research and assessment centers.

“(2) PURPOSE.—The purpose of each institution of higher education-based industrial research and assessment center shall be—

“(A) to identify opportunities for optimizing energy efficiency and environmental performance, including implementation of—

“(i) smart manufacturing;

“(ii) energy management systems;

“(iii) sustainable manufacturing; and

“(iv) information technology advancements for supply chain analysis, logistics, system monitoring, industrial and manufacturing processes, and other purposes;

“(B) to promote applications of emerging concepts and technologies in small- and medium-sized manufacturers (including water and wastewater treatment facilities and federally owned manufacturing facilities);

“(C) to promote research and development for the use of alternative energy sources to supply heat, power, and new feedstocks for energy-intensive industries;

“(D) to coordinate with appropriate Federal and State research offices;

“(E) to provide a clearinghouse for industrial process and energy efficiency technical assistance resources; and

“(F) to coordinate with State-accredited technical training centers and community colleges, while ensuring appropriate services to all regions of the United States.

“(c) COORDINATION.—To increase the value and capabilities of the industrial research and assessment centers, the centers shall—

“(1) coordinate with Manufacturing Extension Partnership Centers of the National Institute of Standards and Technology;

“(2) coordinate with the Federal Energy Management Program and the Building Technologies Program of the Department of Energy to provide building assessment services to manufacturers;

“(3) increase partnerships with the National Laboratories of the Department of Energy to leverage the expertise, technologies, and research and development capabilities of the National Laboratories for national industrial and manufacturing needs;

“(4) increase partnerships with energy service providers and technology providers to leverage private sector expertise and accelerate deployment of new and existing technologies and processes for energy efficiency, power factor, and load management;

“(5) identify opportunities for reducing greenhouse gas emissions and other air emissions; and

“(6) promote sustainable manufacturing practices for small- and medium-sized manufacturers.

“(d) OUTREACH.—The Secretary shall provide funding for—

“(1) outreach activities by the industrial research and assessment centers to inform small- and medium-sized manufacturers of the information, technologies, and services available; and

“(2) coordination activities by each industrial research and assessment center to leverage efforts with—

“(A) Federal and State efforts;

“(B) the efforts of utilities and energy service providers;

“(C) the efforts of regional energy efficiency organizations; and

“(D) the efforts of other industrial research and assessment centers.

“(e) CENTERS OF EXCELLENCE.—

“(1) ESTABLISHMENT.—The Secretary shall establish a Center of Excellence at not more than 5 of the highest-performing industrial research and assessment centers, as determined by the Secretary.

“(2) DUTIES.—A Center of Excellence shall coordinate with and advise the industrial research and assessment centers located in the region of the Center of Excellence, including—

“(A) by mentoring new directors and staff of the industrial research and assessment centers with respect to—

“(i) the availability of resources; and

“(ii) best practices for carrying out assessments, including through the participation of the staff of the Center of Excellence in assessments carried out by new industrial research and assessment centers;

“(B) by providing training to staff and students at the industrial research and assessment centers on new technologies, practices, and tools to expand the scope and impact of the assessments carried out by the centers;

“(C) by assisting the industrial research and assessment centers with specialized technical opportunities, including by providing a clearinghouse of available expertise and tools to assist the centers and clients of the centers in assessing and implementing those opportunities;

“(D) by identifying and coordinating with regional, State, local, and utility energy efficiency programs for the purpose of facilitating efforts by industrial research and assessment centers to connect industrial facilities receiving assessments from those centers with regional, State, local, and utility energy efficiency programs that could aid the industrial facilities in implementing any recommendations resulting from the assessments;

“(E) by facilitating coordination between the industrial research and assessment centers and other Federal programs described in paragraphs (1) through (3) of subsection (c); and

“(F) by coordinating the outreach activities of the industrial research and assessment centers under subsection (d)(1).

“(3) FUNDING.—Subject to the availability of appropriations, for each fiscal year, out of any amounts made available to carry out this section under subsection (i), the Secretary shall use not less than \$500,000 to support each Center of Excellence.

“(f) EXPANSION OF INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—

“(1) IN GENERAL.—The Secretary shall provide funding to establish additional industrial research and assessment centers at trade schools, community colleges, and union training programs.

“(2) PURPOSE.—

“(A) IN GENERAL.—Subject to subparagraph (B), to the maximum extent practicable, an industrial research and assessment center established under paragraph (1) shall have the same purpose as an institution of higher education-based industrial research center that is funded by the Secretary under subsection (b)(1).

“(B) CONSIDERATION OF CAPABILITIES.—In evaluating or establishing the purpose of an industrial research and assessment center established under paragraph (1), the Secretary shall take into consideration the varying capabilities of trade schools, community colleges, and union training programs.

“(g) WORKFORCE TRAINING.—

“(1) INTERNSHIPS.—The Secretary shall pay the Federal share of associated internship programs under which students work with or for industries, manufacturers, and energy service providers to implement the recommendations of industrial research and assessment centers.

“(2) APPRENTICESHIPS.—The Secretary shall pay the Federal share of associated apprenticeship programs under which—

“(A) students work with or for industries, manufacturers, and energy service providers

to implement the recommendations of industrial research and assessment centers; and

“(B) employees of facilities that have received an assessment from an industrial research and assessment center work with or for an industrial research and assessment center to gain knowledge on engineering practices and processes to improve productivity and energy savings.

“(3) FEDERAL SHARE.—The Federal share of the cost of carrying out internship programs described in paragraph (1) and apprenticeship programs described in paragraph (2) shall be 50 percent.

“(h) SMALL BUSINESS LOANS.—The Administrator of the Small Business Administration shall, to the maximum extent practicable, expedite consideration of applications from eligible small business concerns for loans under the Small Business Act (15 U.S.C. 631 et seq.) to implement recommendations developed by the industrial research and assessment centers.

“(i) FUNDING.—There is authorized to be appropriated to the Secretary to carry out this section \$30,000,000 for each fiscal year, to remain available until expended.”.

(c) CLERICAL AMENDMENT.—The table of contents of the Energy Independence and Security Act of 2007 (42 U.S.C. prec. 17001) is amended by adding at the end of the items relating to subtitle D of title IV the following:

“Sec. 454. Industrial research and assessment centers.”.

#### SEC. 1023. CHP TECHNICAL ASSISTANCE PARTNERSHIP PROGRAM.

(a) IN GENERAL.—Section 375 of the Energy Policy and Conservation Act (42 U.S.C. 6345) is amended to read as follows:

#### “SEC. 375. CHP TECHNICAL ASSISTANCE PARTNERSHIP PROGRAM.

“(a) RENAMING.—

“(1) IN GENERAL.—The Clean Energy Application Centers of the Department of Energy are redesignated as the CHP Technical Assistance Partnership Program (referred to in this section as the ‘Program’).

“(2) PROGRAM DESCRIPTION.—The Program shall consist of—

“(A) the 10 regional CHP Technical Assistance Partnerships in existence on the date of enactment of the American Energy Innovation Act of 2020;

“(B) any other regional CHP Technical Assistance Partnerships as the Secretary may establish; and

“(C) any supporting technical activities under the Technical Partnership Program of the Advanced Manufacturing Office of the Department of Energy.

“(3) REFERENCES.—Any reference in any law, rule, regulation, or publication to a Combined Heat and Power Application Center or a Clean Energy Application Center shall be deemed to be a reference to the Program.

“(b) CHP TECHNICAL ASSISTANCE PARTNERSHIP PROGRAM.—

“(1) IN GENERAL.—The Program shall—

“(A) operate programs to encourage deployment of combined heat and power, waste heat to power, and efficient district energy (collectively referred to in this subsection as ‘CHP’) technologies by providing education and outreach—

“(i) to building, industrial, and electric and natural gas utility professionals;

“(ii) to State and local policymakers; and

“(iii) to other individuals and organizations with an interest in efficient energy use, local or opportunity fuel use, resiliency, energy security, microgrids, and district energy; and

“(B) provide project-specific support to building and industrial professionals through economic and engineering assessments and advisory activities.

“(2) FUNDING FOR CERTAIN ACTIVITIES.—

“(A) IN GENERAL.—The Program shall make funds available to institutions of higher education, research centers, and other appropriate institutions to ensure the continued operation and effectiveness of regional CHP Technical Assistance Partnerships.

“(B) USE OF FUNDS.—Funds made available under subparagraph (A) may be used—

“(i) to research, develop, and distribute informational materials relevant to manufacturers, commercial buildings, institutional facilities, and Federal sites;

“(ii) to support the mission goals of the Department of Defense relating to CHP and microgrid technologies;

“(iii) to continuously maintain and update—

“(I) the CHP installation database;

“(II) CHP technology potential analyses;

“(III) State CHP resource websites; and

“(IV) CHP Technical Assistance Partnership websites;

“(iv) to research, develop, and conduct workshops, reports, seminars, internet programs, CHP resiliency resources, and other activities to provide education to end users, regulators, and stakeholders in a manner that leads to the deployment of CHP technologies;

“(v) to provide or coordinate onsite assessments for sites and enterprises that may consider deployment of CHP technology;

“(vi) to identify candidates for deployment of CHP technologies, hybrid renewable-CHP technologies, microgrids, and clean energy;

“(vii) to provide nonbiased engineering support to sites considering deployment of CHP technologies;

“(viii) to assist organizations developing clean energy technologies and policies in overcoming barriers to deployment; and

“(ix) to assist with field validation and performance evaluations of CHP and other clean energy technologies implemented.

“(C) DURATION.—The Program shall make funds available under subparagraph (A) for a period of 5 years.

“(C) AUTHORIZATION OF APPROPRIATIONS.—

There is authorized to be appropriated to carry out this section \$12,000,000 for each of fiscal years 2021 through 2025.”

(b) CONFORMING AMENDMENT.—Section 372(g) of the Energy Policy and Conservation Act (42 U.S.C. 6342(g)) is amended by striking “Clean Energy Applications Center operated by the Secretary of Energy” and inserting “regional CHP Technical Assistance Partnerships”.

(c) CLERICAL AMENDMENT.—The table of contents of the Energy Policy and Conservation Act (Public Law 94-163; 89 Stat. 872; 92 Stat. 3272) is amended by striking the item relating to section 375 and inserting the following:

“Sec. 375. CHP Technical Assistance Partnership Program.”.

**SEC. 1024. SUSTAINABLE MANUFACTURING INITIATIVE.**

(a) IN GENERAL.—Part E of title III of the Energy Policy and Conservation Act (42 U.S.C. 6341 et seq.) is amended by adding at the end the following:

“**SEC. 376. SUSTAINABLE MANUFACTURING INITIATIVE.**

“(a) IN GENERAL.—As part of the Office of Energy Efficiency and Renewable Energy of the Department of Energy, the Secretary, on the request of a manufacturer, shall carry out onsite technical assessments to identify opportunities for—

“(1) maximizing the energy efficiency of industrial processes and cross-cutting systems;

“(2) preventing pollution and minimizing waste;

“(3) improving efficient use of water in manufacturing processes;

“(4) conserving natural resources; and

“(5) achieving such other goals as the Secretary determines to be appropriate.

“(b) COORDINATION.—To implement any recommendations resulting from an onsite technical assessment carried out under subsection (a) and to accelerate the adoption of new and existing technologies and processes that improve energy efficiency, the Secretary shall coordinate with—

“(1) the Advanced Manufacturing Office of the Department of Energy;

“(2) the Building Technologies Office of the Department of Energy;

“(3) the Federal Energy Management Program of the Department of Energy; and

“(4) the private sector and other appropriate agencies, including the National Institute of Standards and Technology.

“(c) RESEARCH AND DEVELOPMENT PROGRAM FOR SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECHNOLOGIES AND PROCESSES.—As part of the industrial efficiency programs of the Department of Energy, the Secretary shall carry out a joint industry-government partnership program to research, develop, and demonstrate new sustainable manufacturing and industrial technologies and processes that maximize the energy efficiency of industrial plants, reduce pollution, and conserve natural resources.”.

(b) CLERICAL AMENDMENT.—The table of contents of the Energy Policy and Conservation Act (42 U.S.C. prec. 6201) is amended by adding at the end of the items relating to part E of title III the following:

“Sec. 376. Sustainable manufacturing initiative.”.

#### **SEC. 1025. CONFORMING AMENDMENTS.**

(a) Section 106 of the Energy Policy Act of 2005 (42 U.S.C. 15811) is repealed.

(b) Sections 131, 132, 133, 2103, and 2107 of the Energy Policy Act of 1992 (42 U.S.C. 6348, 6349, 6350, 13453, 13456) are repealed.

(c) Section 2101(a) of the Energy Policy Act of 1992 (42 U.S.C. 13451(a)) is amended in the third sentence by striking “sections 2102, 2103, 2104, 2105, 2106, 2107, and 2108” and inserting “sections 2102, 2104, 2105, 2106, and 2108 of this Act and section 376 of the Energy Policy and Conservation Act.”.

#### **Subpart C—Federal Agency Energy Efficiency**

#### **SEC. 1031. ENERGY AND WATER PERFORMANCE REQUIREMENTS FOR FEDERAL BUILDINGS.**

(a) IN GENERAL.—Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended—

(1) in the section heading, by inserting “AND WATER” after “ENERGY”;

(2) by striking subsection (a) and inserting the following:

“(a) ENERGY AND WATER PERFORMANCE REQUIREMENTS FOR FEDERAL BUILDINGS.—

“(1) ENERGY REQUIREMENTS.—Subject to paragraph (3), to the maximum extent life cycle cost-effective (as defined in subsection (f)(1)), each agency shall apply energy conservation measures to, and shall improve the design for the construction of, the Federal buildings of the agency (including each industrial or laboratory facility) so that the energy consumption per gross square foot of the Federal buildings of the agency in fiscal years 2021 through 2028 is reduced, as compared with the energy consumption per gross square foot of the Federal buildings of the agency in fiscal year 2018, by the percentage specified in the following table:

<b>Fiscal Year</b>	<b>Percentage Reduction</b>
2021 .....	2.5
2022 .....	5
2023 .....	7.5
2024 .....	10
2025 .....	12.5

<b>Fiscal Year</b>	<b>Percentage Reduction</b>
2026 .....	15
2027 .....	17.5
2028 .....	20.

“(2) WATER REQUIREMENTS.—Subject to paragraph (3), the head of each Federal agency shall, for each of fiscal years 2021 through 2030, improve water use efficiency and management, including stormwater management, at facilities of the agency by reducing agency potable water consumption intensity—

“(A) by reducing potable water consumption by 54 percent by fiscal year 2030, relative to the potable water consumption of the agency in fiscal year 2007, through reductions of 2 percent each fiscal year (as measured in gallons per gross square foot);

“(B) by reducing the industrial, landscaping, and agricultural water consumption of the agency, as compared to a baseline of that consumption by the agency in fiscal year 2010, through reductions of 2 percent each fiscal year (as measured in gallons); and

“(C) by installing appropriate infrastructure features on federally owned property to improve stormwater and wastewater management.

“(3) ENERGY AND WATER INTENSIVE BUILDING EXCLUSION.—

“(A) IN GENERAL.—An agency may exclude from the requirements of paragraphs (1) and (2) any building (including the associated energy consumption and gross square footage of the building) in which energy and water intensive activities are carried out.

“(B) REPORTS.—Each agency shall identify and include in each report under section 548(a) each building designated by the agency for exclusion under subparagraph (A) during the period covered by the report.

“(4) RECOMMENDATIONS.—Not later than December 31, 2026, the Secretary shall—

“(A) review the results of the implementation of the energy and water performance requirements established under paragraph (1);

“(B) submit to Congress recommendations concerning energy performance requirements for fiscal years 2029 through 2038; and

“(C) submit to Congress recommendations concerning water performance requirements for fiscal years 2031 through 2040.”;

(3) in subsection (b)—

(A) in the subsection heading, by inserting “AND WATER” after “ENERGY”; and

(B) by striking paragraphs (1) and (2) and inserting the following:

“(1) IN GENERAL.—Each agency shall—

“(A) not later than October 1, 2022, to the maximum extent practicable, begin installing in Federal buildings owned by the United States all energy and water conservation measures determined by the Secretary to be life cycle cost-effective (as defined in subsection (f)(1)); and

“(B) complete the installation described in subparagraph (A) as soon as practicable after the date referred to in that subparagraph.

“(2) EXPLANATION OF NONCOMPLIANCE.—

“(A) IN GENERAL.—If an agency fails to comply with paragraph (1), the agency shall submit to the Secretary, using guidelines developed by the Secretary, an explanation of the reasons for the failure.

“(B) REPORT TO CONGRESS.—Not later than October 1, 2021, and every 2 years thereafter, the Secretary shall submit to Congress a report that describes any noncompliance by an agency with the requirements of paragraph (1).”;

(4) in subsection (c)(1)—

(A) in subparagraph (A)—

(i) in the matter preceding clause (i), by striking “An agency” and inserting “The head of each agency”; and

(ii) by inserting “or water” after “energy” each place it appears; and

(B) in subparagraph (B)(i), by inserting “or water” after “energy”;

(5) in subsection (d)(2), by inserting “and water” after “energy”;

(6) in subsection (e)—

(A) in the subsection heading, by inserting “and Water” after “Energy”;

(B) in paragraph (1)—

(i) in the first sentence—

(I) by striking “October 1, 2012” and inserting “October 1, 2022”;

(II) by inserting “and water” after “energy”; and

(III) by inserting “and water” after “electricity”;

(ii) in the second sentence, by inserting “and water” after “electricity”; and

(iii) in the fourth sentence, by inserting “and water” after “energy”;

(C) in paragraph (2)—

(i) in subparagraph (A)—

(I) by striking “and” before “Federal”; and

(II) by inserting “and any other person the Secretary deems necessary,” before “shall”;

(ii) in subparagraph (B)—

(I) in clause (i)(II), by inserting “and water” after “energy” each place it appears;

(II) in clause (ii), by inserting “and water” after “energy”; and

(III) in clause (iv), by inserting “and water” after “energy”; and

(iii) by adding at the end the following:

“(C) UPDATE.—Not later than 180 days after the date of enactment of this subparagraph, the Secretary shall update the guidelines established under subparagraph (A) to take into account water efficiency requirements under this section.”;

(D) in paragraph (3), in the matter preceding subparagraph (A), by striking “established under paragraph (2)” and inserting “updated under paragraph (2)(C)”;

(E) in paragraph (4)—

(i) in subparagraph (A)—

(I) by striking “this paragraph” and inserting “the American Energy Innovation Act of 2020”; and

(II) by inserting “and water” before “use in”; and

(ii) in subparagraph (B)(ii), in the matter preceding clause (I), by inserting “and water” after “energy”; and

(7) in subsection (f)—

(A) in paragraph (1)—

(i) by redesignating subparagraphs (E), (F), and (G) as subparagraphs (F), (G), and (H), respectively; and

(ii) by inserting after subparagraph (D) the following:

“(E) ONGOING COMMISSIONING.—The term ‘ongoing commissioning’ means an ongoing process of commissioning using monitored data, the primary goal of which is to ensure continuous optimum performance of a facility, in accordance with design or operating needs, over the useful life of the facility, while meeting facility occupancy requirements.”;

(B) in paragraph (2)—

(i) in subparagraph (A), by inserting “and water” before “use”;

(ii) in subparagraph (B)—

(I) by striking “energy” before “efficiency”; and

(II) by inserting “or water” before “use”; and

(iii) by adding at the end the following:

“(C) ENERGY MANAGEMENT SYSTEM.—An energy manager designated for a facility under subparagraph (A) shall take into consideration—

“(i) the use of a system to manage energy and water use at the facility; and

“(ii) the applicability of the certification of the facility in accordance with the International Organization for Standardization standard numbered 50001 and entitled ‘Energy Management Systems’.”;

(C) by striking paragraphs (3) and (4) and inserting the following:

“(3) ENERGY AND WATER EVALUATIONS AND COMMISSIONING.—

“(A) EVALUATIONS.—Except as provided in subparagraph (B), not later than the date that is 180 days after the date of enactment of the American Energy Innovation Act of 2020, and annually thereafter, each energy manager shall complete, for the preceding calendar year, a comprehensive energy and water evaluation and recommissioning or retrocommissioning for approximately 25 percent of the facilities of the applicable agency that meet the criteria under paragraph (2)(B) in a manner that ensures that an evaluation of each facility is completed not less frequently than once every 4 years.

“(B) EXCEPTIONS.—An evaluation and recommissioning or retrocommissioning shall not be required under subparagraph (A) with respect to a facility that, as of the date on which the evaluation and recommissioning or retrocommissioning would occur—

“(i) has had a comprehensive energy and water evaluation during the preceding 8-year period;

“(ii)(I) has been commissioned, recommissioned, or retrocommissioned during the preceding 10-year period; or

“(II) is under ongoing commissioning, recommissioning, or retrocommissioning;

“(iii) has not had a major change in function or use since the previous evaluation and recommissioning or retrocommissioning;

“(iv) has been benchmarked with public disclosure under paragraph (8) during the preceding calendar year; and

“(v)(I) based on the benchmarking described in clause (iv), has achieved at a facility level the most recent cumulative energy savings target under subsection (a) compared to the earlier of—

“(aa) the date of the most recent evaluation; or

“(bb) the date—

“(AA) of the most recent commissioning, recommissioning, or retrocommissioning; or

“(BB) on which ongoing commissioning began; or

“(II) has a long-term contract in place guaranteeing energy savings at least as great as the energy savings target under subsection (I).

“(4) IMPLEMENTATION OF IDENTIFIED ENERGY AND WATER EFFICIENCY MEASURES.—

“(A) IN GENERAL.—Not later than 2 years after the date of completion of each evaluation under paragraph (3), each energy manager shall implement any energy- or water-saving measure that—

“(i) the Federal agency identified in the evaluation; and

“(ii) is life cycle cost-effective, as determined by evaluating an individual measure or a bundle of measures with varying paybacks.

“(B) PERFORMANCE CONTRACTING.—Each Federal agency shall use performance contracting to address at least 50 percent of the measures identified under subparagraph (A)(i).”;

(D) in paragraph (7)(B)(ii)(II), by inserting “and water” after “energy”; and

(E) in paragraph (9)(A), in the matter preceding clause (i), by inserting “and water” after “energy”.

(b) CONFORMING AMENDMENT.—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206) is amended by striking the item relating to section 543 and inserting the following:

“Sec. 543. Energy and water management requirements.”.

## SEC. 1032. FEDERAL ENERGY MANAGEMENT PROGRAM.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended by adding at the end the following:

“(h) FEDERAL ENERGY MANAGEMENT PROGRAM.—

“(1) IN GENERAL.—The Secretary shall carry out a program, to be known as the ‘Federal Energy Management Program’ (referred to in this subsection as the ‘Program’), to facilitate the implementation by the Federal Government of cost-effective energy and water management and energy-related investment practices—

“(A) to coordinate and strengthen Federal energy and water resilience; and

“(B) to promote environmental stewardship.

“(2) PROGRAM ACTIVITIES.—

“(A) STRATEGIC PLANNING AND TECHNICAL ASSISTANCE.—Under the Program, the Federal Director appointed under paragraph (3)(A) (referred to in this subsection as the ‘Federal Director’) shall—

“(i) provide technical assistance and project implementation support and guidance to Federal agencies to identify, implement, procure, and track energy and water conservation measures required under this Act and under other provisions of law (including regulations);

“(ii) in coordination with the Administrator of the General Services Administration, establish appropriate procedures, methods, and best practices for use by Federal agencies to select, monitor, and terminate contracts entered into under section 546 with utilities;

“(iii) in coordination with the Federal Acquisition Regulatory Council, establish appropriate procedures, methods, and best practices for use by Federal agencies to select, monitor, and terminate contracts entered into under section 801 with energy service contractors and utilities;

“(iv) establish and maintain internet-based information resources and project tracking systems and tools for energy and water management;

“(v) coordinate comprehensive and strategic approaches to energy and water resilience planning for Federal agencies; and

“(vi) establish a recognition program for Federal achievement in energy and water management, energy-related investment practices, environmental stewardship, and other relevant areas, through events such as individual recognition award ceremonies and public announcements.

“(B) ENERGY AND WATER MANAGEMENT AND REPORTING.—Under the Program, the Federal Director shall—

“(i) track and report on the progress of Federal agencies in meeting the requirements of the agency under this section;

“(ii) make publicly available annual Federal agency performance data required under—

“(I) this section and sections 544 through 548; and

“(II) section 203 of the Energy Policy Act of 2005 (42 U.S.C. 15852);

“(iii)(I) collect energy and water use and consumption data from each Federal agency; and

“(II) based on that data, submit to each Federal agency a report that will facilitate the energy and water management, energy-related investment practices, and environmental stewardship of the agency in support of Federal goals under this Act and under other provisions of law (including regulations);

“(iv)(I) establish new Federal building energy efficiency standards; and



“(II) in consultation with the Administrator of the General Services Administration, acting through the head of the Office of High-Performance Green Buildings, establish and implement Federal building sustainable design principles for Federal facilities;

“(v) manage the implementation of Federal building energy efficiency standards established under section 305 of the Energy Conservation and Production Act (42 U.S.C. 6834); and

“(vi) designate products that meet the highest energy conservation standards for categories not covered under the Energy Star program established under section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a).

“(C) FEDERAL POLICY COORDINATION.—Under the Program, the Federal Director shall—

“(i) develop and implement accredited training consistent with existing Federal programs and activities—

“(I) relating to energy and water use, management, and resilience in Federal buildings, energy-related investment practices, and environmental stewardship; and

“(II) that includes in-person training, internet-based programs, and national in-person training events;

“(ii) coordinate and facilitate energy and water management, energy-related investment practices, and environmental stewardship through the Interagency Energy Management Task Force established under section 547; and

“(iii) report on the implementation of the priorities of the President, including Executive orders, relating to energy and water use in Federal buildings, in coordination with—

“(I) the Office of Management and Budget; and

“(II) the Council on Environmental Quality; and

“(III) any other entity, as considered necessary by the Federal Director.

“(D) FACILITY AND FLEET OPTIMIZATION.—Under the Program, the Federal Director shall develop guidance, supply assistance to, and track the progress of Federal agencies—

“(i) in conducting portfolio-wide facility energy and water resilience planning and project integration;

“(ii) in building new construction and major renovations to meet the sustainable design and energy and water performance standards required under this section;

“(iii) in developing guidelines for—

“(I) building commissioning; and

“(II) facility operations and maintenance; and

“(iv) in coordination with the Administrator of the General Services Administration, in meeting statutory and agency goals for Federal fleet vehicles.

“(3) FEDERAL DIRECTOR.—

“(A) APPOINTMENT.—The Secretary shall appoint an individual to serve as Federal Director of the Program, which shall be a career position in the Senior Executive service, to manage the Program and carry out the activities of the Program described in paragraph (2).

“(B) DUTIES.—The Federal Director shall—

“(i) oversee, manage, and administer the Program;

“(ii) provide leadership in energy and water management, energy-related investment practices, and environmental stewardship through coordination with Federal agencies and other appropriate entities; and

“(iii) establish a management council to advise the Federal Director that shall—

“(I) convene not less frequently than once every quarter; and

“(II) consist of representatives from—

“(aa) the Council on Environmental Quality;

“(bb) the Office of Management and Budget; and

“(cc) the Office of Federal High-Performance Green Buildings in the General Services Administration.

“(4) SAVINGS CLAUSE.—Nothing in this subsection impedes, supersedes, or alters the authority of the Secretary to carry out the remainder of this section or section 305 of the Energy Conservation and Production Act (42 U.S.C. 6834).

“(5) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out this subsection \$36,000,000 for each of fiscal years 2021 through 2031.”

#### SEC. 1033. USE OF ENERGY AND WATER EFFICIENCY MEASURES IN FEDERAL BUILDINGS.

(a) REPORTS.—Section 548(b) of the National Energy Conservation Policy Act (42 U.S.C. 8258(b)) is amended—

(1) in paragraph (3), by striking “and” at the end;

(2) in paragraph (4), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(5)(A) the status of the energy savings performance contracts and utility energy service contracts of each agency, to the extent that the information is not duplicative of information provided to the Secretary under a separate authority;

“(B) the quantity and investment value of the contracts for the previous year;

“(C) the guaranteed energy savings, or for contracts without a guarantee, the estimated energy savings, for the previous year, as compared to the measured energy savings for the previous year;

“(D) a forecast of the estimated quantity and investment value of contracts anticipated in the following year for each agency; and

“(E)(i) a comparison of the information described in subparagraph (B) and the forecast described in subparagraph (D) in the report of the previous year; and

“(ii) if applicable, the reasons for any differences in the data compared under clause (i).”

(b) DEFINITION OF ENERGY CONSERVATION MEASURES.—Section 551(4) of the National Energy Conservation Policy Act (42 U.S.C. 8259(4)) is amended by striking “or retrofit activities” and inserting “retrofit activities, or energy consuming devices and required support structures”.

(c) AUTHORITY TO ENTER INTO CONTRACTS.—Section 801(a)(2)(F) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)(F)) is amended—

(1) in clause (i), by striking “or” at the end;

(2) in clause (ii), by striking the period at the end and inserting “; or”; and

(3) by adding at the end the following:

“(iii) limit the recognition of operation and maintenance savings associated with systems modernized or replaced with the implementation of energy conservation measures, water conservation measures, or any combination of energy conservation measures and water conservation measures.”

(d) MISCELLANEOUS AUTHORITY; EXCLUDED CONTRACTS.—Section 801(a)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)) is amended by adding at the end the following:

“(H) MISCELLANEOUS AUTHORITY.—Notwithstanding subtitle I of title 40, United States Code, a Federal agency may accept, retain, sell, or transfer, and apply the proceeds of the sale or transfer of, any energy and water incentive, rebate, grid services revenue, or credit (including a renewable energy certificate) to fund a contract under this title.

“(I) EXCLUDED CONTRACTS.—A contract entered into under this title may not be for work performed—

“(i) at a Federal hydroelectric facility that provides power marketed by a Power Marketing Administration; or

“(ii) at a hydroelectric facility owned and operated by the Tennessee Valley Authority established under the Tennessee Valley Authority Act of 1933 (16 U.S.C. 831 et seq.).”

(e) PAYMENT OF COSTS.—Section 802 of the National Energy Conservation Policy Act (42 U.S.C. 8287a) is amended by striking “(and related operation and maintenance expenses)” and inserting “, including related operations and maintenance expenses”.

(f) DEFINITION OF ENERGY SAVINGS.—Section 804(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(2)) is amended—

(1) in subparagraph (A), by striking “federally owned building or buildings or other federally owned facilities” and inserting “Federal building (as defined in section 551)” each place it appears;

(2) in subparagraph (C), by striking “; and” and inserting a semicolon;

(3) in subparagraph (D), by striking the period at the end and inserting a semicolon; and

(4) by adding at the end the following:

“(E) the use, sale, or transfer of any energy and water incentive, rebate, grid services revenue, or credit (including a renewable energy certificate); and

“(F) any revenue generated from a reduction in energy or water use, more efficient waste recycling, or additional energy generated from more efficient equipment.”

#### SEC. 1034. FEDERAL BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS; CERTIFICATION SYSTEM AND LEVEL FOR GREEN BUILDINGS.

(a) DEFINITIONS.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended—

(1) in each of paragraphs (1) through (16), by inserting a paragraph heading, the text of which is comprised of the term defined in that paragraph;

(2) by redesignating paragraphs (2) through (16) as paragraphs (3), (4), (6), (7), (8), (10), (12), (13), (14), (15), (16), (9), (17), (5), and (2), respectively, and moving the paragraphs so as to appear in numerical order; and

(3) by inserting after paragraph (10) (as so redesignated) the following:

“(11) MAJOR RENOVATION.—The term ‘major renovation’ means a modification of the energy systems of a building that is sufficiently extensive to ensure that the entire building can achieve compliance with applicable energy standards for new buildings, as established by the Secretary.”

(b) FEDERAL BUILDING EFFICIENCY STANDARDS.—Section 305 of the Energy Conservation and Production Act (42 U.S.C. 6834) is amended—

(1) in subsection (a)—

(A) in paragraph (2)(A), by striking “the 2004 International Energy Conservation Code (in the case of residential buildings) or ASHRAE Standard 90.1-2004 (in the case of commercial buildings)” and inserting “the most recently published edition of the International Energy Conservation Code (in the case of residential buildings) or ASHRAE Standard 90.1 (in the case of commercial buildings) on the date of enactment of the American Energy Innovation Act of 2020”; and

(B) in paragraph (3)—

(i) by striking “(3)(A) Not later than” and all that follows through subparagraph (B) and inserting the following:

“(3) REVISED FEDERAL BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS; CERTIFICATION FOR GREEN BUILDINGS.—

“(A) REVISED FEDERAL BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS.—

“(i) IN GENERAL.—Not later than 1 year after the date of enactment of the American

Energy Innovation Act of 2020, the Secretary shall establish, by regulation, revised Federal building energy efficiency performance standards that require that—

“(I) subject to clause (ii), new Federal buildings and Federal buildings with major renovations—

“(aa) meet or exceed the most recently published version of the International Energy Conservation Code (in the case of residential buildings) or ASHRAE Standard 90.1 (in the case of commercial buildings) as of the date of enactment of the American Energy Innovation Act of 2020; and

“(bb) meet or exceed the energy provisions of the State and local building codes applicable to the building if the codes are more stringent than the most recently published version of the International Energy Conservation Code or ASHRAE Standard 90.1 as of the date of enactment of the American Energy Innovation Act of 2020, as applicable;

“(II) unless demonstrated not to be life cycle cost-effective for new Federal buildings and Federal buildings with major renovations—

“(aa) the buildings shall be designed to achieve energy consumption levels that are not less than 30 percent below the levels established in the most recently published version of the International Energy Conservation Code or the ASHRAE Standard, as of the date of enactment of the American Energy Innovation Act of 2020, as appropriate, unless the Secretary determines, pursuant to subparagraph (B), that a subsequent version of such a standard or code shall apply; and

“(bb) sustainable design principles are applied to the location, siting, design, and construction of all new Federal buildings and replacement Federal buildings;

“(III) if water is used to achieve energy efficiency, water conservation technologies shall be applied to the extent that the technologies are life-cycle cost effective; and

“(IV) if life-cycle cost effective, as compared to other reasonably available technologies, not less than 30 percent of the hot water demand for each new Federal building or Federal building undergoing a major renovation be met through the installation and use of solar hot water heaters.

“(ii) EXCEPTION.—Clause (i)(I) shall not apply to the unaltered portions of Federal buildings and systems that have undergone major renovations.

“(B) UPDATES.—Not later than 1 year after the date of approval of each subsequent revision of the ASHRAE Standard or the International Energy Conservation Code, as appropriate, the Secretary shall determine whether the revised standards established under subclauses (I) and (II) of subparagraph (A)(i) should be updated to reflect the revisions, based on the energy savings and life cycle cost-effectiveness of the revisions.”;

(ii) in subparagraph (C)—

(I) by striking “(C) In the budget request” and inserting the following:

“(C) BUDGET REQUEST.—In the budget request”; and

(II) by indenting clauses (i) and (ii) appropriately; and

(iii) by striking subparagraph (D) and inserting the following:

“(D) CERTIFICATION FOR GREEN BUILDINGS.—

“(i) SUSTAINABLE DESIGN PRINCIPLES.—Sustainable design principles shall be applied to the siting, design, and construction of buildings covered by this subparagraph.

“(ii) SELECTION OF CERTIFICATION SYSTEMS.—The Secretary, after reviewing the findings of the Federal Director under section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)), in consultation with the Administrator of General Services, and in consultation with the

Secretary of Defense relating to those facilities under the custody and control of the Department of Defense, shall determine those certification systems for green commercial and residential buildings that the Secretary determines to be the most likely to encourage a comprehensive and environmentally sound approach to certification of green buildings.

“(iii) BASIS FOR SELECTION.—The determination of the certification systems under clause (i) shall be based on ongoing review of the findings of the Federal Director under section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)) and the criteria described in clause (v).

“(iv) ADMINISTRATION.—In determining certification systems under this subparagraph, the Secretary shall—

“(I) make a separate determination for all or part of each system; and

“(II) confirm that the criteria used to support the selection of building products, materials, brands, and technologies—

“(aa) are based on relevant technical data;

“(bb) use and reward evaluation of health, safety, and environmental risks and impacts across the lifecycle of the building product, material, brand, or technology, including methodologies generally accepted by the applicable scientific disciplines;

“(cc) as practicable, give preference to performance standards instead of prescriptive measures; and

“(dd) reward continual improvements in the lifecycle management of health, safety, and environmental risks and impacts.

“(v) CONSIDERATIONS.—In determining the green building certification systems under this subparagraph, the Secretary shall take into consideration—

“(I) the ability and availability of assessors and auditors to independently verify the criteria and measurement of metrics at the scale necessary to implement this subparagraph;

“(II) the ability of the applicable certification organization to collect and reflect public comment;

“(III) the ability of the standard to be developed and revised through a consensus-based process;

“(IV) an evaluation of the robustness of the criteria for a high-performance green building, which shall give credit for promoting—

“(aa) efficient and sustainable use of water, energy, and other natural resources;

“(bb) use of renewable energy sources;

“(cc) improved indoor environmental quality through enhanced indoor air quality, thermal comfort, acoustics, day lighting, pollutant source control, and use of low-emission materials and building system controls;

“(dd)(AA) the sourcing of grown, harvested, or mined materials; and

“(BB) certifications of responsible sourcing, such as certifications provided by the Forest Stewardship Council, the Sustainable Forestry Initiative, the American Tree Farm System, or the Programme for the Endorsement of Forest Certification; and

“(ee) such other criteria as the Secretary determines to be appropriate; and

“(V) national recognition within the building industry.

“(vi) REVIEW.—The Secretary, in consultation with the Administrator of General Services and the Secretary of Defense, shall conduct an ongoing review to evaluate and compare private sector green building certification systems, taking into account—

“(I) the criteria described in clause (v); and

“(II) the identification made by the Federal Director under section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)).

“(vii) EXCLUSIONS.—

“(I) IN GENERAL.—Subject to subclause (II), if a certification system fails to meet the review requirements of clause (v), the Secretary shall—

“(aa) identify the portions of the system, whether prerequisites, credits, points, or otherwise, that meet the review criteria of clause (v);

“(bb) determine the portions of the system that are suitable for use; and

“(cc) exclude all other portions of the system from identification and use.

“(II) ENTIRE SYSTEMS.—The Secretary shall exclude an entire system from use if an exclusion under subclause (I)—

“(aa) impedes the integrated use of the system;

“(bb) creates disparate review criteria or unequal point access for competing materials; or

“(cc) increases agency costs of the use.

“(viii) INTERNAL CERTIFICATION PROCESSES.—The Secretary may by rule allow Federal agencies to develop internal certification processes, using certified professionals, in lieu of certification by certification entities identified under clause (ii).

“(ix) PRIVATIZED MILITARY HOUSING.—With respect to privatized military housing, the Secretary of Defense, after consultation with the Secretary may, through rulemaking, develop alternative certification systems and levels than the systems and levels identified under clause (i) that achieve an equivalent result in terms of energy savings, sustainable design, and green building performance.

“(x) WATER CONSERVATION TECHNOLOGIES.—In addition to any use of water conservation technologies otherwise required by this section, water conservation technologies shall be applied to the extent that the technologies are life-cycle cost-effective.

“(xi) EFFECTIVE DATE.—

“(I) DETERMINATIONS MADE AFTER DECEMBER 31, 2020.—This subparagraph shall apply to any determination made by a Federal agency after December 31, 2020.

“(II) DETERMINATIONS MADE ON OR BEFORE DECEMBER 31, 2020.—This subparagraph (as in effect on the day before the date of enactment of the American Energy Innovation Act of 2020) shall apply to any use of a certification system for green commercial and residential buildings by a Federal agency on or before December 31, 2020.”; and

(2) by striking subsections (c) and (d) and inserting the following:

“(c) PERIODIC REVIEW.—The Secretary shall—

“(1) once every 5 years, review the Federal building energy standards established under this section; and

“(2) on completion of a review under paragraph (1), if the Secretary determines that significant energy savings would result, upgrade the standards to include all new energy efficiency and renewable energy measures that are technologically feasible and economically justified.”.

(c) FEDERAL COMPLIANCE.—Section 306 of the Energy Conservation and Production Act (42 U.S.C. 6835) is amended—

(1) in subsection (a)—

(A) in paragraph (1)—

(i) by striking “(1) The head” and inserting the following:

“(1) IN GENERAL.—The head”; and

(ii) by striking “assure that new Federal buildings” and inserting “ensure that new Federal buildings and Federal buildings with major renovations”; and

(B) in paragraph (2)—

(i) by striking the second sentence and inserting the following:

“(B) PROCEDURES.—The Architect of the Capitol shall adopt procedures necessary to

ensure that the buildings referred to in subparagraph (A) meet or exceed the standards described in that subparagraph.”; and

(ii) in the first sentence—

(I) by inserting “and Federal buildings with major renovations” after “new buildings”; and

(II) by striking “(2) The Federal” and inserting the following:

“(2) APPLICABILITY.—

“(A) IN GENERAL.—The Federal”; and

(2) in subsection (b)—

(A) by striking the subsection heading and inserting “EXPENDITURES”; and

(B) by striking “new Federal building” and all that follows through the period at the end and inserting “new Federal building or a Federal building with major renovations.”.

#### SEC. 1035. ENERGY-EFFICIENT AND ENERGY-SAVING INFORMATION TECHNOLOGIES.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) (as amended by section 1032) is amended by adding at the end the following:

“(1) FEDERAL IMPLEMENTATION STRATEGY FOR ENERGY-EFFICIENT AND ENERGY-SAVING INFORMATION TECHNOLOGIES.—

“(1) DEFINITIONS.—In this subsection:

“(A) DIRECTOR.—The term ‘Director’ means the Director of the Office of Management and Budget.

“(B) INFORMATION TECHNOLOGY.—The term ‘information technology’ has the meaning given that term in section 11101 of title 40, United States Code.

“(2) DEVELOPMENT OF IMPLEMENTATION STRATEGY.—Not later than 1 year after the date of enactment of the American Energy Innovation Act of 2020, each Federal agency shall coordinate with the Director, the Secretary, and the Administrator of the Environmental Protection Agency to develop an implementation strategy (including best practices and measurement and verification techniques) for the maintenance, purchase, and use by the Federal agency of energy-efficient and energy-saving information technologies at or for facilities owned and operated by the Federal agency, taking into consideration the performance goals established under paragraph (4).

“(3) ADMINISTRATION.—In developing an implementation strategy under paragraph (2), each Federal agency shall consider—

“(A) advanced metering infrastructure;

“(B) energy efficient data center strategies and methods of increasing asset and infrastructure utilization;

“(C) advanced power management tools;

“(D) building information modeling, including building energy management;

“(E) secure telework and travel substitution tools; and

“(F) mechanisms to ensure that the agency realizes the energy cost savings of increased efficiency and utilization.

“(4) PERFORMANCE GOALS.—

“(A) IN GENERAL.—Not later than 180 days after the date of enactment of the American Energy Innovation Act of 2020, the Director, in consultation with the Secretary, shall establish performance goals for evaluating the efforts of Federal agencies in improving the maintenance, purchase, and use of energy-efficient and energy-saving information technology at or for facilities owned and operated by the Federal agencies.

“(B) BEST PRACTICES.—The Chief Information Officers Council established under section 3603 of title 44, United States Code, shall recommend best practices for the attainment of the performance goals established under subparagraph (A), which shall include, to the extent applicable by law, consideration by a Federal agency of the use of—

“(i) energy savings performance contracting; and

“(ii) utility energy services contracting.

“(5) REPORTS.—

“(A) AGENCY REPORTS.—Each Federal agency shall include in the report of the agency under section 527 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17143) a description of the efforts and results of the agency under this subsection.

“(B) OMB GOVERNMENT EFFICIENCY REPORTS AND SCORECARDS.—Effective beginning not later than October 1, 2022, the Director shall include in the annual report and scorecard of the Director required under section 528 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17144) a description of the efforts and results of Federal agencies under this subsection.

“(C) USE OF EXISTING REPORTING STRUCTURES.—The Director may require Federal agencies to submit any information required to be submitted under this subsection through reporting structures in use as of the date of enactment of the American Energy Innovation Act of 2020.”.

#### SEC. 1036. HIGH-PERFORMANCE GREEN FEDERAL BUILDINGS.

Section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)) is amended—

(1) in the subsection heading, by striking “SYSTEM” and inserting “SYSTEMS”; and

(2) by striking paragraph (1) and inserting the following:

“(1) IN GENERAL.—Based on an ongoing review, the Federal Director shall identify and shall provide to the Secretary pursuant to section 305(a)(3)(D) of the Energy Conservation and Production Act (42 U.S.C. 6834(a)(3)(D)) a list of those certification systems that the Director identifies as the most likely to encourage a comprehensive and environmentally sound approach to certification of green buildings.”; and

(3) in paragraph (2)—

(A) in the matter preceding subparagraph (A), by striking “system” and inserting “systems”;

(B) by striking subparagraph (A) and inserting the following:

“(A) an ongoing review provided to the Secretary pursuant to section 305(a)(3)(D) of the Energy Conservation and Production Act (42 U.S.C. 6834(a)(3)(D)), which shall—

“(i) be carried out by the Federal Director to compare and evaluate standards; and

“(ii) allow any developer or administrator of a rating system or certification system to be included in the review.”;

(C) in subparagraph (E)(v), by striking “and” after the semicolon at the end;

(D) in subparagraph (F), by striking the period at the end and inserting a semicolon; and

(E) by adding at the end the following:

“(G) a finding that, for all credits addressing the sourcing of grown, harvested, or mined materials, the system rewards the use of products that have obtained certifications of responsible sourcing, such as certifications provided by the Sustainable Forestry Initiative, the Forest Stewardship Council, the American Tree Farm System, or the Programme for the Endorsement of Forest Certification; and

“(H) a finding that the system incorporates life-cycle assessment as a credit pathway.”.

#### SEC. 1037. ENERGY EFFICIENT DATA CENTERS.

Section 453 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17112) is amended—

(1) in subsection (b)—

(A) in paragraph (2)(D)(iv), by striking “determined by the organization” and inserting “proposed by the stakeholders”; and

(B) by striking paragraph (3); and

(2) by striking subsections (c) through (g) and inserting the following:

“(c) STAKEHOLDER INVOLVEMENT.—

“(1) IN GENERAL.—The Secretary and the Administrator shall carry out subsection (b) in collaboration with the information technology industry and other key stakeholders, with the goal of producing results that accurately reflect the most relevant and useful information.

“(2) CONSIDERATIONS.—In carrying out the collaboration described in paragraph (1), the Secretary and the Administrator shall pay particular attention to organizations that—

“(A) have members with expertise in energy efficiency and in the development, operation, and functionality of data centers, information technology equipment, and software, including representatives of hardware manufacturers, data center operators, and facility managers;

“(B) obtain and address input from the National Laboratories (as that term is defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)) or any institution of higher education, research institution, industry association, company, or public interest group with applicable expertise;

“(C) follow—

“(i) commonly accepted procedures for the development of specifications; and

“(ii) accredited standards development processes; or

“(D) have a mission to promote energy efficiency for data centers and information technology.

“(d) MEASUREMENTS AND SPECIFICATIONS.—

The Secretary and the Administrator shall consider and assess the adequacy of the specifications, measurements, best practices, and benchmarks described in subsection (b) for use by the Federal Energy Management Program, the Energy Star Program, and other efficiency programs of the Department of Energy or the Environmental Protection Agency.

“(e) STUDY.—

“(1) DEFINITION OF REPORT.—In this subsection, the term ‘report’ means the report of the Lawrence Berkeley National Laboratory entitled ‘United States Data Center Energy Usage Report’ and dated June 2016, which was prepared as an update to the ‘Report to Congress on Server and Data Center Energy Efficiency’, published on August 2, 2007, pursuant to section 1 of Public Law 109–431 (120 Stat. 2920).

“(2) STUDY.—Not later than 4 years after the date of enactment of the American Energy Innovation Act of 2020, the Secretary, in collaboration with the Administrator, shall make available to the public an update to the report that provides—

“(A) a comparison and gap analysis of the estimates and projections contained in the report with new data regarding the period from 2015 through 2019;

“(B) an analysis considering the impact of information technologies, including virtualization and cloud computing, in the public and private sectors;

“(C) an evaluation of the impact of the combination of cloud platforms, mobile devices, social media, and big data on data center energy usage;

“(D) an evaluation of water usage in data centers and recommendations for reductions in that water usage; and

“(E) updated projections and recommendations for best practices through fiscal year 2025.

“(f) DATA CENTER ENERGY PRACTITIONER PROGRAM.—

“(1) IN GENERAL.—The Secretary, in collaboration with key stakeholders and the Director of the Office of Management and Budget, shall maintain a data center energy practitioner program that provides for the

certification of energy practitioners qualified to evaluate the energy usage and efficiency opportunities in federally owned and operated data centers.

“(2) EVALUATIONS.—Each Federal agency shall consider having the data centers of the agency evaluated once every 4 years by energy practitioners certified pursuant to the program, whenever practicable using certified practitioners employed by the agency.

“(g) OPEN DATA INITIATIVE.—

“(1) IN GENERAL.—The Secretary, in collaboration with key stakeholders and the Director of the Office of Management and Budget, shall establish an open data initiative relating to energy usage at federally owned and operated data centers, with the purpose of making the data available and accessible in a manner that encourages further data center innovation, optimization, and consolidation.

“(2) CONSIDERATION.—In establishing the initiative under paragraph (1), the Secretary shall consider using the online Data Center Maturity Model.

“(h) INTERNATIONAL SPECIFICATIONS AND METRICS.—The Secretary, in collaboration with key stakeholders, shall actively participate in efforts to harmonize global specifications and metrics for data center energy and water efficiency.

“(i) DATA CENTER UTILIZATION METRIC.—The Secretary, in collaboration with key stakeholders, shall facilitate in the development of an efficiency metric that measures the energy efficiency of a data center (including equipment and facilities).

“(j) PROTECTION OF PROPRIETARY INFORMATION.—The Secretary and the Administrator shall not disclose any proprietary information or trade secrets provided by any individual or company for the purposes of carrying out this section or the programs and initiatives established under this section.”.

#### Subpart D—Rebates and Certifications

#### SEC. 1041. THIRD-PARTY CERTIFICATION UNDER ENERGY STAR PROGRAM.

Section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a) is amended by adding at the end the following:

“(e) THIRD-PARTY CERTIFICATION.—

“(1) IN GENERAL.—Subject to paragraph (2), not later than 180 days after the date of enactment of this subsection, the Administrator shall revise the certification requirements for the labeling of consumer, home, and office electronic products for program partners that have complied with all requirements of the Energy Star program for a period of at least 18 months.

“(2) ADMINISTRATION.—In the case of a program partner described in paragraph (1), the new requirements under paragraph (1)—

“(A) shall not require third-party certification for a product to be listed; but

“(B) may require that test data and other product information be submitted to facilitate product listing and performance verification for a sample of products.

“(3) THIRD PARTIES.—Nothing in this subsection prevents the Administrator from using third parties in the course of the administration of the Energy Star program.

“(4) TERMINATION.—

“(A) IN GENERAL.—Subject to subparagraph (B), an exemption from third-party certification provided to a program partner under paragraph (1) shall terminate if the program partner is found to have violated program requirements with respect to at least 2 separate models during a 2-year period.

“(B) RESUMPTION.—A termination for a program partner under subparagraph (A) shall cease if the program partner complies with all Energy Star program requirements for a period of at least 3 years.”.

#### SEC. 1042. EXTENDED PRODUCT SYSTEM REBATE PROGRAM.

(a) DEFINITIONS.—In this section:

(1) ELECTRIC MOTOR.—The term “electric motor” has the meaning given the term in section 431.12 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act).

(2) ELECTRONIC CONTROL.—The term “electronic control” means—

(A) a power converter; or

(B) a combination of a power circuit and control circuit included on 1 chassis.

(3) EXTENDED PRODUCT SYSTEM.—The term “extended product system” means an electric motor and any required associated electronic control and driven load that—

(A) offers variable speed or multispeed operation;

(B) offers partial load control that reduces input energy requirements (as measured in kilowatt-hours) as compared to identified base levels set by the Secretary; and

(C)(i) has greater than 1 horsepower; and

(ii) uses an extended product system technology, as determined by the Secretary.

(4) QUALIFIED EXTENDED PRODUCT SYSTEM.—

(A) IN GENERAL.—The term “qualified extended product system” means an extended product system that—

(i) includes an electric motor and an electronic control; and

(ii) reduces the input energy (as measured in kilowatt-hours) required to operate the extended product system by not less than 5 percent, as compared to identified base levels set by the Secretary.

(B) INCLUSIONS.—The term “qualified extended product system” includes commercial or industrial machinery or equipment that—

(i)(I) did not previously make use of the extended product system prior to the redesign described in subclause (II); and

(II) incorporates an extended product system that has greater than 1 horsepower into redesigned machinery or equipment; and

(ii) was previously used prior to, and was placed back into service during, calendar year 2021 or 2022.

(b) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a program to provide rebates for expenditures made by qualified entities for the purchase or installation of a qualified extended product system.

(c) QUALIFIED ENTITIES.—

(1) ELIGIBILITY REQUIREMENTS.—A qualified entity under this section shall be—

(A) in the case of a qualified extended product system described in subsection (a)(4)(A), the purchaser of the qualified extended product that is installed; and

(B) in the case of a qualified extended product system described in subsection (a)(4)(B), the manufacturer of the commercial or industrial machinery or equipment that incorporated the extended product system into that machinery or equipment.

(2) APPLICATION.—To be eligible to receive a rebate under this section, a qualified entity shall submit to the Secretary—

(A) an application in such form, at such time, and containing such information as the Secretary may require; and

(B) a certification that includes demonstrated evidence—

(i) that the entity is a qualified entity; and

(ii)(I) in the case of a qualified entity described in paragraph (1)(A)—

(aa) that the qualified entity installed the qualified extended product system during the 2 fiscal years following the date of enactment of this Act;

(bb) that the qualified extended product system meets the requirements of subsection (a)(4)(A); and

(cc) showing the serial number, manufacturer, and model number from the nameplate of the installed motor of the qualified entity on which the qualified extended product system was installed; or

(II) in the case of a qualified entity described in paragraph (1)(B), demonstrated evidence—

(aa) that the qualified extended product system meets the requirements of subsection (a)(4)(B); and

(bb) showing the serial number, manufacturer, and model number from the nameplate of the installed motor of the qualified entity with which the extended product system is integrated.

(d) AUTHORIZED AMOUNT OF REBATE.—

(1) IN GENERAL.—The Secretary may provide to a qualified entity a rebate in an amount equal to the product obtained by multiplying—

(A) an amount equal to the sum of the nameplate rated horsepower of—

(i) the electric motor to which the qualified extended product system is attached; and

(ii) the electronic control; and

(B) \$25.

(2) MAXIMUM AGGREGATE AMOUNT.—A qualified entity shall not be entitled to aggregate rebates under this section in excess of \$25,000 per calendar year.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$5,000,000 for each of the first 2 full fiscal years following the date of enactment of this Act, to remain available until expended.

#### SEC. 1043. ENERGY EFFICIENT TRANSFORMER REBATE PROGRAM.

(a) DEFINITIONS.—In this section:

(1) QUALIFIED ENERGY EFFICIENT TRANSFORMER.—The term “qualified energy efficient transformer” means a transformer that meets or exceeds the applicable energy conservation standards described in the tables in subsection (b)(2) and paragraphs (1) and (2) of subsection (c) of section 431.196 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act).

(2) QUALIFIED ENERGY INEFFICIENT TRANSFORMER.—The term “qualified energy inefficient transformer” means a transformer with an equal number of phases and capacity to a transformer described in any of the tables in subsection (b)(2) and paragraphs (1) and (2) of subsection (c) of section 431.196 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act) that—

(A) does not meet or exceed the applicable energy conservation standards described in paragraph (1); and

(B)(i) was manufactured between January 1, 1987, and December 31, 2008, for a transformer with an equal number of phases and capacity as a transformer described in the table in subsection (b)(2) of section 431.196 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act); or

(ii) was manufactured between January 1, 1992, and December 31, 2011, for a transformer with an equal number of phases and capacity as a transformer described in the table in paragraph (1) or (2) of subsection (c) of that section (as in effect on the date of enactment of this Act).

(3) QUALIFIED ENTITY.—The term “qualified entity” means an owner of industrial or manufacturing facilities, commercial buildings, or multifamily residential buildings, a utility, or an energy service company that fulfills the requirements of subsection (d).

(b) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act, the

Secretary shall establish a program to provide rebates to qualified entities for expenditures made by the qualified entity for the replacement of a qualified energy inefficient transformer with a qualified energy efficient transformer.

(c) REQUIREMENTS.—To be eligible to receive a rebate under this section, an entity shall submit to the Secretary an application in such form, at such time, and containing such information as the Secretary may require, including demonstrated evidence—

(1) that the entity purchased a qualified energy efficient transformer;

(2) of the core loss value of the qualified energy efficient transformer;

(3) of the age of the qualified energy inefficient transformer being replaced;

(4) of the core loss value of the qualified energy inefficient transformer being replaced—

(A) as measured by a qualified professional or verified by the equipment manufacturer, as applicable; or

(B) for transformers described in subsection (a)(2)(B)(i), as selected from a table of default values as determined by the Secretary in consultation with applicable industry; and

(5) that the qualified energy inefficient transformer has been permanently decommissioned and scrapped.

(d) AUTHORIZED AMOUNT OF REBATE.—The amount of a rebate provided under this section shall be—

(1) for a 3-phase or single-phase transformer with a capacity of not less than 10 and not greater than 2,500 kilovolt-amperes, twice the amount equal to the difference in Watts between the core loss value (as measured in accordance with paragraphs (2) and (4) of subsection (c)) of—

(A) the qualified energy inefficient transformer; and

(B) the qualified energy efficient transformer; or

(2) for a transformer described in subsection (a)(2)(B)(i), the amount determined using a table of default rebate values by rated transformer output, as measured in kilovolt-amperes, as determined by the Secretary in consultation with applicable industry.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$5,000,000 for each of fiscal years 2021 and 2022, to remain available until expended.

(f) TERMINATION OF EFFECTIVENESS.—The authority provided by this section terminates on December 31, 2022.

#### Subpart E—Miscellaneous

#### SEC. 1051. ADVANCE APPROPRIATIONS REQUIRED.

The authorization of amounts under this part and the amendments made by this part shall be effective for any fiscal year only to the extent and in the amount provided in advance in appropriations Acts.

#### PART II—WEATHERIZATION

#### SEC. 1101. WEATHERIZATION ASSISTANCE PROGRAM.

(a) DEFINITION OF WEATHERIZATION MATERIALS.—Section 412(9)(J) of the Energy Conservation and Production Act (42 U.S.C. 6862(9)(J)) is amended—

(1) by inserting “, including renewable energy technologies and other advanced technologies,” after “technologies”; and

(2) by striking “Development,” and all that follows through the period at the end and inserting “Development and the Secretary of Agriculture.”.

(b) ALLOWANCE FOR HEALTH AND SAFETY BENEFITS.—Section 413(b) of the Energy Conservation and Production Act (42 U.S.C. 6863(b)) is amended—

(1) in paragraph (2)(B), by striking “paragraph (5)” and inserting “paragraph (6)”;

(2) in paragraph (3)—

(A) in the first sentence, by striking “and with the Director of the Community Services Administration”; and

(B) in the first sentence of the undesignated matter following subparagraph (C)—

(i) by striking “part,” and inserting “part and by”; and

(ii) by striking “, and the Director” and all that follows through “1964”;

(3) by redesignating paragraphs (5) and (6) as paragraphs (6) and (7), respectively; and

(4) by inserting after paragraph (4) the following:

“(5) In carrying out paragraph (3), the Secretary may take into consideration evidence-based values for improvements in the health and safety of occupants of weatherized homes, and other non-energy benefits, as determined by the Secretary.”.

(c) CONTRACTOR OPTIMIZATION.—

(1) TECHNICAL TRANSFER GRANTS.—Section 414B(a)(4) of the Energy Conservation and Production Act (42 U.S.C. 6864b(a)(4)) is amended—

(A) by striking “for persons” and inserting the following: “for—

“(A) persons”; and

(B) in subparagraph (A) (as so designated), by striking the period at the end and inserting the following: “; and

“(B) private entities that are contracted to provide weatherization assistance under this part, in accordance with rules determined by the Secretary.”.

(2) CONTRACTOR OPTIMIZATION.—The Energy Conservation and Production Act is amended by inserting after section 414B (42 U.S.C. 6864b) the following:

#### “SEC. 414C. CONTRACTOR OPTIMIZATION.

“The Secretary may request that entities receiving funding from the Federal Government or from a State through a weatherization assistance program under section 413 or 414—

“(1) perform periodic reviews of the use of private contractors in the provision of weatherization assistance, if applicable; and

“(2) encourage an increased use and expanded role of contractors as appropriate.”.

(3) TABLE OF CONTENTS AMENDMENT.—The table of contents for the Energy Conservation and Production Act (Public Law 94-385; 90 Stat. 1125) is amended by inserting after the item relating to section 414B the following:

“Sec. 414C. Contractor optimization.”.

(d) FINANCIAL ASSISTANCE FOR WAP ENHANCEMENT AND INNOVATION.—

(1) IN GENERAL.—The Energy Conservation and Production Act (Public Law 94-385; 90 Stat. 1125) is amended by inserting after section 414C (as added by subsection (c)(2)) the following:

#### “SEC. 414D. FINANCIAL ASSISTANCE FOR WAP ENHANCEMENT AND INNOVATION.

“(a) PURPOSES.—The purposes of this section are—

“(1) to expand the number of dwelling units that are occupied by low-income persons that receive weatherization assistance under this section by making those dwelling units weatherization-ready;

“(2) to promote the deployment of renewable energy in dwelling units that are occupied by low-income persons;

“(3) to ensure healthy indoor environments by enhancing or expanding health and safety measures and resources available to dwellings that are occupied by low-income persons;

“(4) to disseminate new methods and best practices among eligible entities providing weatherization assistance under this section; and

“(5) to encourage eligible entities providing weatherization assistance to hire and retain employees who are individuals—

“(A) from the community in which the assistance is provided; and

“(B) from communities or groups underrepresented in the home energy performance workforce.

“(b) DEFINITION OF ELIGIBLE ENTITY.—In this section, the term ‘eligible entity’ means—

“(1) an entity receiving funding from the Federal Government or from a State, Tribal, or local government through a weatherization assistance program under section 413 or 414; and

“(2) a nonprofit organization.

“(c) FINANCIAL ASSISTANCE AWARDS.—The Secretary shall, to the extent funds are made available, award financial assistance on an annual basis through a competitive process to an eligible entity—

“(1) with respect to dwelling units that are occupied by low-income persons—

“(A) to implement measures to make those dwelling units weatherization-ready, including by addressing structural, plumbing, roofing, and electrical issues, environmental hazards, and other issues that the Secretary determines to be appropriate;

“(B) to install energy efficiency technologies, including home energy management systems, smart devices, and other technologies the Secretary determines to be appropriate;

“(C) to install renewable energy systems (as defined in section 415(c)(6)(A)); and

“(D) to implement measures to ensure healthy indoor environments by improving indoor air quality, accessibility, and other healthy home measures, as determined by the Secretary;

“(2) to improve the capability of the eligible entity—

“(A) to significantly increase the number of energy retrofits performed by the eligible entity;

“(B) to replicate best practices for work performed under this section on a larger scale;

“(C) to leverage additional funds to sustain the provision of weatherization assistance and other work performed under this section after the financial assistance awarded under this section is expended; and

“(D) to hire and retain employees described in subsection (a)(5);

“(3) for innovative outreach and education regarding the benefits and availability of weatherization assistance and other assistance available under this section;

“(4) for quality control of work performed under this section;

“(5) for data collection, measurement, and verification with respect to that work;

“(6) for program monitoring, oversight, evaluation, and reporting of that work;

“(7) for labor, training, and technical assistance relating to that work;

“(8) subject to subsection (g)(2), for planning, management, and administration of that work; and

“(9) for any other appropriate activity, as determined by the Secretary.

“(d) APPLICATIONS.—To be eligible for an award of financial assistance under this section, an eligible entity shall submit to the Secretary an application in such manner and containing such information as the Secretary may require.

“(e) AWARD FACTORS.—In awarding financial assistance under this section, the Secretary shall consider—

“(1) the record of the eligible entity, using the most recent year for which data are available, in constructing, renovating, repairing, and making energy efficient single-family, multifamily, or manufactured homes

that are occupied by low-income persons, either directly or through affiliates, chapters, or other partners;

“(2) the number of dwelling units occupied by low-income persons that the eligible entity has built, renovated, repaired, weatherized, and made more energy efficient in the 5 years immediately preceding the date on which the eligible entity submits an application under subsection (d);

“(3) the qualifications, experience, and past performance of the eligible entity, including experience successfully managing and administering Federal funds;

“(4) the strength of the proposal of the eligible entity to achieve one or more of the purposes described in subsection (a);

“(5) the extent to which the eligible entity will use partnerships and regional coordination to achieve one or more of the purposes described in subsection (a);

“(6) regional and climate zone diversity;

“(7) urban, suburban, and rural localities; and

“(8) any other appropriate factor, as determined by the Secretary.

“(f) FIRST AWARD.—Subject to the availability of appropriations, not later than 270 days after the date of enactment of this section, the Secretary shall make a first award of financial assistance under this section.

“(g) AMOUNT AND TERM.—

“(1) MAXIMUM AMOUNT.—The total amount of financial assistance awarded to an eligible entity under this section shall not exceed \$2,000,000.

“(2) PLANNING, MANAGEMENT, AND ADMINISTRATION.—Of the amount awarded to an eligible entity under this section, not more than 15 percent may be used by the eligible entity for the purpose described in subsection (c)(8).

“(3) TECHNICAL AND TRAINING ASSISTANCE.—The total amount of financial assistance awarded to an entity under this section shall be reduced by the cost of any technical and training assistance provided by the Secretary under this section that relates to that financial assistance.

“(4) TERM.—The term of an award of financial assistance under this section shall not exceed 3 years.

“(5) RELATIONSHIP TO FORMULA GRANTS.—An eligible entity may use financial assistance awarded under this section in conjunction with other financial assistance provided to the eligible entity under this part.

“(h) GUIDANCE.—Not later than 90 days after the date of enactment of this section, the Secretary shall issue guidance on implementing this section, which shall include, with respect to eligible entities awarded financial assistance under this section—

“(1) standards for allowable expenditures;

“(2) a minimum saving-to-investment ratio; and

“(3) standards for—

“(A) training programs;

“(B) energy audits;

“(C) the provision of technical assistance;

“(D) monitoring activities carried out using the financial assistance;

“(E) verification of energy and cost savings;

“(F) liability insurance requirements; and

“(G) recordkeeping and reporting requirements, which shall include reporting to the Office of Weatherization and Intergovernmental Programs of the Department of Energy applicable data on each dwelling unit retrofitted or otherwise assisted by the eligible entity using the financial assistance.

“(i) COMPLIANCE WITH STATE AND LOCAL LAW.—Nothing in this section supersedes or modifies any State or local law to the extent that the State or local law is more stringent than this section.

“(j) REVIEW AND EVALUATION.—The Secretary shall review and evaluate the performance of each eligible entity that receives an award of financial assistance under this section, which may include an audit.

“(k) ANNUAL REPORT.—The Secretary shall submit to the relevant committees of Congress an annual report that describes—

“(1) the actions taken by the Secretary and eligible entities awarded financial assistance under this section to achieve the purposes of this section during the year covered by the report; and

“(2) the energy and cost savings, and any other accomplishments, achieved under this section during the year covered by the report.

“(l) FUNDING.—

“(1) IN GENERAL.—Subject to paragraphs (2) and (3), for each of fiscal years 2021 through 2025, of the amount appropriated under section 422—

“(A) if the amount is not more than \$225,000,000, no funds shall be used to carry out this section;

“(B) if the amount is not more than \$260,000,000, not more than 2 percent of that amount may be used to carry out this section;

“(C) if the amount is not more than \$300,000,000, not more than 4 percent of that amount may be used to carry out this section; and

“(D) if the amount is more than \$300,000,000, not more than 6 percent of that amount may be used to carry out this section.

“(2) AMOUNTS EXCLUDED.—Each amount described in paragraph (1) shall not include the amount made available for Department of Energy headquarters training or technical assistance.

“(3) MAXIMUM AMOUNT.—The maximum amount used to carry out this section in each fiscal year shall not exceed \$25,000,000.”.

(2) TABLE OF CONTENTS.—The table of contents for the Energy Conservation and Production Act (Public Law 94-385; 90 Stat. 1125) is amended by inserting after the item relating to section 414C (as added by subsection (c)(3)) the following:

“Sec. 414D. Financial assistance for WAP enhancement and innovation.”.

(e) INCREASE IN ADMINISTRATIVE FUNDS.—Section 415(a)(1) of the Energy Conservation and Production Act (42 U.S.C. 6865(a)(1)) is amended by striking “10 percent” and inserting “15 percent”.

(f) REWEATHERIZATION DATE.—Section 415(c) of the Energy Conservation and Production Act (42 U.S.C. 6865(c)) is amended by striking paragraph (2) and inserting the following:

“(2) FURTHER ASSISTANCE.—

“(A) DEFINITION OF INTERIM SERVICE.—

“(i) IN GENERAL.—In this paragraph, the term ‘interim service’ means an energy service that takes place between instances of weatherization or partial weatherization of a dwelling unit, as determined by the Secretary.

“(ii) INCLUSION.—In this paragraph, the term ‘interim service’ includes—

“(I) the provision of energy information and education to assist with energy management;

“(II) an evaluation of the effectiveness of installed weatherization measures; and

“(III) the provision of services, equipment, or other measures funded by non-Federal funds, as determined by the Secretary.

“(B) FURTHER ASSISTANCE.—Dwelling units weatherized or partially weatherized under this part, or under other Federal programs—

“(i) may not receive further financial assistance for weatherization under this part until the date that is 15 years after the date

on which the previous weatherization was completed; and

“(ii) may receive further financial assistance for weatherization under this part for the purpose of providing an interim service.”.

(g) ANNUAL REPORT.—Section 421 of the Energy Conservation and Production Act (42 U.S.C. 6871) is amended in the second sentence by inserting “the number of multifamily buildings in which individual dwelling units were weatherized during the previous year, the number of individual dwelling units in multifamily buildings weatherized during the previous year,” after “the average size of the dwellings being weatherized.”.

(h) REAUTHORIZATION OF WAP.—Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amended in the matter preceding paragraph (1) by striking “appropriated” and all that follows through “2012..” in paragraph (5) and inserting “appropriated \$350,000,000 for each of fiscal years 2021 through 2025.”.

(i) WAIVER STUDY.—

(1) IN GENERAL.—It is the sense of Congress that, to the maximum extent practicable, the Secretary should coordinate with the Director of the Office of Management and Budget to grant waivers of requirements under section 200.313 of title 2, Code of Federal Regulations (or successor regulations), to better leverage private sector funds for the purposes of using funding awarded under the Weatherization Assistance Program for Low-Income Persons established under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.).

(2) STUDY.—Not more than 180 days after the date of enactment of this Act, the Secretary shall submit to the relevant committees of Congress a report that describes—

(A) each waiver that has been requested under paragraph (1) after September 30, 2010; and

(B) the determination of the Secretary and the Director of the Office of Management and Budget regarding each waiver described in subparagraph (A).

## Subtitle B—Renewable Energy

### SEC. 1201. HYDROELECTRIC PRODUCTION INCENTIVES AND EFFICIENCY IMPROVEMENTS.

(a) HYDROELECTRIC PRODUCTION INCENTIVES.—Section 242 of the Energy Policy Act of 2005 (42 U.S.C. 15881) is amended—

(1) in subsection (b), by striking paragraph (1) and inserting the following:

“(1) QUALIFIED HYDROELECTRIC FACILITY.—The term ‘qualified hydroelectric facility’ means a turbine or other generating device owned or solely operated by a non-Federal entity—

“(A) that generates hydroelectric energy for sale; and

“(B)(i) that is added to an existing dam or conduit; or

“(ii)(I) that has a generating capacity of not more than 20 megawatts;

“(II) for which the non-Federal entity has received a construction authorization from the Federal Energy Regulatory Commission, if applicable; and

“(III) that is constructed in an area in which there is inadequate electric service, as determined by the Secretary, including by taking into consideration—

“(aa) access to the electric grid;

“(bb) the frequency of electric outages; or

“(cc) the affordability of electricity.”;

(2) in subsection (c), by striking “10” and inserting “22”;

(3) in subsection (e)(2), by striking “section 29(d)(2)(B)” and inserting “section 45K(d)(2)(B)”;

(4) in subsection (f), by striking “20” and inserting “32”; and



(5) in subsection (g), by striking “each of the fiscal years 2006 through 2015” and inserting “each of fiscal years 2021 through 2036”.

(b) **HYDROELECTRIC EFFICIENCY IMPROVEMENT.**—Section 243(c) of the Energy Policy Act of 2005 (42 U.S.C. 15882(c)) is amended by striking “each of the fiscal years 2006 through 2015” and inserting “each of fiscal years 2021 through 2036”.

**SEC. 1202. MARINE ENERGY RESEARCH AND DEVELOPMENT.**

(a) **PURPOSE.**—The purpose of this section is to support marine energy programs that—  
(1) promote research on, and the development of, increased energy generation and capacity at reduced costs;

(2) promote research and development activities that improve environmental outcomes of marine energy technologies;

(3) provide grid stability and create new market opportunities; and

(4) promote job creation in the energy sector.

(b) **DEFINITION OF MARINE ENERGY.**—

(1) **IN GENERAL.**—Section 632 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17211) is amended to read as follows:

**“SEC. 632. DEFINITION OF MARINE ENERGY.**

“In this subtitle, the term ‘marine energy’ means energy from—

“(1) waves, tides, and currents in oceans, estuaries, and tidal areas;

“(2) free-flowing hydrokinetic water in rivers, lakes, and streams;

“(3) free-flowing hydrokinetic water in man-made channels; and

“(4) differentials in ocean temperature or ocean thermal energy conversion.”.

(2) **CONFORMING EDITS.**—

(A) The subtitle heading for subtitle C of title VI of the Energy Independence and Security Act of 2007 (Public Law 110-440; 121 Stat. 1686) is amended by striking “and Hydrokinetic Renewable”.

(B) Section 631 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17001 note; 121 Stat. 1686) is amended by striking “and Hydrokinetic Renewable”.

(c) **MARINE ENERGY RESEARCH AND DEVELOPMENT.**—Section 633 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17212) is amended to read as follows:

**“SEC. 633. MARINE ENERGY RESEARCH AND DEVELOPMENT.**

“(a) **IN GENERAL.**—The Secretary, acting through the Director of the Water Power Technologies Office, in consultation with the Secretary of the Interior, the Secretary of Commerce, and the Federal Energy Regulatory Commission, shall carry out a program to accelerate the introduction of marine energy production into the United States energy supply, giving priority to technologies most likely to lead to commercial utilization, while fostering accelerated research, development, demonstration, and commercial application of technology, including programs—

“(1) to assist technology development on a variety of scales, including full-scale prototypes, to improve the components, processes, and systems used for power generation from marine energy resources;

“(2) to establish and expand critical testing infrastructure and facilities necessary—

“(A) to cost-effectively and efficiently test and prove marine energy devices; and

“(B) to accelerate the technological readiness and commercialization of those devices;

“(3) to support efforts to increase the efficiency of energy conversion, lower the cost, increase the use, improve the reliability, and demonstrate the applicability of marine energy technologies by participating in demonstration projects;

“(4) to investigate variability issues and the efficient and reliable integration of marine energy with the utility grid;

“(5) to identify and study critical short- and long-term needs to create a sustainable marine energy supply chain based in the United States;

“(6) to increase the reliability and survivability of marine energy technologies;

“(7) to verify the performance, reliability, maintainability, and cost of new marine energy device designs and system components in an operating environment;

“(8) to consider the protection of critical infrastructure, such as adequate separation between marine energy devices and projects and submarine telecommunications cables, including consideration of established industry standards;

“(9)(A) to coordinate the programs carried out under this section with, and avoid duplication of activities across, programs of the Department and other applicable Federal agencies, including National Laboratories; and

“(B) to coordinate public-private collaboration in carrying out the programs under this section;

“(10) to identify opportunities for joint research and development programs and the development of economies of scale between—

“(A) marine energy technologies; and

“(B) other renewable energy and fossil energy programs, offshore oil and gas production activities, and activities of the Department of Defense;

“(11) to identify, in conjunction with the Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere, and other relevant Federal agencies as appropriate, the potential environmental impacts, including potential impacts on fisheries and other marine resources, of marine energy technologies, measures to prevent adverse impacts, and technologies and other means available for monitoring and determining environmental impacts;

“(12) to identify, in conjunction with the Secretary of the Department in which the United States Coast Guard is operating, acting through the Commandant of the United States Coast Guard, the potential navigational impacts of marine energy technologies and measures to prevent adverse impacts on navigation;

“(13) to support in-water technology development with international partners using existing cooperative procedures (including memoranda of understanding)—

“(A) to allow cooperative funding and other support of value to be exchanged and leveraged; and

“(B) to encourage international research centers and international companies to participate in the development of marine energy technology in the United States and to encourage United States research centers and companies to participate in marine energy projects abroad; and

“(14) to assist in the development of technology necessary to support the use of marine energy—

“(A) for the generation and storage of power at sea, including in applications relating to—

“(i) ocean observation and navigation;

“(ii) underwater vehicle charging;

“(iii) marine aquaculture;

“(iv) production of marine algae; and

“(v) extraction of critical minerals and gasses from seawater;

“(B) for the generation and storage of power to promote the resilience of coastal communities, including in applications relating to—

“(i) desalination;

“(ii) disaster recovery and resilience; and

“(iii) community microgrids in isolated power systems; and

“(C) in any other applications, as determined by the Secretary.

“(b) **COST SHARING AND MERIT REVIEW.**—The Secretary shall carry out the program under this section in accordance with sections 988 and 989 of the Energy Policy Act of 2005 (42 U.S.C. 16352, 16353).”.

(d) **NATIONAL MARINE ENERGY CENTERS.**—Section 634 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17213) is amended—

(1) in the section heading, by striking “**RENEWABLE ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION**” and inserting “**ENERGY**”; and

(2) by redesignating subsection (c) as subsection (d); and

(3) by striking subsections (a) and (b) and inserting the following:

“(a) **CENTERS.**—

“(1) **IN GENERAL.**—The Secretary shall award grants to institutions of higher education for—

“(A) the continuation and expansion of research, development, and testing activities at National Marine Energy Centers established as of January 1, 2019; and

“(B) the establishment of new National Marine Energy Centers.

“(2) **CRITERIA.**—In selecting locations for new National Marine Energy Centers to be established under paragraph (1)(B), the Secretary shall consider sites that meet one of the following criteria:

“(A) The new Center hosts an existing marine energy research and development program in coordination with an engineering program at an institution of higher education.

“(B) The new Center has proven expertise to support environmental and policy-related issues associated with the harnessing of energy in the marine environment.

“(C) The new Center has access to and uses marine resources.

“(b) **PURPOSES.**—The National Marine Energy Centers shall coordinate with other National Marine Energy Centers, the Department, and the National Laboratories—

“(1) to advance research, development, and demonstration of marine energy technologies;

“(2) to support in-water testing and demonstration of marine energy technologies, including facilities capable of testing—

“(A) marine energy systems of various technology readiness levels and scales;

“(B) a variety of technologies in multiple test berths at a single location; and

“(C) arrays of technology devices; and

“(3) to serve as information clearinghouses for the marine energy industry by collecting and disseminating information on best practices in all areas relating to developing and managing marine energy resources and energy systems.

“(c) **COST SHARING.**—The Secretary shall carry out the program under this section in accordance with section 988(b)(4) of the Energy Policy Act of 2005 (42 U.S.C. 16352(b)(4)).”.

(e) **AUTHORIZATION OF APPROPRIATIONS.**—Section 636 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17215) is amended by striking “\$50,000,000 for each of the fiscal years 2008 through 2012” and inserting “\$160,000,000 for each of fiscal years 2021 and 2022”.

(f) **STUDY OF ENERGY INNOVATION IN MARINE TRANSPORTATION AND INFRASTRUCTURE RESILIENCE.**—

(1) **IN GENERAL.**—The Secretary, in consultation with the Secretary of Transportation and the Secretary of Commerce, shall conduct a study to examine opportunities for research and development in advanced marine energy technologies—

(A) to support the maritime transportation sector to enhance job creation, economic development, and competitiveness;

(B) to support associated maritime energy infrastructure, including infrastructure that serves ports, to improve system resilience and disaster recovery; and

(C) to enable scientific missions at sea and in extreme environments, including the Arctic.

(2) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that describes the results of the study conducted under paragraph (1).

(g) CLERICAL AMENDMENTS.—The table of contents in section 1(b) of the Energy Independence and Security Act of 2007 (Public Law 110-140; 121 Stat. 1495) is amended—

(1) by striking the item relating to subtitle C of title VI and inserting the following:

“Subtitle C—Marine Renewable Energy Technologies”; and

(2) by striking the items relating to sections 632, 633, and 634 and inserting the following:

“Sec. 632. Definition of marine energy.

“Sec. 633. Marine energy research and development.

“Sec. 634. National Marine Energy Centers.”.

#### SEC. 1203. ADVANCED GEOTHERMAL INNOVATION LEADERSHIP.

(a) UPDATE TO GEOTHERMAL RESOURCE ASSESSMENT.—Section 2501 of the Energy Policy Act of 1992 (30 U.S.C. 1028) is amended—

(1) by redesignating subsections (a) and (b) as subsections (b) and (d), respectively;

(2) by inserting before subsection (b) (as so redesignated) the following:

“(a) DEFINITION OF ENHANCED GEOTHERMAL SYSTEMS.—In this section, the term ‘enhanced geothermal systems’ has the meaning given the term in section 612 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17191).”;

(3) by inserting after subsection (b) (as so redesignated) the following:

“(c) UPDATE TO GEOTHERMAL RESOURCE ASSESSMENT.—The Secretary of the Interior, acting through the United States Geological Survey, and in consultation with the Secretary of Energy, shall update the 2008 United States geothermal resource assessment carried out by the United States Geological Survey, including—

“(1) with respect to areas previously identified by the Department of Energy or the United States Geological Survey as having significant potential for hydrothermal energy or enhanced geothermal systems energy, by focusing on—

“(A) improving the resolution of resource potential at systematic temperatures and depths, including temperatures and depths appropriate for power generation and direct use applications;

“(B) quantifying the total potential to coproduce geothermal energy and minerals;

“(C) incorporating data relevant to underground thermal energy storage and exchange, such as aquifer and soil properties; and

“(D) producing high resolution maps, including—

“(i) maps that indicate key subsurface parameters for electric and direct use resources; and

“(ii) risk maps for induced seismicity based on geologic, geographic, and operational parameters; and

“(2) to the maximum extent practicable, by coordinating with relevant State officials and institutions of higher education to ex-

pand geothermal assessments, including enhanced geothermal systems assessments, to include assessments for the Commonwealth of Puerto Rico and the States of Alaska and Hawaii.”; and

(4) in subsection (d) (as so redesignated), by striking “necessary” and inserting “necessary”.

(b) GENERAL GEOTHERMAL RESEARCH AND DEVELOPMENT PROGRAMS.—Section 614 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17193) is amended by adding at the end the following:

“(d) OIL AND GAS TECHNOLOGY TRANSFER INITIATIVE.—

“(1) IN GENERAL.—The Secretary shall support an initiative among the Office of Fossil Energy, the Office of Energy Efficiency and Renewable Energy, and the private sector to modify, improve, and demonstrate the use in geothermal energy development of relevant advanced technologies and operation techniques used in the oil and gas sector.

“(2) PRIORITIES.—In carrying out paragraph (1), the Secretary shall prioritize technologies with the greatest potential to significantly increase the use and lower the cost of geothermal energy in the United States, including the cost and speed of small- and large-scale geothermal drilling.

“(e) COPRODUCTION OF GEOTHERMAL ENERGY AND MINERALS PRODUCTION PRIZE COMPETITION.—

“(1) IN GENERAL.—The Secretary shall carry out a prize competition under which the Secretary shall award prizes to demonstrate the coproduction of critical minerals (as defined by the Secretary of the Interior on the date of enactment of the American Energy Innovation Act of 2020) from geothermal resources.

“(2) REQUIREMENTS.—A demonstration awarded a prize under paragraph (1) shall—

“(A) improve the cost-effectiveness of removing minerals from geothermal brines as part of the coproduction process;

“(B) increase recovery rates of the targeted mineral commodity;

“(C) decrease water use and other environmental impacts, as determined by the Secretary; and

“(D) demonstrate a path to commercial viability.

“(3) MAXIMUM PRIZE AMOUNT.—The maximum amount of a prize awarded under paragraph (1) shall be \$10,000,000.

“(f) DRILLING DATA REPOSITORY.—

“(1) IN GENERAL.—The Secretary shall, in coordination with the Secretary of the Interior, establish and operate a voluntary, industry-wide repository of geothermal drilling information to lower the cost of future geothermal drilling.

“(2) REPOSITORY.—

“(A) IN GENERAL.—In carrying out paragraph (1), the Secretary shall collaborate with geothermally significant countries, such as Iceland, Switzerland, Kenya, Australia, the Philippines, and any other relevant country, as determined by the Secretary.

“(B) DATA SYSTEM.—The repository established under paragraph (1) shall be integrated with the National Geothermal Data System.”.

(c) ENHANCED GEOTHERMAL RESEARCH AND DEVELOPMENT.—

(1) DEFINITION OF ENGINEERED.—Section 612(1) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17191(1)) is amended in the matter preceding subparagraph (A) by striking “subjected to intervention, including intervention” and inserting “designed to access subsurface heat, including nonstimulation technologies.”.

(2) PROGRAMS.—Section 615(b) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17194(b)) is amended—

(A) in paragraph (1)—

(i) in subparagraph (C), by striking “mapping” and inserting “and fracture mapping, including real-time modeling”;;

(ii) in subparagraph (E), by striking “and” at the end;

(iii) by redesignating subparagraph (F) as subparagraph (K); and

(iv) by inserting after subparagraph (E) the following:

“(F) well placement and orientation;

“(G) long-term reservoir management;

“(H) drilling technologies, methods, and tools;

“(I) improved exploration tools;

“(J) zonal isolation; and”; and

(B) by striking paragraph (2) and inserting the following:

“(2) FRONTIER OBSERVATORIES FOR RESEARCH IN GEOTHERMAL ENERGY.—

“(A) PROGRAM.—The Secretary shall support 2 field research sites, which shall each be known as a ‘Frontier Observatory for Research in Geothermal Energy’ or ‘FORGE’ site, to develop, test, and enhance techniques and tools for enhanced geothermal energy.

“(B) SITE SELECTION.—Of the FORGE sites referred to in subparagraph (A)—

“(i) 1 shall be the existing research site in Milford, Utah; and

“(ii) 1 shall be—

“(I) selected by the Secretary through a competitive selection process; and

“(II) located in a different geologic type than the existing research site described in clause (i).

“(C) SITE OPERATION.—

“(i) INITIAL DURATION.—The FORGE site selected under subparagraph (B)(ii) shall operate for an initial term of not more than 7 years after the date on which site preparation is complete.

“(ii) PERFORMANCE METRICS.—The Secretary shall establish performance metrics for each FORGE site supported under this paragraph, which may be used by the Secretary to determine whether a FORGE site should continue to receive funding.

“(D) ADDITIONAL TERMS.—

“(i) IN GENERAL.—At the end of an operational term described in clause (ii), a FORGE site may—

“(I) be transferred to other public or private entities for further enhanced geothermal testing; or

“(II) subject to appropriations and a merit review by the Secretary, operate for an additional term of not more than 7 years.

“(ii) OPERATIONAL TERM DESCRIBED.—An operational term referred to in clause (i)—

“(I) in the case of the FORGE site designated under subparagraph (B)(i), is the existing operational term; and

“(II) in the case of the FORGE site selected under subparagraph (B)(ii), is the initial term under subparagraph (C) or an additional term under clause (i)(II).

“(3) ENHANCED GEOTHERMAL SYSTEMS DEMONSTRATIONS.—

“(A) IN GENERAL.—Beginning on the date of enactment of the American Energy Innovation Act of 2020, the Secretary, in collaboration with industry partners and institutions of higher education, shall support an initiative for demonstration of enhanced geothermal systems for power production or direct use.

“(B) PROJECTS.—

“(i) IN GENERAL.—Under the initiative described in subparagraph (A), not less than 4 demonstration projects shall be carried out in locations that are potentially commercially viable for enhanced geothermal systems development, as determined by the Secretary.

“(ii) REQUIREMENTS.—Demonstration projects under clause (i) shall—

“(I) collectively demonstrate—

“(aa) different geologic settings, such as hot sedimentary aquifers, layered geologic systems, supercritical systems, and basement rock systems; and

“(bb) a variety of development techniques, including open hole and cased hole completions, differing well orientations, and stimulation mechanisms;

“(II) to the extent practicable, use existing sites where subsurface characterization or geothermal energy integration analysis has been conducted; and

“(III) each be carried out in accordance with section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).

“(iii) EASTERN DEMONSTRATION.—Not less than 1 demonstration project under clause (i) shall be located in an area east of the Mississippi River that is suitable for enhanced geothermal demonstration for power, heat, or a combination of power and heat.

“(C) OPTIONAL PROGRAM STRUCTURE.—

“(i) IN GENERAL.—The Secretary may, pursuant to section 646(g) of the Department of Energy Organization Act (42 U.S.C. 7256(g)), structure the initiative described in subparagraph (A) as a public-private cost-shared demonstration initiative with specific design milestones required to be met by a participant before costs are reimbursed by the Secretary.

“(ii) REQUIREMENTS.—If the Secretary elects to carry out clause (i) for a demonstration project, the Secretary shall—

“(I) request proposals from eligible entities, as determined by the Secretary, that include—

“(aa) a business plan;

“(ab) technical details; and

“(cc) proposed milestones and associated payments; and

“(II) select projects—

“(aa) based on the demonstrated ability of the eligible entity to meet the milestones and associated payments described in the proposal of that eligible entity; and

“(bb) that have the greatest potential commercial applicability.

“(iii) AUTHORITY.—Notwithstanding section 646(g)(10) of the Department of Energy Organization Act (42 U.S.C. 7256(g)(10)), the Secretary shall have the authority to carry out clause (i) until the completion of the initiative described in subparagraph (A).”

(d) GEOTHERMAL HEAT PUMPS AND DIRECT USE.—

(1) IN GENERAL.—Title VI of the Energy Independence and Security Act of 2007 is amended by inserting after section 616 (42 U.S.C. 17195) the following:

**“SEC. 616A. GEOTHERMAL HEAT PUMPS AND DIRECT USE RESEARCH AND DEVELOPMENT.**

“(a) PURPOSES.—The purposes of this section are—

“(1) to improve the components, processes, and systems used for geothermal heat pumps and the direct use of geothermal energy; and

“(2) to increase the energy efficiency, lower the cost, increase the use, and improve and demonstrate the applicability of geothermal heat pumps to, and the direct use of geothermal energy in, large buildings, commercial districts, residential communities, and large municipal, agricultural, or industrial projects.

“(b) DEFINITIONS.—In this section:

“(1) DIRECT USE OF GEOTHERMAL ENERGY.—The term ‘direct use of geothermal energy’ means geothermal systems that use water directly or through a heat exchanger to provide—

“(A) heating to buildings; or

“(B) heat required for industrial processes, agriculture, aquaculture, and other facilities.

“(2) ECONOMICALLY DISTRESSED AREA.—The term ‘economically distressed area’ means

an area described in section 301(a) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161(a)).

“(3) GEOTHERMAL HEAT PUMP.—The term ‘geothermal heat pump’ means a system that provides heating and cooling by exchanging heat from shallow ground or surface water using—

“(A) a closed loop system, which transfers heat by way of buried or immersed pipes that contain a mix of water and working fluid; or

“(B) an open loop system, which circulates ground or surface water directly into the building and returns the water to the same aquifer or surface water source.

“(c) PROGRAM.—

“(1) IN GENERAL.—The Secretary shall support within the Geothermal Technologies Office a program of research, development, and demonstration for geothermal heat pumps and the direct use of geothermal energy.

“(2) AREAS.—The program under paragraph (1) may include research, development, demonstration, and commercial application of—

“(A) geothermal ground loop efficiency improvements, cost reductions, and improved installation and operations methods;

“(B) the use of geothermal energy for building-scale energy storage;

“(C) the use of geothermal energy as a grid management resource or seasonal energy storage;

“(D) geothermal heat pump efficiency improvements;

“(E) the use of alternative fluids as a heat exchange medium, such as hot water found in mines and mine shafts, graywater, or other fluids that may improve the economics of geothermal heat pumps;

“(F) heating of districts, neighborhoods, communities, large commercial or public buildings, and industrial and manufacturing facilities;

“(G) the use of water sources at a temperature of less than 150 degrees Celsius for direct use; and

“(H) system integration of direct use with geothermal electricity production.

“(3) ENVIRONMENTAL IMPACTS.—In carrying out the program, the Secretary shall identify and mitigate potential environmental impacts in accordance with section 614(c).

“(d) FINANCIAL ASSISTANCE.—

“(1) IN GENERAL.—The Secretary shall make financial assistance available to State, local, and Tribal governments, institutions of higher education, nonprofit entities, National Laboratories, utilities, and for-profit companies to promote the development of geothermal heat pumps and the direct use of geothermal energy.

“(2) PRIORITY.—In providing financial assistance under this subsection, the Secretary shall give priority to proposals that apply to large buildings, commercial districts, and residential communities that are located in economically distressed areas.”

(2) CLERICAL AMENDMENT.—The table of contents in section 1(b) of the Energy Independence and Security Act of 2007 (Public Law 110–140; 121 Stat. 1495) is amended by inserting after the item relating to section 616 the following:

“Sec. 616A. Geothermal heat pumps and direct use research and development.”

(e) MODIFYING THE DEFINITION OF RENEWABLE ENERGY TO INCLUDE THERMAL ENERGY.—

(1) IN GENERAL.—Section 203 of the Energy Policy Act of 2005 (42 U.S.C. 15852) is amended—

(A) in subsection (b)(2), by striking “generated” and inserting “produced”; and

(B) in subsection (c)—  
(i) by redesignating paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting appropriately;

(ii) in the matter preceding subparagraph (A) (as so redesignated), by striking “For purposes” and inserting the following:

“(1) IN GENERAL.—For purposes”; and

(iii) by adding at the end the following:

“(2) SEPARATE CALCULATION.—

“(A) IN GENERAL.—For purposes of determining compliance with the requirement of this section, any energy consumption that is avoided through the use of geothermal energy shall be considered to be renewable energy produced.

“(B) EFFICIENCY ACCOUNTING.—Energy consumption that is avoided through the use of geothermal energy that is considered to be renewable energy under this section shall not be considered energy efficiency for the purpose of compliance with Federal energy efficiency goals, targets, and incentives.”

(2) CONFORMING AMENDMENT.—Section 2410q(a) of title 10, United States Code, is amended by striking “section 203(b)(2) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b)(2))” and inserting “section 203(b) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b))”.

(f) AUTHORIZATION OF APPROPRIATIONS.—Section 623 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17202) is amended by striking “\$90,000,000” in the first sentence and all that follows through the period at the end of the second sentence and inserting the following: “\$165,000,000 for each of fiscal years 2021 through 2025, of which—

“(1) \$5,000,000 each fiscal year shall be for the prize competition under section 614(e); and

“(2) \$1,000,000 each fiscal year shall be for the drilling data repository under section 614(f).”

(g) REAUTHORIZATION OF HIGH COST REGION GEOTHERMAL ENERGY GRANT PROGRAM.—Section 625 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17204) is amended—

(1) in subsection (a)(2), by inserting “or heat” after “electrical power”; and

(2) by striking subsection (e) and inserting the following:

“(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$5,000,000 for each of fiscal years 2021 through 2025.”

(h) NATIONAL GOALS FOR PRODUCTION ON FEDERAL LAND.—

(1) IN GENERAL.—Not later than September 1, 2022, the Secretary of the Interior shall, in consultation with the Secretary, the Secretary of Agriculture, and other heads of relevant Federal agencies, establish national goals for geothermal energy capacity on public land.

(2) GEOTHERMAL ENERGY DEVELOPMENT.—The Director of the Bureau of Land Management, in consultation with other appropriate Federal officials, shall take any actions that the Director of the Bureau of Land Management determines necessary to facilitate geothermal energy development, consistent with applicable laws.

(i) FACILITATION OF COPRODUCTION OF GEOTHERMAL ENERGY ON OIL AND GAS LEASES.—Section 4(b) of the Geothermal Steam Act of 1970 (30 U.S.C. 1003(b)) is amended by adding at the end the following:

“(4) LAND SUBJECT TO OIL AND GAS LEASE.—Land under an oil and gas lease issued pursuant to the Mineral Leasing Act (30 U.S.C. 181 et seq.) or the Mineral Leasing Act for Acquired Lands (30 U.S.C. 351 et seq.) that is subject to an approved application for permit to drill and from which oil and gas production is occurring may be available for noncompetitive leasing under this section to the holder of the oil and gas lease—

“(A) on a determination that—

“(i) geothermal energy will be produced from a well producing or capable of producing oil and gas; and

“(ii) national energy security will be improved by the issuance of such a lease; and

“(B) to provide for the coproduction of geothermal energy with oil and gas.”.

(J) GEOTHERMAL RESOURCE CONFIRMATION TEST PROJECTS.—

(1) IN GENERAL.—The Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) is amended by adding at the end the following:

**“SEC. 30. GEOTHERMAL RESOURCE CONFIRMATION TEST PROJECTS.**

“(a) DEFINITIONS.—In this section:

“(1) EXTRAORDINARY CIRCUMSTANCES.—The term ‘extraordinary circumstances’ has the same meaning given the term in the Department of the Interior Departmental Manual, 516 DM 2.3A(3) and 516 DM 2, Appendix 2 (or successor provisions).

“(2) GEOTHERMAL RESOURCE CONFIRMATION TEST PROJECT.—The term ‘geothermal resource confirmation test project’ means a project of drilling not more than 3 wells into a reservoir to test or explore for geothermal resources—

“(A) on land for which the Secretary has issued a lease under this Act; and

“(B) that—

“(i) is carried out by the holder of the lease;

“(ii) allows for well testing, such as to confirm temperature, pressure, chemistry, flow rate, and near-wellbore and overall reservoir permeability;

“(iii) causes—

“(I) less than 2.5 acres of soil or vegetation disruption at the location of each geothermal exploration well; and

“(II) not more than an additional 5 acres of soil or vegetation disruption during access to or egress from the test site;

“(iv) is less than 9 inches in bottom-hole diameter;

“(v) is developed—

“(I) in a manner that does not require off-road motorized access other than to and from the well site along an identified off-road route; and

“(II) without the use of high-pressure well stimulation;

“(vi) includes the removal of any surface infrastructure other than the wellhead from the site not later than 90 days after the project is completed; and

“(vii) requires, not later than 42 months after the date on which the first exploration drilling began, the restoration of the project site to approximately the condition that existed at the time the project begins, unless the site is subsequently used as part of an energy development under the lease.

“(b) CATEGORICAL EXCLUSION.—Unless extraordinary circumstances exist, a project that the Secretary determines under subsection (c) is a geothermal resource confirmation test project shall be categorically excluded from the requirements for an environmental assessment or an environmental impact statement under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) or section 1508.4 of title 40, Code of Federal Regulations (or a successor regulation).

“(c) PROCESS.—

“(1) REQUIREMENT TO PROVIDE NOTICE.—A leaseholder shall provide notice to the Secretary of the intent of the leaseholder to carry out a geothermal resource confirmation test project at least 30 days before the start of drilling under the project.

“(2) REVIEW AND DETERMINATION.—Not later than 30 days after receipt of a notice of intent under paragraph (1), the Secretary shall, with respect to the project described in the notice of intent—

“(A) determine if the project is a geothermal resource confirmation test project;

“(B) notify the leaseholder of such determination; and

“(C) provide public notice of the determination.

“(3) OPPORTUNITY TO REMEDY.—If the Secretary determines under paragraph (2)(A) that the project is not a geothermal resource confirmation test project, the Secretary shall—

“(A) include in such notice clear and detailed findings on any deficiencies in the project that resulted in such determination; and

“(B) allow the leaseholder to remedy any such deficiencies and resubmit the notice of intent under paragraph (1).”.

(2) REPEAL.—The Geothermal Energy Research, Development, and Demonstration Act of 1974 (30 U.S.C. 1101 et seq.) is repealed.

(K) PROGRAM TO IMPROVE FEDERAL GEOTHERMAL PERMIT COORDINATION.—

(1) DEFINITIONS.—In this subsection:

(A) PROGRAM.—The term “Program” means the Geothermal Energy Permitting Coordination Program established under paragraph (2).

(B) SECRETARY.—The term “Secretary” means the Secretary of the Interior.

(2) ESTABLISHMENT OF PROGRAM.—Not later than 90 days after the date of enactment of this Act, the Secretary shall establish a program, to be known as the “Geothermal Energy Permitting Coordination Program”, to improve Federal permit coordination and reduce regulatory timelines with respect to geothermal energy projects on Federal land by increasing the expertise of officials administering and approving permits.

(3) ESTABLISHMENT OF PROGRAM OFFICES.—To carry out the Program, the Secretary shall establish 1 or more Program offices at State or district offices of the Department of the Interior.

(4) MEMORANDUM OF UNDERSTANDING.—

(A) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Secretary shall enter into a memorandum of understanding for purposes of this subsection with—

(i) the Secretary of Agriculture;

(ii) the Administrator of the Environmental Protection Agency; and

(iii) the Secretary of Defense.

(B) STATE PARTICIPATION.—The Secretary may request that the Governor of any State be a signatory to the memorandum of understanding under subparagraph (A).

(5) DESIGNATION OF QUALIFIED STAFF.—

(A) IN GENERAL.—Not later than 30 days after the date on which the memorandum of understanding under paragraph (4) is executed, all Federal signatories, as appropriate, shall assign to each Program office established under paragraph (3) 1 or more employees who have expertise in the regulatory issues relating to the office or agency in which the employee is employed, including, as applicable, particular expertise in—

(i) consultation regarding, and preparation of, biological opinions under section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1536);

(ii) permits under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(iii) regulatory matters under the Clean Air Act (42 U.S.C. 7401 et seq.);

(iv) the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.);

(v) planning under section 14 of the National Forest Management Act of 1976 (16 U.S.C. 472a);

(vi) developing geothermal resources under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.); and

(vii) the preparation of analyses under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(B) DUTIES.—Each employee assigned under subparagraph (A) shall—

(i) not later than 90 days after the date on which the employee is assigned, report to the State Director of the Bureau of Land Management for the State in which the office to which the employee is assigned is located;

(ii) be responsible for all issues relating to the jurisdiction of the home office or agency of the employee; and

(iii) participate as part of the team of personnel working on proposed energy projects, planning, and environmental analyses.

(6) ADDITIONAL PERSONNEL.—The Secretary shall assign to each Program office any additional personnel that are necessary to ensure the effective implementation of—

(A) the Program; and

(B) any program administered by the Program office, including inspection and enforcement relating to energy development on Federal land, in accordance with the multiple use mandate of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.).

(7) TRANSFER OF FUNDS.—To facilitate the coordination and processing of geothermal permits on Federal land under the administration of a Program office, the Secretary may authorize the expenditure or transfer of any funds that are necessary to—

(A) the United States Fish and Wildlife Service;

(B) the Bureau of Indian Affairs;

(C) the Forest Service;

(D) the Environmental Protection Agency;

(E) the Corps of Engineers;

(F) the Department of Defense; or

(G) any State in which a geothermal project is located.

(8) REPORTS.—Not later than 3 years after the date of enactment of this Act, the Secretary shall submit to Congress a report that describes—

(A) the progress of the Program; and

(B) any problems relating to leasing, permitting, or siting with respect to geothermal energy development on Federal land.

(9) SAVINGS CLAUSE.—Nothing in this subsection affects—

(A) the operation of any Federal or State law; or

(B) any delegation of authority made by the head of a Federal agency any employee of which is participating in the Program.

**SEC. 1204. WIND ENERGY RESEARCH AND DEVELOPMENT.**

(a) DEFINITIONS.—In this section:

(1) ECONOMICALLY DISTRESSED AREA.—The term “economically distressed area” means an area described in section 301(a) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161(a)).

(2) ELIGIBLE ENTITY.—The term “eligible entity” means—

(A) an institution of higher education;

(B) a National Laboratory;

(C) a Federal research agency;

(D) a State research agency;

(E) a research agency associated with a territory or freely associated state;

(F) a tribal energy development organization;

(G) an Indian tribe;

(H) a tribal organization;

(I) a Native Hawaiian community-based organization;

(J) a nonprofit research organization;

(K) an industrial entity;

(L) any other entity, as determined by the Secretary; and

(M) a consortium of 2 or more entities described in subparagraphs (A) through (L).

(3) INDIAN TRIBE.—The term “Indian tribe” has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(4) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” has the meaning given the term in section 101 of

the Higher Education Act of 1965 (20 U.S.C. 1001).

(5) **NATIVE HAWAIIAN COMMUNITY-BASED ORGANIZATION.**—The term “Native Hawaiian community-based organization” has the meaning given the term in section 6207 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7517).

(6) **PROGRAM.**—The term “program” means the program established under subsection (b)(1).

(7) **TERRITORY OR FREELY ASSOCIATED STATE.**—The term “territory or freely associated state” has the meaning given the term “insular area” in section 1404 of the Food and Agriculture Act of 1977 (7 U.S.C. 3103).

(8) **TRIBAL ENERGY DEVELOPMENT ORGANIZATION.**—The term “tribal energy development organization” has the meaning given the term in section 2601 of the Energy Policy Act of 1992 (25 U.S.C. 3501).

(9) **TRIBAL ORGANIZATION.**—The term “tribal organization” has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(b) **WIND ENERGY TECHNOLOGY PROGRAM.**—

(1) **ESTABLISHMENT.**—

(A) **IN GENERAL.**—The Secretary shall establish a program to conduct research, development, testing, evaluation, demonstration, and commercialization of wind energy technologies in accordance with this subsection.

(B) **PURPOSES.**—The purposes of the program are the following:

(i) To improve the energy efficiency, cost effectiveness, reliability, resilience, security, integration, manufacturability, and recyclability of wind energy technologies.

(ii) To optimize the performance and operation of wind energy components, turbines, and systems, including through the development of new materials, hardware, and software.

(iii) To optimize the design and adaptability of wind energy technologies to the broadest practical range of geographic, atmospheric, offshore, and other site conditions, including—

(I) at varying hub heights; and

(II) through the use of computer modeling.

(iv) To support the integration of wind energy technologies with—

(I) the electric grid, including transmission, distribution, microgrids, and distributed energy systems; and

(II) other energy technologies and systems, such as—

(aa) other generation sources;

(bb) demand response technologies;

(cc) energy storage technologies; and

(dd) hybrid systems.

(v) To reduce the cost and risk across the lifespan of wind energy technologies, including—

(I) manufacturing, permitting, construction, operations, maintenance, and recycling; and

(II) through the development of solutions to transportation barriers to wind components.

(vi) To reduce and mitigate any potential negative impacts of wind energy technologies on—

(I) human communities;

(II) military operations;

(III) aviation;

(IV) radar; and

(V) wildlife and wildlife habitats.

(vii) To address barriers to the commercialization and export of wind energy technologies.

(viii) To support the domestic wind industry, workforce, and supply chain.

(C) **TARGETS.**—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish targets for the program relating to near-term (up to 2 years),

mid-term (up to 7 years), and long-term (up to 15 years) challenges to the advancement of wind energy technologies, including onshore, offshore, distributed, and off-grid technologies.

(2) **ACTIVITIES.**—

(A) **TYPES OF ACTIVITIES.**—In carrying out the program, the Secretary shall carry out research, development, demonstration, and commercialization activities, including—

(i) awarding grants and awards, on a competitive, merit-reviewed basis;

(ii) performing precompetitive research and development;

(iii) establishing or maintaining demonstration facilities and projects, including through stewardship of existing facilities such as the National Wind Test Center;

(iv) providing technical assistance;

(v) entering into contracts and cooperative agreements;

(vi) providing small business vouchers;

(vii) conducting education and outreach activities;

(viii) conducting workforce development activities; and

(ix) conducting analyses, studies, and reports.

(B) **SUBJECT AREAS.**—The Secretary shall carry out research, development, testing, evaluation, demonstration, and commercialization activities in the following subject areas:

(i) Wind power plant performance, operations, and security.

(ii) New materials and designs relating to all hardware, software, and components of wind energy technologies, including alternatives to minerals and other commodities from foreign sources that are determined to be vulnerable to disruption.

(iii) Advanced wind energy manufacturing technologies and practices, including materials, processes, and design.

(iv) Offshore wind-specific projects and plants, including—

(I) the deep water floating systems, materials, components, and operation of offshore facilities; and

(II) the monitoring and analysis of site and environmental considerations unique to offshore sites.

(v) Integration of wind energy technologies with—

(I) the electric grid, including transmission, distribution, microgrids, and distributed energy systems; and

(II) other energy technologies, including—

(aa) other generation sources;

(bb) demand response technologies; and

(cc) energy storage technologies.

(vi) Methods to improve the lifetime, maintenance, recycling, and reuse of wind energy components and systems.

(vii) Wind power forecasting and atmospheric measurement systems, including for turbines and plant systems of varying height.

(viii) Hybrid wind energy systems, grid-connected and off-grid, that incorporate diverse—

(I) generation sources;

(II) loads; and

(III) storage technologies.

(ix) Reducing, including through education and outreach activities, market barriers to the adoption of wind energy technologies, such as impacts on, or challenges relating to—

(I) distributed wind technologies, including the development of best practices, models, and voluntary streamlined processes for local permitting of distributed wind energy systems to reduce costs;

(II) airspace;

(III) military uses;

(IV) radar;

(V) local communities;

(VI) wildlife and wildlife habitats; and  
(VII) any other appropriate matter, as determined by the Secretary.

(x) Advanced physics-based and data analysis computational tools, in coordination with the high-performance computing programs of the Department.

(xi) Technologies for distributed wind, including micro, small, and medium turbines and the components of those turbines.

(xii) Transformational technologies for harnessing wind energy.

(xiii) Other research areas that advance the purposes of the program, as determined by the Secretary.

(C) **PRIORITIZATION.**—In carrying out activities under the program, the Secretary shall give priority to projects that—

(i) are located in geographically diverse regions of the United States;

(ii) support the development or demonstration of projects—

(I) in collaboration with tribal energy development organizations, Indian tribes, tribal organizations, Native Hawaiian community-based organizations, or territories or freely associated states; or

(II) in economically distressed areas;

(iii) can be replicated in a variety of regions and climates; and

(iv) include business commercialization plans that have the potential for—

(I) domestic manufacturing and production of wind energy technologies; or

(II) exports of wind energy technologies.

(D) **COORDINATION.**—To the maximum extent practicable, the Secretary shall coordinate activities under the program with other relevant programs and capabilities of the Department and other Federal research programs.

(3) **WIND TECHNICIAN TRAINING GRANT PROGRAM.**—The Secretary may award grants, on a competitive basis, to eligible entities to purchase large pieces of wind component equipment, such as nacelles, towers, and blades, for use in training wind technician students in onshore or offshore wind applications.

(4) **WAGES.**—Notwithstanding any other provision of law, all laborers and mechanics employed by contractors or subcontractors on projects funded by grants under this subsection shall be paid wages at rates not less than those prevailing on projects of a similar character in the locality, as determined by the Secretary of Labor, in accordance with subchapter IV of chapter 31 of title 40, United States Code.

(5) **WIND ENERGY PROGRAM STRATEGIC VISION.**—

(A) **IN GENERAL.**—Not later than September 1, 2022, and every 6 years thereafter, the Secretary shall submit to Congress a report on the strategic vision, progress, goals, and targets of the program, including assessments of wind energy markets and manufacturing.

(B) **PREPARATION.**—The Secretary shall coordinate the preparation of the report under subparagraph (A) with—

(i) existing peer review processes;

(ii) studies conducted by the National Laboratories; and

(iii) the multiyear program planning required under section 994 of the Energy Policy Act of 2005 (42 U.S.C. 16358).

(6) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Secretary to carry out the program \$120,000,000 for each of fiscal years 2021 through 2025.

(C) **CONFORMING AMENDMENTS.**—

(1) Section 4 of the Renewable Energy and Energy Efficiency Technology Competitive Act of 1989 (42 U.S.C. 12003) is amended—

(A) in the section heading by striking “WIND”;

(B) in subsection (a)—

(i) in the matter preceding paragraph (1), by striking “wind,”;

(ii) by striking paragraph (1); and

(iii) by redesignating paragraphs (2) through (5) as paragraphs (1) through (4), respectively; and

(C) in subsection (c), in the matter preceding paragraph (1), by striking “the Wind Energy Research Program.”

(2) Section 931(a)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16231(a)(2)) is amended—

(A) by striking subparagraph (B); and

(B) by redesignating subparagraphs (C) through (E) as subparagraphs (B) through (D), respectively.

(3) Section 636 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17215) is amended by striking “section 931(a)(2)(E)(i)” and all that follows through the period at the end and inserting “subparagraph (D)(i) of section 931(a)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16231(a)(2)).”

#### SEC. 1205. SOLAR ENERGY RESEARCH AND DEVELOPMENT.

(a) DEFINITIONS.—In this section:

(1) ECONOMICALLY DISTRESSED AREA.—The term “economically distressed area” means an area described in section 301(a) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161(a)).

(2) ELIGIBLE ENTITY.—The term “eligible entity” means—

(A) an institution of higher education;

(B) a National Laboratory;

(C) a Federal research agency;

(D) a State research agency;

(E) a research agency associated with a territory or freely associated state;

(F) a tribal energy development organization;

(G) an Indian tribe;

(H) a tribal organization;

(I) a Native Hawaiian community-based organization;

(J) a nonprofit research organization;

(K) an industrial entity;

(L) any other entity, as determined by the Secretary; and

(M) a consortium of 2 or more entities described in subparagraphs (A) through (L).

(3) INDIAN TRIBE.—The term “Indian tribe” has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(4) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

(5) NATIVE HAWAIIAN COMMUNITY-BASED ORGANIZATION.—The term “Native Hawaiian community-based organization” has the meaning given the term in section 6207 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7517).

(6) PHOTOVOLTAIC DEVICE.—The term “photovoltaic device” means—

(A) a device that converts light directly into electricity through a solid-state, semiconductor process;

(B) the photovoltaic cells of a device described in subparagraph (A); and

(C) the electronic and electrical components of a device described in subparagraph (A).

(7) PROGRAM.—The term “program” means the program established under subsection (b)(1)(A).

(8) SOLAR ENERGY.—The term “solar energy” means—

(A) thermal or electric energy derived from radiation from the Sun; or

(B) energy resulting from a chemical reaction caused by radiation recently originated in the Sun.

(9) TERRITORY OR FREELY ASSOCIATED STATE.—The term “territory or freely associ-

ated state” has the meaning given the term “insular area” in section 1404 of the Food and Agriculture Act of 1977 (7 U.S.C. 3103).

(10) TRIBAL ENERGY DEVELOPMENT ORGANIZATION.—The term “tribal energy development organization” has the meaning given the term in section 2601 of the Energy Policy Act of 1992 (25 U.S.C. 3501).

(11) TRIBAL ORGANIZATION.—The term “tribal organization” has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(b) SOLAR ENERGY TECHNOLOGY PROGRAM.—

(1) ESTABLISHMENT.—

(A) IN GENERAL.—The Secretary shall establish a program to conduct research, development, testing, evaluation, demonstration, and commercialization of solar energy technologies in accordance with this subsection.

(B) PURPOSES.—The purposes of the program are the following:

(i) To improve the energy efficiency, cost effectiveness, reliability, resilience, security, integration, manufacturability, and recyclability of solar energy technologies.

(ii) To optimize the performance and operation of solar energy components, cells, and systems, and enabling technologies, including through the development of new materials, hardware, and software.

(iii) To optimize the design and adaptability of solar energy systems to the broadest practical range of geographic and atmospheric conditions.

(iv) To support the integration of solar energy technologies with the electric grid and complementary energy technologies.

(v) To create and improve the conversion of solar energy to other useful forms of energy or other products.

(vi) To reduce and mitigate any potential negative impacts of solar energy technologies on humans, wildlife, and wildlife habitats.

(vii) To address barriers to the commercialization and export of solar energy technologies.

(viii) To support the domestic solar industry, workforce, and supply chain.

(C) TARGETS.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish targets for the program to address near-term (up to 2 years), mid-term (up to 7 years), and long-term (up to 15 years) challenges to the advancement of solar energy systems.

(2) ACTIVITIES.—

(A) TYPES OF ACTIVITIES.—In carrying out the program, the Secretary shall carry out research, development, demonstration, and commercialization activities, including—

(i) awarding grants and awards, on a competitive, merit-reviewed basis;

(ii) performing precompetitive research and development;

(iii) establishing or maintaining demonstration facilities and projects, including through stewardship of existing facilities;

(iv) providing technical assistance;

(v) entering into contracts and cooperative agreements;

(vi) providing small business vouchers;

(vii) establishing prize competitions;

(viii) conducting education and outreach activities; and

(ix) conducting analyses, studies, and reports.

(B) SUBJECT AREAS.—The Secretary shall carry out research, development, testing, evaluation, demonstration, and commercialization activities in the following subject areas:

(i) Advanced solar energy technologies, including—

(I) new materials, components, designs, and systems, including perovskites;

(II) advanced photovoltaic and thin-film devices;

(III) concentrated solar power;

(IV) solar heating and cooling; and

(V) enabling technologies for solar energy systems, including hardware and software.

(ii) Solar energy technology performance, operations, and security.

(iii) Integration of solar energy technologies with—

(I) the electric grid, including transmission, distribution, microgrids, and distributed energy systems;

(II) other energy technologies, including—

(aa) other generation sources;

(bb) demand response technologies; and

(cc) energy storage technologies; and

(III) other nonelectric applications, such as in the agriculture, transportation, industrial, and fuels sectors.

(iv) Advanced solar energy manufacturing technologies and practices, including materials, processes, and design.

(v) Methods to improve the lifetime, maintenance, recycling, and reuse of solar energy components and systems.

(vi) Solar energy forecasting, modeling, and atmospheric measurement systems, including for small-scale, large-scale, and aggregated systems.

(vii) Hybrid solar energy systems that incorporate diverse—

(I) generation sources;

(II) loads; and

(III) storage technologies.

(viii) Reducing market barriers to the adoption of solar energy technologies, including impacts on, or challenges relating to—

(I) distributed solar technologies, including the development of best practices, models, and voluntary streamlined processes for local permitting of distributed solar energy systems to reduce costs;

(II) local communities;

(III) wildlife and wildlife habitats; and

(IV) any other appropriate matter, as determined by the Secretary.

(ix) Transformational technologies for harnessing solar energy.

(x) Other research areas that advance the purposes of the program, as determined by the Secretary.

(C) PRIORITIZATION.—In carrying out activities under the program, the Secretary shall give priority to projects that—

(i) are located in a geographically diverse range of eligible entities;

(ii) support the development or demonstration of projects—

(I) in collaboration with tribal energy development organizations, Indian tribes, tribal organizations, Native Hawaiian community-based organizations, or territories or freely associated states; or

(II) in economically distressed areas;

(iii) can be replicated in a variety of regions and climates; and

(iv) include business commercialization plans that have the potential for—

(I) domestic manufacturing and production of solar energy technologies; or

(II) exports of solar energy technologies.

(D) COORDINATION.—To the maximum extent practicable, the Secretary shall coordinate activities under the program with other relevant programs and capabilities of the Department and other Federal research programs.

(E) USE OF FUNDS.—To the extent that funding is not otherwise available through other Federal programs or power purchase agreements, funding awarded under this paragraph may be used for additional non-technology costs, as determined to be appropriate by the Secretary, such as engineering or feasibility studies.



(3) **ADVANCED SOLAR ENERGY MANUFACTURING INITIATIVE.**—

(A) **GRANTS.**—In addition to the program activities described in paragraph (2), in carrying out the program, the Secretary shall award multiyear grants to eligible entities for research, development, and demonstration projects to advance new solar energy manufacturing technologies and techniques.

(B) **PRIORITY.**—In awarding grants under subparagraph (A), to the extent practicable, the Secretary shall give priority to solar energy manufacturing projects that—

(i) increase efficiency and cost effectiveness in—

- (I) the manufacturing process; and
- (II) the use of resources.

(ii) support domestic supply chains for materials and components;

(iii) identify and incorporate nonhazardous alternative materials for components and devices;

(iv) operate in partnership with tribal energy development organizations, Indian tribes, tribal organizations, Native Hawaiian community-based organizations, or territories or freely associated states; or

(v) are located in economically distressed areas.

(C) **EVALUATION.**—Not later than 3 years after the date of enactment of this Act, and every 4 years thereafter, the Secretary shall conduct, and make available to the public and the relevant committees of Congress, an independent review of the progress of the grants awarded under subparagraph (A).

(4) **SOLAR ENERGY TECHNOLOGY RECYCLING RESEARCH, DEVELOPMENT, AND DEMONSTRATION PROGRAM.**—

(A) **IN GENERAL.**—In addition to the program activities described in paragraph (2), in carrying out the program, the Secretary shall award multiyear grants to eligible entities for research, development, and demonstration projects to create innovative and practical approaches to increase the reuse and recycling of solar energy technologies, including—

(i) by increasing the efficiency and cost effectiveness of the recovery of raw materials from solar energy technology components and systems, including enabling technologies such as inverters;

(ii) by minimizing environmental impacts from the recovery and disposal processes;

(iii) by addressing any barriers to the research, development, demonstration, and commercialization of technologies and processes for the disassembly and recycling of solar energy devices;

(iv) by developing alternative materials, designs, manufacturing processes, and other aspects of solar energy technologies and the disassembly and resource recovery process that enable efficient, cost effective, and environmentally responsible disassembly of, and resource recovery from, solar energy technologies; and

(v) strategies to increase consumer acceptance of, and participation in, the recycling of photovoltaic devices.

(B) **DISSEMINATION OF RESULTS.**—The Secretary shall make available to the public and the relevant committees of Congress the results of the projects carried out through grants awarded under subparagraph (A), including any educational and outreach materials.

(5) **SOLAR ENERGY TECHNOLOGY MATERIALS PHYSICAL PROPERTY DATABASE.**—

(A) **IN GENERAL.**—Not later than September 1, 2022, the Secretary shall establish a comprehensive physical property database of materials for use in solar energy technologies, which shall identify the type, quantity, country of origin, source, significant uses, and physical properties of materials used in solar energy technologies.

(B) **COORDINATION.**—In establishing the database described in subparagraph (A), the Secretary shall coordinate with—

(i) the Director of the National Institute of Standards and Technology;

(ii) the Administrator of the Environmental Protection Agency;

(iii) the Secretary of the Interior; and

(iv) relevant industry stakeholders, as determined by the Secretary.

(6) **SOLAR ENERGY TECHNOLOGY PROGRAM STRATEGIC VISION.**—

(A) **IN GENERAL.**—Not later than September 1, 2022, and every 6 years thereafter, the Secretary shall submit to Congress a report on the strategic vision, progress, goals, and targets of the program, including assessments of solar energy markets and manufacturing.

(B) **PREPARATION.**—The Secretary shall coordinate the preparation of the report under subparagraph (A) with—

(i) existing peer review processes;

(ii) studies conducted by the National Laboratories; and

(iii) the multiyear program planning required under section 994 of the Energy Policy Act of 2005 (42 U.S.C. 16358).

(7) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Secretary to carry out the program \$270,000,000 for each of fiscal years 2021 through 2025.

(c) **CONFORMING AMENDMENTS.**—

(1) The Solar Energy Research, Development, and Demonstration Act of 1974 (42 U.S.C. 5551 et seq.) is repealed.

(2) Section 6(b)(3) of the Federal Non-nuclear Energy Research and Development Act of 1974 (42 U.S.C. 5905(b)(3)) is amended—

(A) by striking subparagraph (L); and

(B) by redesignating subparagraphs (M) through (S) as subparagraphs (L) through (R), respectively.

(3) The Solar Photovoltaic Energy Research, Development, and Demonstration Act of 1978 (42 U.S.C. 5581 et seq.) is repealed.

(4) Section 4 of the Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989 (42 U.S.C. 12003) is amended—

(A) in the section heading, by striking “**PHOTOVOLTAICS, AND SOLAR THERMAL**” and inserting “**ALCOHOL FROM BIOMASS AND OTHER TECHNOLOGY**”;

(B) in subsection (a)—

(i) in the matter preceding paragraph (1) (as redesignated by section 1204(c)(1)(B)(iii)), by striking “photovoltaics, and solar thermal energy” and inserting “alcohol from biomass and other energy technology”;

(ii) by striking paragraphs (1) and (2) (as redesignated by section 1204(c)(1)(B)(iii)); and

(iii) by redesignating paragraphs (3) and (4) (as redesignated by section 1204(c)(1)(B)(iii)) as paragraphs (1) and (2), respectively; and

(C) in subsection (c)—

(i) in the matter preceding paragraph (1), by striking “the Photovoltaic Energy Systems Program, the Solar Thermal Energy Systems Program,”;

(ii) in paragraph (1)—

(I) by striking subparagraph (A); and

(II) by redesignating subparagraphs (B) and (C) as subparagraphs (A) and (B), respectively; and

(iii) in paragraph (2)—

(I) by striking subparagraph (A); and

(II) by redesignating subparagraphs (B) and (C) as subparagraphs (A) and (B), respectively.

(5) Section 931 of the Energy Policy Act of 2005 (42 U.S.C. 16231) is amended—

(A) in subsection (a)(2)—

(i) by striking subparagraph (A); and

(ii) by redesignating subparagraphs (B) through (D) (as redesignated by section 1204(c)(2)(B)) as subparagraphs (A) through (C), respectively;

(B) by striking subsection (d); and

(C) by redesignating subsections (e) through (g) as subsections (d) through (f), respectively.

(6)(A) Sections 606 and 607 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17174, 17175) are repealed.

(B) The table of contents in section 1(b) of the Energy Independence and Security Act of 2007 (Public Law 110-140; 121 Stat. 1495) is amended by striking the items relating to sections 606 and 607.

(d) **SAVINGS PROVISION.**—The repeal of the Solar Energy Research, Development, and Demonstration Act of 1974 (42 U.S.C. 5551 et seq.) under subsection (c)(1) shall not affect the authority of the Secretary to conduct research and development on solar energy.

### Subtitle C—Energy Storage

#### SEC. 1301. BETTER ENERGY STORAGE TECHNOLOGY.

(a) **DEFINITIONS.**—In this section:

(1) **ENERGY STORAGE SYSTEM.**—The term “energy storage system” means any system, equipment, facility, or technology that—

(A) is capable of absorbing or converting energy, storing the energy for a period of time, and dispatching the energy; and

(B)(i) uses mechanical, electrochemical, thermal, electrolysis, or other processes to convert and store electric energy that was generated at an earlier time for use at a later time; or

(ii) stores energy in an electric, thermal, or gaseous state for direct use for heating or cooling at a later time in a manner that avoids the need to use electricity or other fuel sources at that later time, such as a grid-enabled water heater.

(2) **PROGRAM.**—The term “program” means the Energy Storage System Research, Development, and Deployment Program established under subsection (b)(1).

(b) **ENERGY STORAGE SYSTEM RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM.**—

(1) **ESTABLISHMENT.**—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a program, to be known as the “Energy Storage System Research, Development, and Deployment Program”.

(2) **INITIAL PROGRAM OBJECTIVES.**—The program shall focus on research, development, and deployment of—

(A) energy storage systems designed to further the development of technologies—

(i) for large-scale commercial deployment;

(ii) for deployment at cost targets established by the Secretary;

(iii) for hourly and subhourly durations required to provide reliability services to the grid;

(iv) for daily durations, which have—

(I) the capacity to discharge energy for a minimum of 6 hours; and

(II) a system lifetime of at least 20 years under regular operation;

(v) for weekly or monthly durations, which have—

(I) the capacity to discharge energy for 10 to 100 hours, at a minimum; and

(II) a system lifetime of at least 20 years under regular operation; and

(vi) for seasonal durations, which have—

(I) the capability to address seasonal variations in supply and demand; and

(II) a system lifetime of at least 20 years under regular operation;

(B) distributed energy storage technologies and applications, including building-grid integration;

(C) transportation energy storage technologies and applications, including vehicle-grid integration;

(D) cost-effective systems and methods for—

(i) the reclamation, recycling, and disposal of energy storage materials, including lithium, cobalt, nickel, and graphite; and

(ii) the reuse and repurposing of energy storage system technologies;

(E) advanced control methods for energy storage systems;

(F) pumped hydroelectric energy storage systems to advance—

(i) adoption of innovative technologies, including—

(I) adjustable-speed, ternary, and other new pumping and generating equipment designs;

(II) modular systems;

(III) closed-loop systems, including mines and quarries; and

(IV) other critical equipment and materials for pumped hydroelectric energy storage, as determined by the Secretary; and

(ii) reductions of equipment costs, civil works costs, and construction times for pumped hydroelectric energy storage projects, with the goal of reducing those costs by 50 percent;

(G) models and tools to demonstrate the benefits of energy storage to—

(i) power and water supply systems;

(ii) electric generation portfolio optimization; and

(iii) expanded deployment of other renewable energy technologies, including in hybrid energy storage systems; and

(H) energy storage use cases from individual and combination technology applications, including value from various-use cases and energy storage services.

(3) TESTING AND VALIDATION.—In coordination with 1 or more National Laboratories, the Secretary shall accelerate the development, standardized testing, and validation of energy storage systems under the program by developing testing and evaluation methodologies for—

(A) storage technologies, controls, and power electronics for energy storage systems under a variety of operating conditions;

(B) standardized and grid performance testing for energy storage systems, materials, and technologies during each stage of development, beginning with the research stage and ending with the deployment stage;

(C) reliability, safety, and durability testing under standard and evolving duty cycles; and

(D) accelerated life testing protocols to predict estimated lifetime metrics with accuracy.

(4) PERIODIC EVALUATION OF PROGRAM OBJECTIVES.—Not less frequently than once every calendar year, the Secretary shall evaluate and, if necessary, update the program objectives to ensure that the program continues to advance energy storage systems toward widespread commercial deployment by lowering the costs and increasing the duration of energy storage resources.

(5) ENERGY STORAGE STRATEGIC PLAN.—

(A) IN GENERAL.—The Secretary shall develop a 10-year strategic plan for the program, and update the plan, in accordance with this paragraph.

(B) CONTENTS.—The strategic plan developed under subparagraph (A) shall—

(i) be coordinated with and integrated across other relevant offices in the Department;

(ii) to the extent practicable, include metrics that can be used to evaluate storage technologies;

(iii) identify Department programs that—

(I) support the research and development activities described in paragraph (2) and the demonstration projects under subsection (c); and

(II)(aa) do not support the activities or projects described in subclause (I); but

(bb) are important to the development of energy storage systems and the mission of the Department, as determined by the Secretary;

(iv) include expected timelines for—

(I) the accomplishment of relevant objectives under current programs of the Department relating to energy storage systems; and

(II) the commencement of any new initiatives within the Department relating to energy storage systems to accomplish those objectives; and

(v) incorporate relevant activities described in the Grid Modernization Initiative Multi-Year Program Plan.

(C) SUBMISSION TO CONGRESS.—Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Energy and Commerce and Science, Space, and Technology of the House of Representatives the strategic plan developed under subparagraph (A).

(D) UPDATES TO PLAN.—The Secretary—

(i) shall annually review the strategic plan developed under subparagraph (A); and

(ii) may periodically revise the strategic plan as appropriate.

(6) LEVERAGING OF RESOURCES.—The program may be led by a specific office of the Department, but shall be cross-cutting in nature, so that in carrying out activities under the program, the Secretary (or a designee of the Secretary charged with leading the program) shall leverage existing Federal resources, including, at a minimum, the expertise and resources of—

(A) the Office of Electricity Delivery and Energy Reliability;

(B) the Office of Energy Efficiency and Renewable Energy, including the Water Power Technologies Office; and

(C) the Office of Science, including—

(i) the Basic Energy Sciences Program;

(ii) the Advanced Scientific Computing Research Program;

(iii) the Biological and Environmental Research Program; and

(D) the Electricity Storage Research Initiative established under section 975 of the Energy Policy Act of 2005 (42 U.S.C. 16315).

(7) PROTECTING PRIVACY AND SECURITY.—In carrying out this subsection, the Secretary shall identify, incorporate, and follow best practices for protecting the privacy of individuals and businesses and the respective sensitive data of the individuals and businesses, including by managing privacy risk and implementing the Fair Information Practice Principles of the Federal Trade Commission for the collection, use, disclosure, and retention of individual electric consumer information in accordance with the Office of Management and Budget Circular A-130 (or successor circulars).

(c) ENERGY STORAGE DEMONSTRATION PROJECTS; PILOT GRANT PROGRAM.—

(1) DEMONSTRATION PROJECTS.—Not later than September 30, 2023, the Secretary shall, to the maximum extent practicable, enter into agreements to carry out not fewer than 5 energy storage system demonstration projects, including at least 1 energy storage system demonstration project designed to further the development of technologies described in clause (v) or (vi) of subsection (b)(2)(A).

(2) ENERGY STORAGE PILOT GRANT PROGRAM.—

(A) DEFINITION OF ELIGIBLE ENTITY.—In this paragraph, the term “eligible entity” means—

(i) a State energy office (as defined in section 124(a) of the Energy Policy Act of 2005 (42 U.S.C. 15821(a)));;

(ii) an Indian tribe (as defined in section 4 of the Native American Housing Assistance and Self-Determination Act of 1996 (25 U.S.C. 4103);

(iii) a tribal organization (as defined in section 3765 of title 38, United States Code);

(iv) an institution of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001));

(v) an electric utility, including—

(I) an electric cooperative;

(II) a political subdivision of a State, such as a municipally owned electric utility, or any agency, authority, corporation, or instrumentality of a State political subdivision; and

(III) an investor-owned utility; and

(vi) a private energy storage company.

(B) ESTABLISHMENT.—The Secretary shall establish a competitive grant program under which the Secretary shall award grants to eligible entities to carry out demonstration projects for pilot energy storage systems.

(C) SELECTION REQUIREMENTS.—In selecting eligible entities to receive a grant under subparagraph (B), the Secretary shall, to the maximum extent practicable—

(i) ensure regional diversity among eligible entities awarded grants, including ensuring participation of eligible entities that are rural States and States with high energy costs;

(ii) ensure that grants are awarded for demonstration projects that—

(I) expand on the existing technology demonstration programs of the Department;

(II) are designed to achieve 1 or more of the objectives described in subparagraph (D); and

(III) inject or withdraw energy from the bulk power system, electric distribution system, building energy system, or microgrid (grid-connected or islanded mode) where the project is located; and

(iii) give consideration to proposals from eligible entities for securing energy storage through competitive procurement or contract for service.

(D) OBJECTIVES.—Each demonstration project carried out by a grant awarded under subparagraph (B) shall have 1 or more of the following objectives:

(i) To improve the security of critical infrastructure and emergency response systems.

(ii) To improve the reliability of transmission and distribution systems, particularly in rural areas, including high-energy-cost rural areas.

(iii) To optimize transmission or distribution system operation and power quality to defer or avoid costs of replacing or upgrading electric grid infrastructure, including transformers and substations.

(iv) To supply energy at peak periods of demand on the electric grid or during periods of significant variation of electric grid supply.

(v) To reduce peak loads of homes and businesses.

(vi) To improve and advance power conversion systems.

(vii) To provide ancillary services for grid stability and management.

(viii) To integrate renewable energy resource production.

(ix) To increase the feasibility of microgrids (grid-connected or islanded mode).

(x) To enable the use of stored energy in forms other than electricity to support the natural gas system and other industrial processes.

(xi) To integrate fast charging of electric vehicles.

(xii) To improve energy efficiency.

(3) REPORTS.—Not less frequently than once every 2 years for the duration of the programs under paragraphs (1) and (2), the Secretary shall submit to Congress and make publicly available a report describing the performance of those programs.

(4) NO PROJECT OWNERSHIP INTEREST.—The Federal Government shall not hold any equity or other ownership interest in any energy storage system that is part of a project under this subsection unless the holding is agreed to by each participant of the project.

(d) LONG-DURATION DEMONSTRATION INITIATIVE AND JOINT PROGRAM.—

(1) DEFINITIONS.—In this subsection:

(A) DIRECTOR OF ARPA-E.—The term “Director of ARPA-E” has the meaning given the term in section 5012(a) of the America COMPETES Act (42 U.S.C. 16538(a)).

(B) DIRECTOR OF ESTCP.—The term “Director of ESTCP” means the Secretary of Defense, acting through the Director of the Environmental Security Technology Certification Program of the Department of Defense.

(C) INITIATIVE.—The term “Initiative” means the demonstration initiative established under paragraph (2).

(D) JOINT PROGRAM.—The term “Joint Program” means the joint program established under paragraph (4).

(E) SECRETARY.—The term “Secretary” means the Secretary, acting through the Director of ARPA-E.

(2) ESTABLISHMENT OF INITIATIVE.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a demonstration initiative composed of demonstration projects focused on the development of long-duration energy storage technologies.

(3) SELECTION OF PROJECTS.—To the maximum extent practicable, in selecting demonstration projects to participate in the Initiative, the Secretary shall—

(A) ensure a range of technology types;

(B) ensure regional diversity among projects; and

(C) consider bulk power level, distribution power level, behind-the-meter, microgrid (grid-connected or islanded mode), and off-grid applications.

(4) JOINT PROGRAM.—

(A) ESTABLISHMENT.—As part of the Initiative, the Secretary, in consultation with the Director of ESTCP, shall establish within the Department a joint program to carry out projects—

(i) to demonstrate promising long-duration energy storage technologies at different scales; and

(ii) to help new, innovative long-duration energy storage technologies become commercially viable.

(B) MEMORANDUM OF UNDERSTANDING.—Not later than 200 days after the date of enactment of this Act, the Secretary shall enter into a memorandum of understanding with the Director of ESTCP to administer the Joint Program.

(C) INFRASTRUCTURE.—In carrying out the Joint Program, the Secretary and the Director of ESTCP shall—

(i) use existing test-bed infrastructure at—

(I) Department facilities; and

(II) Department of Defense installations; and

(ii) develop new infrastructure for identified projects, if appropriate.

(D) GOALS AND METRICS.—The Secretary and the Director of ESTCP shall develop goals and metrics for technological progress under the Joint Program consistent with energy resilience and energy security policies.

(E) SELECTION OF PROJECTS.—

(i) IN GENERAL.—To the maximum extent practicable, in selecting projects to participate in the Joint Program, the Secretary and the Director of ESTCP shall—

(I) ensure that projects are carried out under conditions that represent a variety of environments with different physical conditions and market constraints; and

(II) ensure an appropriate balance of—

(aa) larger, higher-cost projects; and

(bb) smaller, lower-cost projects.

(ii) PRIORITY.—In carrying out the Joint Program, the Secretary and the Director of ESTCP shall give priority to demonstration projects that—

(I) make available to the public project information that will accelerate deployment of long-duration energy storage technologies; and

(II) will be carried out in the field.

(e) TECHNICAL AND PLANNING ASSISTANCE PROGRAM.—

(1) DEFINITIONS.—In this subsection:

(A) ELIGIBLE ENTITY.—The term “eligible entity” means—

(i) an electric cooperative;

(ii) a political subdivision of a State, such as a municipally owned electric utility, or any agency, authority, corporation, or instrumentality of a State political subdivision;

(iii) a not-for-profit entity that is in a partnership with not less than 6 entities described in clause (i) or (ii); and

(iv) an investor-owned utility.

(B) PROGRAM.—The term “program” means the technical and planning assistance program established under paragraph (2)(A).

(2) ESTABLISHMENT.—

(A) IN GENERAL.—The Secretary shall establish a technical and planning assistance program to assist eligible entities in identifying, evaluating, planning, designing, and developing processes to procure energy storage systems.

(B) ASSISTANCE AND GRANTS.—Under the program, the Secretary shall—

(i) provide technical and planning assistance, including disseminating information, directly to eligible entities; and

(ii) award grants to eligible entities to contract to obtain technical and planning assistance from outside experts.

(C) FOCUS.—In carrying out the program, the Secretary shall focus on energy storage system projects that have the greatest potential for—

(i) strengthening the reliability and resiliency of energy infrastructure;

(ii) reducing the cost of energy storage systems;

(iii) improving the feasibility of microgrids (grid-connected or islanded mode), particularly in rural areas, including high energy cost rural areas;

(iv) reducing consumer electricity costs; or

(v) maximizing local job creation.

(3) TECHNICAL AND PLANNING ASSISTANCE.—

(A) IN GENERAL.—Technical and planning assistance provided under the program shall include assistance with 1 or more of the following activities relating to energy storage systems:

(i) Identification of opportunities to use energy storage systems.

(ii) Feasibility studies to assess the potential for development of new energy storage systems or improvement of existing energy storage systems.

(iii) Assessment of technical and economic characteristics, including a cost-benefit analysis.

(iv) Utility interconnection.

(v) Permitting and siting issues.

(vi) Business planning and financial analysis.

(vii) Engineering design.

(viii) Resource adequacy planning.

(ix) Resilience planning and valuation.

(B) EXCLUSION.—Technical and planning assistance provided under the program shall not be used to pay any person for influencing or attempting to influence an officer or employee of any Federal, State, or local agency, a Member of Congress, an employee of a Member of Congress, a State or local legisla-

tive body, or an employee of a State or local legislative body.

(4) INFORMATION DISSEMINATION.—The information disseminated under paragraph (2)(B)(i) shall include—

(A) information relating to the topics described in paragraph (3)(A), including case studies of successful examples;

(B) computational tools or software for assessment, design, and operation and maintenance of energy storage systems;

(C) public databases that track existing and planned energy storage systems;

(D) best practices for the utility and grid operator business processes associated with the topics described in paragraph (3)(A); and

(E) relevant State policies or regulations associated with the topics described in paragraph (3)(A).

(5) APPLICATIONS.—

(A) IN GENERAL.—The Secretary shall seek applications for the program—

(i) on a competitive, merit-reviewed basis; and

(ii) on a periodic basis, but not less frequently than once every 12 months.

(B) APPLICATION.—An eligible entity desiring to apply for the program shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require, including whether the eligible entity is applying for—

(i) direct technical or planning assistance under paragraph (2)(B)(i); or

(ii) a grant under paragraph (2)(B)(ii).

(C) PRIORITIES.—In selecting eligible entities for technical and planning assistance under the program, the Secretary shall give priority to eligible entities described in clauses (i) and (ii) of paragraph (1)(A).

(6) REPORTS.—The Secretary shall submit to Congress and make available to the public—

(A) not less frequently than once every 2 years, a report describing the performance of the program, including a synthesis and analysis of any information the Secretary requires grant recipients to provide to the Secretary as a condition of receiving a grant; and

(B) on termination of the program, an assessment of the success of, and education provided by, the measures carried out by eligible entities under the program.

(7) COST-SHARING.—Activities under this subsection shall be subject to the cost-sharing requirements under section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).

(f) ENERGY STORAGE MATERIALS RECYCLING PRIZE COMPETITION.—Section 1008 of the Energy Policy Act of 2005 (42 U.S.C. 16396) is amended by adding at the end the following:

“(g) ENERGY STORAGE MATERIALS RECYCLING PRIZE COMPETITION.—

“(1) DEFINITION OF CRITICAL ENERGY STORAGE MATERIALS.—In this subsection, the term ‘critical energy storage materials’ includes—

“(A) lithium;

“(B) cobalt;

“(C) nickel;

“(D) graphite; and

“(E) any other material determined by the Secretary to be critical to the continued growing supply of energy storage resources.

“(2) PRIZE AUTHORITY.—

“(A) IN GENERAL.—As part of the program established under subsection (a), the Secretary shall establish an award program, to be known as the ‘Energy Storage Materials Recycling Prize Competition’ (referred to in this subsection as the ‘program’), under which the Secretary shall carry out prize competitions and make awards to advance the recycling of critical energy storage materials.

“(B) FREQUENCY.—To the maximum extent practicable, the Secretary shall carry out a

competition under the program not less frequently than once every calendar year.

“(3) ELIGIBILITY.—

“(A) IN GENERAL.—To be eligible to win a prize under the program, an individual or entity—

“(i) shall have complied with the requirements of the competition as described in the announcement for that competition published in the Federal Register by the Secretary under paragraph (6);

“(ii) in the case of a private entity, shall be incorporated in the United States and maintain a primary place of business in the United States;

“(iii) in the case of an individual, whether participating singly or in a group, shall be a citizen of, or an alien lawfully admitted for permanent residence in, the United States.

“(B) EXCLUSIONS.—The following entities and individuals shall not be eligible to win a prize under the program:

“(i) A Federal entity.

“(ii) A Federal employee (including an employee of a National Laboratory) acting within the scope of employment.

“(4) AWARDS.—In carrying out the program, the Secretary shall award cash prizes, in amounts to be determined by the Secretary, to each individual or entity selected through a competitive process to develop advanced methods or technologies to recycle critical energy storage materials from energy storage systems.

“(5) CRITERIA.—

“(A) IN GENERAL.—The Secretary shall establish objective, merit-based criteria for awarding the prizes in each competition carried out under the program.

“(B) REQUIREMENTS.—The criteria established under subparagraph (A) shall prioritize advancements in methods or technologies that present the greatest potential for large-scale commercial deployment.

“(C) CONSULTATION.—In establishing criteria under subparagraph (A), the Secretary shall consult with appropriate members of private industry involved in the commercial deployment of energy storage systems.

“(6) ADVERTISING AND SOLICITATION OF COMPETITORS.—

“(A) IN GENERAL.—The Secretary shall announce each prize competition under the program by publishing a notice in the Federal Register.

“(B) REQUIREMENTS.—Each notice published under subparagraph (A) shall describe the essential elements of the competition, such as—

“(i) the subject of the competition;

“(ii) the duration of the competition;

“(iii) the eligibility requirements for participation in the competition;

“(iv) the process for participants to register for the competition;

“(v) the amount of the prize; and

“(vi) the criteria for awarding the prize.

“(7) JUDGES.—

“(A) IN GENERAL.—For each prize competition under the program, the Secretary shall assemble a panel of qualified judges to select the winner or winners of the competition on the basis of the criteria established under paragraph (5).

“(B) SELECTION.—The judges for each competition shall include appropriate members of private industry involved in the commercial deployment of energy storage systems.

“(C) CONFLICTS.—An individual may not serve as a judge in a prize competition under the program if the individual, the spouse of the individual, any child of the individual, or any other member of the household of the individual—

“(i) has a personal or financial interest in, or is an employee, officer, director, or agent of, any entity that is a registered participant

in the prize competition for which the individual will serve as a judge; or

“(ii) has a familial or financial relationship with a registered participant in the prize competition for which the individual will serve as a judge.

“(8) REPORT TO CONGRESS.—Not later than 60 days after the date on which the first prize is awarded under the program, and annually thereafter, the Secretary shall submit to Congress a report that—

“(A) identifies each award recipient;

“(B) describes the advanced methods or technologies developed by each award recipient; and

“(C) specifies actions being taken by the Department toward commercial application of all methods or technologies with respect to which a prize has been awarded under the program.

“(9) ANTI-DEFICIENCY ACT.—The Secretary shall carry out the program in accordance with section 1341 of title 31, United States Code (commonly referred to as the ‘Anti-Deficiency Act’).

“(10) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection \$10,000,000 for each of fiscal years 2020 through 2024, to remain available until expended.”.

(g) REGULATORY ACTIONS TO ENCOURAGE ENERGY STORAGE DEPLOYMENT.—

(1) DEFINITIONS.—In this subsection:

(A) COMMISSION.—The term “Commission” means the Federal Energy Regulatory Commission.

(B) ELECTRIC STORAGE RESOURCE.—The term “electric storage resource” means a resource capable of receiving electric energy from the grid and storing that electric energy for later injection back into the grid.

(2) REGULATORY ACTION.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Commission shall issue a regulation to identify the eligibility of, and process for, electric storage resources—

(i) to receive cost recovery through Commission-regulated rates for the transmission of electric energy in interstate commerce; and

(ii) that receive cost recovery under clause (1) to receive compensation for other services (such as the sale of energy, capacity, or ancillary services) without regard to whether those services are provided concurrently with the transmission service described in clause (i).

(B) PROHIBITION OF DUPLICATE RECOVERY.—Any regulation issued under subparagraph (A) shall preclude the receipt of unjust and unreasonable double recovery for electric storage resources providing services described in clauses (i) and (ii) of that subparagraph.

(3) ELECTRIC STORAGE RESOURCES TECHNICAL CONFERENCE.—

(A) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Commission shall convene a technical conference on the potential for electric storage resources to improve the operation of electric systems.

(B) REQUIREMENTS.—The technical conference under subparagraph (A) shall—

(i) identify opportunities for further consideration of electric storage resources in regional and interregional transmission planning processes within the jurisdiction of the Commission;

(ii) identify all energy, capacity, and ancillary service products, market designs, or rules that—

(I) are within the jurisdiction of the Commission; and

(II) enable and compensate for the use of electric storage resources that improve the operation of electric systems;

(iii) examine additional products, market designs, or rules that would enable and compensate for the use of electric storage resources for improving the operation of electric systems; and

(iv) examine the functional value of electric storage resources at the transmission and distribution system interface for purposes of providing electric system reliability.

(h) COORDINATION.—To the maximum extent practicable, the Secretary shall coordinate the activities under this section (including activities conducted pursuant to the amendments made by this section) among the offices and employees of the Department, other Federal agencies, and other relevant entities—

(1) to ensure appropriate collaboration; and

(2) to avoid unnecessary duplication of those activities.

(i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated—

(1) to carry out subsection (b), \$100,000,000 for each of fiscal years 2021 through 2025, to remain available until expended;

(2) to carry out subsection (c), \$100,000,000 for each of fiscal years 2021 through 2025, to remain available until expended;

(3) to carry out subsection (d), \$50,000,000 for each of fiscal years 2021 through 2025, to remain available until expended; and

(4) to carry out subsection (e), \$20,000,000 for each of fiscal years 2021 through 2025, to remain available until expended.

**SEC. 1302. BUREAU OF RECLAMATION PUMPED STORAGE HYDROPOWER DEVELOPMENT.**

(a) AUTHORITY FOR PUMPED STORAGE HYDROPOWER DEVELOPMENT USING MULTIPLE BUREAU OF RECLAMATION RESERVOIRS.—Section 9(c) of the Reclamation Project Act of 1939 (43 U.S.C. 485h(c)) is amended—

(1) in paragraph (1), in the fourth sentence, by striking “, including small conduit hydropower development” and inserting “and reserve to the Secretary the exclusive authority to develop small conduit hydropower using Bureau of Reclamation facilities and pumped storage hydropower exclusively using Bureau of Reclamation reservoirs”; and

(2) in paragraph (8), by striking “has been filed with the Federal Energy Regulatory Commission as of the date of the enactment of the Bureau of Reclamation Small Conduit Hydropower Development and Rural Jobs Act” and inserting “was filed with the Federal Energy Regulatory Commission before August 9, 2013, and is still pending”.

(b) LIMITATIONS ON ISSUANCE OF CERTAIN LEASES OF POWER PRIVILEGE.—

(1) DEFINITIONS.—In this subsection:

(A) COMMISSION.—The term “Commission” means the Federal Energy Regulatory Commission.

(B) DIRECTOR.—The term “Director” means the Director of the Office of Hearings and Appeals.

(C) OFFICE OF HEARINGS AND APPEALS.—The term “Office of Hearings and Appeals” means the Office of Hearings and Appeals of the Department of the Interior.

(D) PARTY.—The term “party”, with respect to a study plan agreement, means each of the following parties to the study plan agreement:

(i) The proposed lessee.

(ii) The Tribes.

(E) PROJECT.—The term “project” means a proposed pumped storage facility that—

(i) would use multiple Bureau of Reclamation reservoirs; and

(ii) as of June 1, 2017, was subject to a preliminary permit issued by the Commission pursuant to section 4(f) of the Federal Power Act (16 U.S.C. 797(f)).

(F) PROPOSED LESSEE.—The term “proposed lessee” means the proposed lessee of a project.

(G) SECRETARY.—The term “Secretary” means the Secretary of the Interior.

(H) STUDY PLAN.—The term “study plan” means the plan described in paragraph (4)(A).

(I) STUDY PLAN AGREEMENT.—The term “study plan agreement” means an agreement entered into under paragraph (2)(A) and described in paragraph (3).

(J) TRIBES.—The term “Tribes” means—

(i) the Confederated Tribes of the Colville Reservation; and

(ii) the Spokane Tribe of Indians of the Spokane Reservation.

(2) REQUIREMENT FOR ISSUANCE OF LEASES OF POWER PRIVILEGE.—The Secretary shall not issue a lease of power privilege pursuant to section 9(c)(1) of the Reclamation Project Act of 1939 (43 U.S.C. 485h(c)(1)) (as amended by subsection (a)) for a project unless—

(A) the proposed lessee and the Tribes have entered into a study plan agreement; or

(B) the Secretary or the Director, as applicable, makes a final determination for—

(i) a study plan agreement under paragraph (3)(B); or

(ii) a study plan under paragraph (4).

(3) STUDY PLAN AGREEMENT REQUIREMENTS.—

(A) IN GENERAL.—A study plan agreement shall—

(i) establish the deadlines for the proposed lessee to formally respond in writing to comments and study requests about the project previously submitted to the Commission;

(ii) allow for the parties to submit additional comments and study requests if any aspect of the project, as proposed, differs from an aspect of the project, as described in a preapplication document provided to the Commission;

(iii) except as expressly agreed to by the parties or as provided in subparagraph (B) or paragraph (4), require that the proposed lessee conduct each study described in—

(I) a study request about the project previously submitted to the Commission; or

(II) any additional study request submitted in accordance with the study plan agreement;

(iv) require that the proposed lessee study any potential adverse economic effects of the project on the Tribes, including effects on—

(I) annual payments to the Confederated Tribes of the Colville Reservation under section 5(b) of the Confederated Tribes of the Colville Reservation Grand Coulee Dam Settlement Act (Public Law 103-436; 108 Stat. 4579); and

(II) annual payments to the Spokane Tribe of Indians of the Spokane Reservation authorized after the date of enactment of this Act, the amount of which derives from the annual payments described in subclause (I);

(v) establish a protocol for communication and consultation between the parties;

(vi) provide mechanisms for resolving disputes between the parties regarding implementation and enforcement of the study plan agreement; and

(vii) contain other provisions determined to be appropriate by the parties.

(B) DISPUTES.—

(i) IN GENERAL.—If the parties cannot agree to the terms of a study plan agreement or implementation of those terms, the parties shall submit to the Director, for final determination on the terms or implementation of the study plan agreement, notice of the dispute, consistent with subparagraph (A)(vi), to the extent the parties have agreed to a study plan agreement.

(ii) INCLUSION.—A dispute covered by clause (i) may include the view of a proposed lessee that an additional study request submitted in accordance with subparagraph

(A)(ii) is not reasonably calculated to assist the Secretary in evaluating the potential impacts of the project.

(iii) TIMING.—The Director shall issue a determination regarding a dispute under clause (i) not later than 120 days after the date on which the Director receives notice of the dispute under that clause.

(4) STUDY PLAN.—

(A) IN GENERAL.—The proposed lessee shall submit to the Secretary for approval a study plan that details the proposed methodology for performing each of the studies—

(i) identified in the study plan agreement of the proposed lessee; or

(ii) determined by the Director in a final determination regarding a dispute under paragraph (3)(B).

(B) INITIAL DETERMINATION.—Not later than 60 days after the date on which the Secretary receives the study plan under subparagraph (A), the Secretary shall make an initial determination that—

(i) approves the study plan;

(ii) rejects the study plan on the grounds that the study plan—

(I) lacks sufficient detail on a proposed methodology for a study identified in the study plan agreement; or

(II) is inconsistent with the study plan agreement; or

(iii) imposes additional study plan requirements that the Secretary determines are necessary to adequately define the potential effects of the project on—

(I) the exercise of the paramount hunting, fishing, and boating rights of the Tribes reserved pursuant to the Act of June 29, 1940 (54 Stat. 703, chapter 460; 16 U.S.C. 835d et seq.);

(II) the annual payments described in subclauses (I) and (II) of paragraph (3)(A)(iv);

(III) the Columbia Basin project (as defined in section 1 of the Act of May 27, 1937 (50 Stat. 208, chapter 269; 57 Stat. 14, chapter 14; 16 U.S.C. 835));

(IV) historic properties and cultural or spiritually significant resources; and

(V) the environment.

(C) OBJECTIONS.—

(i) IN GENERAL.—Not later than 30 days after the date on which the Secretary makes an initial determination under subparagraph (B), the Tribes or the proposed lessee may submit to the Director an objection to the initial determination.

(ii) FINAL DETERMINATION.—Not later than 120 days after the date on which the Director receives an objection under clause (i), the Director shall—

(I) hold a hearing on the record regarding the objection; and

(II) make a final determination that establishes the study plan, including a description of studies the proposed lessee is required to perform.

(D) NO OBJECTIONS.—If no objections are submitted by the deadline described in subparagraph (C)(i), the initial determination of the Secretary under subparagraph (B) shall be final.

(5) CONDITIONS OF LEASE.—

(A) CONSISTENCY WITH RIGHTS OF TRIBES; PROTECTION, MITIGATION, AND ENHANCEMENT OF FISH AND WILDLIFE.—

(i) IN GENERAL.—Any lease of power privilege issued by the Secretary for a project under paragraph (2) shall contain conditions—

(I) to ensure that the project is consistent with, and will not interfere with, the exercise of the paramount hunting, fishing, and boating rights of the Tribes reserved pursuant to the Act of June 29, 1940 (54 Stat. 703, chapter 460; 16 U.S.C. 835d et seq.); and

(II) to adequately and equitably protect, mitigate damages to, and enhance fish and wildlife, including related spawning grounds

and habitat, affected by the development, operation, and management of the project.

(ii) RECOMMENDATIONS OF THE TRIBES.—The conditions required under clause (i) shall be based on joint recommendations of the Tribes.

(iii) RESOLVING INCONSISTENCIES.—

(I) IN GENERAL.—If the Secretary determines that any recommendation of the Tribes under clause (ii) is not reasonably calculated to ensure the project is consistent with clause (i) or is inconsistent with the requirements of the Reclamation Project Act of 1939 (43 U.S.C. 485 et seq.), the Secretary shall attempt to resolve any such inconsistency with the Tribes, giving due weight to the recommendations and expertise of the Tribes.

(II) PUBLICATION OF FINDINGS.—If, after an attempt to resolve an inconsistency under subclause (I), the Secretary does not adopt in whole or in part a recommendation of the Tribes under clause (ii), the Secretary shall issue each of the following findings, including a statement of the basis for each of the findings:

(aa) A finding that adoption of the recommendation is inconsistent with the requirements of the Reclamation Project Act of 1939 (43 U.S.C. 485 et seq.).

(bb) A finding that the conditions selected by the Secretary to be contained in the lease of power privilege under clause (i) comply with the requirements of subclauses (I) and (II) of that clause.

(B) ANNUAL CHARGES PAYABLE BY LICENSEE.—

(i) IN GENERAL.—Subject to clause (ii), any lease of power privilege issued by the Secretary for a project under paragraph (2) shall contain conditions that require the lessee of the project to make direct payments to the Tribes through reasonable annual charges in an amount that recompenses the Tribes for any adverse economic effect of the project identified in a study performed pursuant to the study plan agreement for the project.

(ii) AGREEMENT.—

(I) IN GENERAL.—The amount of the annual charges described in clause (i) shall be established through agreement between the proposed lessee and the Tribes.

(II) CONDITION.—The agreement under subclause (I), including any modification of the agreement, shall be deemed to be a condition to the lease of power privilege issued by the Secretary for a project under paragraph (2).

(iii) DISPUTE RESOLUTION.—

(I) IN GENERAL.—If the proposed lessee and the Tribes cannot agree to the terms of an agreement under clause (ii)(I), the proposed lessee and the Tribes shall submit notice of the dispute to the Director.

(II) RESOLUTION.—The Director shall resolve the dispute described in subclause (I) not later than 180 days after the date on which the Director receives notice of the dispute under that subclause.

(C) ADDITIONAL CONDITIONS.—The Secretary may include in any lease of power privilege issued by the Secretary for a project under paragraph (2) other conditions determined appropriate by the Secretary, on the condition that the conditions shall be consistent with the Reclamation Project Act of 1939 (43 U.S.C. 485 et seq.).

(D) CONSULTATION.—In establishing conditions under this paragraph, the Secretary shall consult with the Tribes.

(6) DEADLINES.—The Secretary or any officer of the Office of Hearing and Appeals before whom a proceeding is pending under this subsection may extend any deadline or enlarge any timeframe described in this subsection—

(A) at the discretion of the Secretary or the officer; or

(B) on a showing of good cause by any party.

(7) JUDICIAL REVIEW.—Any final action of the Secretary or the Director made pursuant to this subsection shall be subject to judicial review in accordance with chapter 7 of title 5, United States Code.

(8) EFFECT ON OTHER PROJECTS.—Nothing in this subsection establishes any precedent or is binding on any Bureau of Reclamation lease of power privilege, other than for a project.

#### Subtitle D—Carbon Capture, Utilization, and Storage

##### SEC. 1401. FOSSIL ENERGY.

Section 961(a) of the Energy Policy Act of 2005 (42 U.S.C. 16291(a)) is amended—

(1) in paragraph (6), by inserting “, including technology development to reduce emissions of carbon dioxide and associated emissions of heavy metals within coal combustion residues and gas streams resulting from fossil fuel use and production” before the period at the end; and

(2) by striking paragraph (7) and inserting the following:

“(7) Increasing the export of fossil energy-related equipment, technology, including emissions control technologies, and services from the United States.

“(8) Developing carbon removal and utilization technologies, products, and methods that result in net reductions in greenhouse gas emissions, including direct air capture and storage, and carbon use and reuse for commercial application.

“(9) Improving the conversion, use, and storage of carbon dioxide produced from fossil fuels.”.

##### SEC. 1402. ESTABLISHMENT OF COAL AND NATURAL GAS TECHNOLOGY PROGRAM.

(a) IN GENERAL.—The Energy Policy Act of 2005 is amended by striking section 962 (42 U.S.C. 16292) and inserting the following:

##### “SEC. 962. COAL AND NATURAL GAS TECHNOLOGY PROGRAM.

“(a) DEFINITIONS.—In this section:

“(1) LARGE-SCALE PILOT PROJECT.—The term ‘large-scale pilot project’ means a pilot project that—

“(A) represents the scale of technology development beyond laboratory development and bench scale testing, but not yet advanced to the point of being tested under real operational conditions at commercial scale;

“(B) represents the scale of technology necessary to gain the operational data needed to understand the technical and performance risks of the technology before the application of that technology at commercial scale or in commercial-scale demonstration; and

“(C) is large enough—

“(i) to validate scaling factors; and

“(ii) to demonstrate the interaction between major components so that control philosophies for a new process can be developed and enable the technology to advance from large-scale pilot plant application to commercial-scale demonstration or application.

“(2) NATURAL GAS.—The term ‘natural gas’ means any fuel consisting in whole or in part of—

“(A) natural gas;

“(B) liquid petroleum gas;

“(C) synthetic gas derived from petroleum or natural gas liquids;

“(D) any mixture of natural gas and synthetic gas; or

“(E) biomethane.

“(3) NATURAL GAS ELECTRIC GENERATION FACILITY.—

“(A) IN GENERAL.—The term ‘natural gas electric generation facility’ means a facility that generates electric energy using natural gas as the fuel.

“(B) INCLUSIONS.—The term ‘natural gas electric generation facility’ includes a new or existing—

“(i) simple cycle plant;

“(ii) combined cycle plant;

“(iii) combined heat and power plant; or

“(iv) steam methane reformer that produces hydrogen from natural gas for use in the production of electric energy.

“(4) PROGRAM.—The term ‘program’ means the program established under subsection (b)(1).

“(5) TRANSFORMATIONAL TECHNOLOGY.—

“(A) IN GENERAL.—The term ‘transformational technology’ means a power generation technology that represents a significant change in the methods used to convert energy that will enable a step change in performance, efficiency, and cost of electricity as compared to the technology in existence on the date of enactment of the American Energy Innovation Act of 2020.

“(B) INCLUSIONS.—The term ‘transformational technology’ includes a broad range of technology improvements, including—

“(i) thermodynamic improvements in energy conversion and heat transfer, including—

“(I) advanced combustion systems, including oxygen combustion systems and chemical looping; and

“(II) the replacement of steam cycles with supercritical carbon dioxide cycles;

“(ii) improvements in steam or carbon dioxide turbine technology;

“(iii) improvements in carbon capture, utilization, and storage systems technology;

“(iv) improvements in small-scale and modular coal-fired technologies with reduced carbon output or carbon capture that can support incremental power generation capacity additions;

“(v) fuel cell technologies for low-cost, high-efficiency modular power systems;

“(vi) advanced gasification systems;

“(vii) thermal cycling technologies; and

“(viii) any other technology the Secretary recognizes as transformational technology.

“(b) COAL AND NATURAL GAS TECHNOLOGY PROGRAM.—

“(1) IN GENERAL.—The Secretary shall establish a coal and natural gas technology program to ensure the continued use of the abundant domestic coal and natural gas resources of the United States through the development of transformational technologies that will significantly improve the efficiency, effectiveness, costs, and environmental performance of coal and natural gas use.

“(2) REQUIREMENTS.—The program shall include—

“(A) a research and development program;

“(B) large-scale pilot projects;

“(C) demonstration projects, in accordance with paragraph (4); and

“(D) a front-end engineering and design program.

“(3) PROGRAM GOALS AND OBJECTIVES.—In consultation with the interested entities described in paragraph (6)(C), the Secretary shall develop goals and objectives for the program to be applied to the transformational technologies developed within the program, taking into consideration the following:

“(A) Increasing the performance of coal and natural gas electric generation facilities, including by—

“(i) ensuring reliable, low-cost power from new and existing coal and natural gas electric generation facilities;

“(ii) achieving high conversion efficiencies;

“(iii) addressing emissions of carbon dioxide through high-efficiency platforms;

“(iv) developing small-scale and modular technologies to support incremental capac-

ity additions and load following generation, in addition to large-scale generation technologies;

“(v) supporting dispatchable operations for new and existing applications of coal and natural gas generation; and

“(vi) accelerating the development of technologies that have transformational energy conversion characteristics.

“(B) Using carbon capture, utilization, and sequestration technologies to decrease the carbon dioxide emissions, and the environmental impact from carbon dioxide emissions, from new and existing coal and natural gas electric generation facilities, including by—

“(i) accelerating the development, deployment, and commercialization of technologies to capture and sequester carbon dioxide emissions from new and existing coal and natural gas electric generation facilities;

“(ii) supporting sites for safe geological storage of large volumes of anthropogenic sources of carbon dioxide and the development of the infrastructure needed to support a carbon dioxide utilization and storage industry;

“(iii) improving the conversion, utilization, and storage of carbon dioxide produced from fossil fuels and other anthropogenic sources of carbon dioxide;

“(iv) lowering greenhouse gas emissions for all fossil fuel production, generation, delivery, and use, to the maximum extent practicable;

“(v) developing carbon utilization technologies, products, and methods, including carbon use and reuse for commercial application;

“(vi) developing net-negative carbon dioxide emissions technologies; and

“(vii) developing technologies for the capture of carbon dioxide produced during the production of hydrogen from natural gas.

“(C) Decreasing the non-carbon dioxide relevant environmental impacts of coal and natural gas production, including by—

“(i) further reducing non-carbon dioxide air emissions; and

“(ii) reducing the use, and managing the discharge, of water in power plant operations.

“(D) Accelerating the development of technologies to capture carbon dioxide emissions from industrial facilities, including—

“(i) nontraditional fuel manufacturing facilities, including ethanol or other biofuel production plants or hydrogen production plants; and

“(ii) energy-intensive manufacturing facilities that produce carbon dioxide as a by-product of operations.

“(E) Examining methods of converting coal and natural gas to other valuable products and commodities in addition to electricity, including hydrogen.

“(F) Entering into cooperative agreements to carry out and expedite demonstration projects (including pilot projects) to demonstrate the technical and commercial viability of technologies to reduce carbon dioxide emissions released from coal and natural gas electric generation facilities for commercial deployment; and

“(G) Identifying any barriers to the commercial deployment of any technologies under development for the capture of carbon dioxide produced by coal and natural gas electric generation facilities.

“(4) DEMONSTRATION PROJECTS.—

“(A) IN GENERAL.—In carrying out the program, the Secretary shall establish a demonstration program under which the Secretary shall enter into agreements by not



later than September 30, 2025, for demonstration projects to demonstrate the construction and operation of not fewer than 5 facilities to capture carbon dioxide from coal and natural gas electric generation facilities.

“(B) REQUIREMENT.—Of the demonstration projects carried out under subparagraph (A)—

“(i) not fewer than 2 shall be designed to capture carbon dioxide from a natural gas electric generation facility; and

“(ii) not fewer than 2 shall be designed to capture carbon dioxide from a coal electric generation facility.

“(C) GOALS.—Each demonstration project under the demonstration program shall be designed to further the development, deployment, and commercialization of technologies to capture and sequester carbon dioxide emissions from new and existing coal and natural gas electric generation facilities.

“(D) APPLICATIONS.—

“(i) IN GENERAL.—To be eligible to enter into an agreement with the Secretary for a demonstration project under subparagraph (A), an entity shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

“(ii) REVIEW OF APPLICATIONS.—In reviewing applications submitted under clause (i), the Secretary, to the maximum extent practicable, shall—

“(I) ensure a broad geographic distribution of project sites;

“(II) ensure that a broad selection of electric generation facilities are represented;

“(III) ensure that a broad selection of technologies are represented; and

“(IV) leverage existing public-private partnerships and Federal resources.

“(5) INTRAAGENCY COORDINATION FOR CARBON CAPTURE, UTILIZATION, AND SEQUESTRATION ACTIVITIES.—The carbon capture, utilization, and sequestration activities described in paragraph (3)(B) shall be carried out by the Assistant Secretary for Fossil Energy, in coordination with the heads of other relevant offices of the Department and the National Laboratories.

“(6) CONSULTATIONS REQUIRED.—In carrying out the program, the Secretary shall—

“(A) undertake international collaborations, taking into consideration the recommendations of the National Coal Council and the National Petroleum Council;

“(B) use existing authorities to encourage international cooperation; and

“(C) consult with interested entities, including—

“(i) coal and natural gas producers;

“(ii) industries that use coal and natural gas;

“(iii) organizations that promote coal, advanced coal, and natural gas technologies;

“(iv) environmental organizations;

“(v) organizations representing workers; and

“(vi) organizations representing consumers.

“(c) REPORT.—

“(1) IN GENERAL.—Not later than 18 months after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall submit to Congress a report describing the program goals and objectives adopted under subsection (b)(3).

“(2) UPDATE.—Not less frequently than once every 2 years after the initial report is submitted under paragraph (1), the Secretary shall submit to Congress a report describing the progress made towards achieving the program goals and objectives adopted under subsection (b)(3).

“(d) FUNDING.—

“(1) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to

the Secretary to carry out this section, to remain available until expended—

“(A) for activities under the research and development program component described in subsection (b)(2)(A)—

“(i) \$230,000,000 for each of fiscal years 2021 and 2022; and

“(ii) \$150,000,000 for each of fiscal years 2023 through 2025;

“(B) subject to paragraph (2), for activities under the large-scale pilot projects program component described in subsection (b)(2)(B)—

“(i) \$347,000,000 for each of fiscal years 2021 and 2022;

“(ii) \$272,000,000 for each of fiscal years 2023 and 2024; and

“(iii) \$250,000,000 for fiscal year 2025;

“(C) for activities under the demonstration projects program component described in subsection (b)(2)(C)—

“(i) \$100,000,000 for each of fiscal years 2021 and 2022; and

“(ii) \$500,000,000 for each of fiscal years 2023 through 2025; and

“(D) for activities under the front-end engineering and design program described in subsection (b)(2)(D), \$50,000,000 for each of fiscal years 2021 through 2024.

“(2) COST SHARING FOR LARGE-SCALE PILOT PROJECTS.—Activities under subsection (b)(2)(B) shall be subject to the cost-sharing requirements of section 988(b).”

(b) TECHNICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600) is amended by striking the item relating to section 962 and inserting the following:

“Sec. 962. Coal and natural gas technology program.”

#### SEC. 1403. CARBON STORAGE VALIDATION AND TESTING.

(a) IN GENERAL.—Section 963 of the Energy Policy Act of 2005 (42 U.S.C. 16293) is amended—

(1) by striking subsection (d) and inserting the following:

“(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

“(1) \$105,000,000 for fiscal year 2021;

“(2) \$110,250,000 for fiscal year 2022;

“(3) \$115,763,000 for fiscal year 2023;

“(4) \$121,551,000 for fiscal year 2024; and

“(5) \$127,628,000 for fiscal year 2025.”;

(2) in subsection (c)—

(A) by striking paragraphs (5) and (6) and inserting the following:

“(f) COST SHARING.—Activities carried out under this section shall be subject to the cost-sharing requirements of section 988.”; and

(B) by redesignating paragraph (4) as subsection (e) and indenting appropriately;

(3) in subsection (e) (as so redesignated)—

(A) by redesignating subparagraphs (A) and (B) as paragraphs (1) and (2), respectively, and indenting appropriately; and

(B) by striking “subsection” each place it appears and inserting “section”; and

(4) by striking the section designation and heading and all that follows through the end of subsection (c)(3) and inserting the following:

“SEC. 963. CARBON STORAGE VALIDATION AND TESTING.

“(a) DEFINITIONS.—In this section:

“(1) LARGE-SCALE CARBON SEQUESTRATION.—The term ‘large-scale carbon sequestration’ means a scale that—

“(A) demonstrates the ability to inject into geologic formations and sequester carbon dioxide; and

“(B) has a goal of sequestering not less than 50 million metric tons of carbon dioxide over a 10-year period.

“(2) PROGRAM.—The term ‘program’ means the program established under subsection (b)(1).

“(b) CARBON STORAGE PROGRAM.—

“(1) IN GENERAL.—The Secretary shall establish a program of research, development, and demonstration for carbon storage.

“(2) PROGRAM ACTIVITIES.—Activities under the program shall include—

“(A) in coordination with relevant Federal agencies, developing and maintaining mapping tools and resources that assess the capacity of geologic storage formation in the United States;

“(B) developing monitoring tools, modeling of geologic formations, and analyses—

“(i) to predict carbon dioxide containment; and

“(ii) to account for sequestered carbon dioxide in geologic storage sites;

“(C) researching—

“(i) potential environmental, safety, and health impacts in the event of a leak into the atmosphere or to an aquifer; and

“(ii) any corresponding mitigation actions or responses to limit harmful consequences of such a leak;

“(D) evaluating the interactions of carbon dioxide with formation solids and fluids, including the propensity of injections to induce seismic activity;

“(E) assessing and ensuring the safety of operations relating to geologic sequestration of carbon dioxide;

“(F) determining the fate of carbon dioxide concurrent with and following injection into geologic formations; and

“(G) supporting cost and business model assessments to examine the economic viability of technologies and systems developed under the program.

“(3) GEOLOGIC SETTINGS.—In carrying out research activities under this subsection, the Secretary shall consider a variety of candidate onshore and offshore geologic settings, including—

“(A) operating oil and gas fields;

“(B) depleted oil and gas fields;

“(C) residual oil zones;

“(D) unconventional reservoirs and rock types;

“(E) unmineable coal seams;

“(F) saline formations in both sedimentary and basaltic geologies;

“(G) geologic systems that may be used as engineered reservoirs to extract economical quantities of brine from geothermal resources of low permeability or porosity; and

“(H) geologic systems containing in situ carbon dioxide mineralization formations.

“(c) LARGE-SCALE CARBON SEQUESTRATION DEMONSTRATION PROGRAM.—

“(1) IN GENERAL.—The Secretary shall establish a demonstration program under which the Secretary shall provide funding for demonstration projects to collect and validate information on the cost and feasibility of commercial deployment of large-scale carbon sequestration technologies.

“(2) EXISTING REGIONAL CARBON SEQUESTRATION PARTNERSHIPS.—In carrying out paragraph (1), the Secretary may provide additional funding to regional carbon sequestration partnerships that are carrying out or have completed a large-scale carbon sequestration demonstration project under this section (as in effect on the day before the date of enactment of the American Energy Innovation Act of 2020) for additional work on that project.

“(3) DEMONSTRATION COMPONENTS.—Each demonstration project carried out under this subsection shall include longitudinal tests involving carbon dioxide injection and monitoring, mitigation, and verification operations.

“(4) CLEARINGHOUSE.—The National Energy Technology Laboratory shall act as a clearinghouse of shared information and resources for—

“(A) existing or completed demonstration projects receiving additional funding under paragraph (2); and

“(B) any new demonstration projects funded under this subsection.

“(5) REPORT.—Not later than 1 year after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that—

“(A) assesses the progress of all regional carbon sequestration partnerships carrying out a demonstration project under this subsection;

“(B) identifies the remaining challenges in achieving large-scale carbon sequestration that is reliable and safe for the environment and public health; and

“(C) creates a roadmap for carbon storage research and development activities of the Department through 2025, with the goal of reducing economic and policy barriers to commercial carbon sequestration.

“(d) INTEGRATED STORAGE.—

“(1) IN GENERAL.—The Secretary may transition large-scale carbon sequestration demonstration projects under subsection (c) into integrated commercial storage complexes.

“(2) GOALS AND OBJECTIVES.—The goals and objectives of the Secretary in seeking to transition large-scale carbon sequestration demonstration projects into integrated commercial storage complexes under paragraph (1) shall be—

“(A) to identify geologic storage sites that are able to accept large volumes of carbon dioxide acceptable for commercial contracts;

“(B) to understand the technical and commercial viability of carbon dioxide geologic storage sites; and

“(C) to carry out any other activities necessary to transition the large-scale carbon sequestration demonstration projects under subsection (c) into integrated commercial storage complexes.”

(b) TECHNICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600; 121 Stat. 1708) is amended by striking the item relating to section 963 and inserting the following:

“Sec. 963. Carbon storage validation and testing.”

(c) CONFORMING AMENDMENTS.—

(1) Section 703(a)(3) of the Department of Energy Carbon Capture and Sequestration Research, Development, and Demonstration Act of 2007 (42 U.S.C. 17251(a)(3)) is amended, in the first sentence of the matter preceding subparagraph (A), by striking “section 963(c)(3)” and inserting “section 963(c)”.

(2) Section 704 of the Department of Energy Carbon Capture and Sequestration Research, Development, and Demonstration Act of 2007 (42 U.S.C. 17252) is amended, in the first sentence, by striking “section 963(c)(3)” and inserting “section 963(c)”.

#### SEC. 1404. CARBON UTILIZATION PROGRAM.

(a) CARBON UTILIZATION PROGRAM.—

(1) IN GENERAL.—Subtitle F of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16291 et seq.) is amended by adding at the end the following:

##### “SEC. 969. CARBON UTILIZATION PROGRAM.

“(a) IN GENERAL.—The Secretary shall establish a program of research, development, and demonstration for carbon utilization—

“(1) to assess and monitor—

“(A) potential changes in lifecycle carbon dioxide and other greenhouse gas emissions; and

“(B) other environmental safety indicators of new technologies, practices, processes, or methods used in enhanced hydrocarbon re-

covery as part of the activities authorized under section 963;

“(2) to identify and assess novel uses for carbon, including the conversion of carbon and carbon oxides for commercial and industrial products and other products with potential market value;

“(3) to identify and assess carbon capture technologies for industrial systems; and

“(4) to identify and assess alternative uses for raw coal and processed coal products in all phases, including products derived from carbon engineering, carbon fiber, and coal conversion methods.

“(b) DEMONSTRATION PROGRAMS FOR THE PURPOSE OF COMMERCIALIZATION.—

“(1) IN GENERAL.—Not later than 180 days after the date of enactment of this section, the Secretary shall establish a 2-year demonstration program in each of the 2 major coal-producing regions of the United States for the purpose of partnering with private institutions in coal mining regions to accelerate the commercial deployment of coal-carbon products.

“(2) COST SHARING.—Activities under paragraph (1) shall be subject to the cost-sharing requirements of section 988.

“(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

“(1) \$29,000,000 for fiscal year 2021;

“(2) \$30,250,000 for fiscal year 2022;

“(3) \$31,562,500 for fiscal year 2023;

“(4) \$32,940,625 for fiscal year 2024; and

“(5) \$34,387,656 for fiscal year 2025.”

(2) TECHNICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600) is amended by adding at the end of the items relating to subtitle F of title IX the following:

“Sec. 969. Carbon utilization program.”

(b) STUDY.—

(1) IN GENERAL.—The Secretary shall enter into an agreement with the National Academies of Sciences, Engineering, and Medicine under which the National Academies of Sciences, Engineering, and Medicine shall conduct a study to assess any barriers and opportunities relating to commercializing carbon, coal-derived carbon, and carbon dioxide in the United States.

(2) REQUIREMENTS.—The study under paragraph (1) shall—

(A) analyze challenges to commercializing carbon dioxide, including—

(i) expanding carbon dioxide pipeline capacity;

(ii) mitigating environmental impacts;

(iii) access to capital;

(iv) geographic barriers; and

(v) regional economic challenges and opportunities;

(B) identify potential markets, industries, or sectors that may benefit from greater access to commercial carbon dioxide;

(C) determine the feasibility of, and opportunities for, the commercialization of coal-derived carbon products, including for—

(i) commercial purposes;

(ii) industrial purposes;

(iii) defense and military purposes;

(iv) agricultural purposes, including soil amendments and fertilizers;

(v) medical and pharmaceutical applications;

(vi) construction and building applications;

(vii) energy applications; and

(viii) production of critical minerals;

(D) assess—

(i) the state of infrastructure as of the date of the study; and

(ii) any necessary updates to infrastructure to allow for the integration of safe and reliable carbon dioxide transportation, use, and storage;

(E) describe the economic, climate, and environmental impacts of any well-integrated

national carbon dioxide pipeline system, including suggestions for policies that could—

(i) improve the economic impact of the system; and

(ii) mitigate impacts of the system;

(F) assess the global status and progress of chemical and biological carbon utilization technologies in practice as of the date of the study that utilize anthropogenic carbon, including carbon dioxide, carbon monoxide, methane, and biogas, from power generation, biofuels production, and other industrial processes;

(G) identify emerging technologies and approaches for carbon utilization that show promise for scale-up, demonstration, deployment, and commercialization;

(H) analyze the factors associated with making carbon utilization technologies viable at a commercial scale, including carbon waste stream availability, economics, market capacity, energy, and lifecycle requirements;

(I)(i) assess the major technical challenges associated with increasing the commercial viability of carbon reuse technologies; and

(ii) identify the research and development questions that will address the challenges described in clause (i);

(J)(i) assess research efforts being carried out as of the date of the study, including basic, applied, engineering, and computational research efforts, that are addressing the challenges described in subparagraph (I)(i); and

(ii) identify gaps in the research efforts under clause (i);

(K) develop a comprehensive research agenda that addresses long- and short-term research needs and opportunities; and

(L)(i) identify appropriate Federal agencies with capabilities to support small business entities; and

(ii) determine what assistance the Federal agencies identified under clause (i) could provide to small business entities to further the development and commercial deployment of carbon dioxide-based products.

(3) DEADLINE.—Not later than 180 days after the date of enactment of this Act, the National Academies of Sciences, Engineering, and Medicine shall submit to the Secretary a report describing the results of the study under paragraph (1).

#### SEC. 1405. CARBON REMOVAL.

(a) IN GENERAL.—Subtitle F of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16291 et seq.) (as amended by section 1404(a)(1)) is amended by adding at the end the following:

##### “SEC. 969A. CARBON REMOVAL.

“(a) ESTABLISHMENT.—The Secretary, in coordination with the heads of appropriate Federal agencies, including the Secretary of Agriculture, shall establish a research, development, and demonstration program (referred to in this section as the ‘program’) to test, validate, or improve technologies and strategies to remove carbon dioxide from the atmosphere on a large scale.

“(b) INTRAAGENCY COORDINATION.—The Secretary shall ensure that the program includes the coordinated participation of the Office of Fossil Energy, the Office of Science, and the Office of Energy Efficiency and Renewable Energy.

“(c) PROGRAM ACTIVITIES.—The program may include research, development, and demonstration activities relating to—

“(1) direct air capture and storage technologies;

“(2) bioenergy with carbon capture and sequestration;

“(3) enhanced geological weathering;

“(4) agricultural practices;

“(5) forest management and afforestation; and

“(6) planned or managed carbon sinks, including natural and artificial.

“(d) REQUIREMENTS.—In developing and identifying carbon removal technologies and strategies under the program, the Secretary shall consider—

“(1) land use changes, including impacts on natural and managed ecosystems;

“(2) ocean acidification;

“(3) net greenhouse gas emissions;

“(4) commercial viability;

“(5) potential for near-term impact;

“(6) potential for carbon reductions on a gigaton scale; and

“(7) economic cobenefits.

“(e) AIR CAPTURE TECHNOLOGY PRIZE COMPETITION.—

“(1) DEFINITIONS.—In this subsection:

“(A) DILUTE MEDIA.—The term ‘dilute media’ means media in which the concentration of carbon dioxide is less than 1 percent by volume.

“(B) PRIZE COMPETITION.—The term ‘prize competition’ means the competitive technology prize competition established under paragraph (2).

“(2) ESTABLISHMENT.—Not later than 2 years after the date of enactment of this section, the Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall establish as part of the program a competitive technology prize competition to award prizes for carbon dioxide capture from dilute media.

“(3) REQUIREMENTS.—In carrying out this subsection, the Secretary, in accordance with section 24 of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3719), shall develop requirements for—

“(A) the prize competition process; and

“(B) monitoring and verification procedures for projects selected to receive a prize under the prize competition.

“(4) ELIGIBLE PROJECTS.—To be eligible to be awarded a prize under the prize competition, a project shall—

“(A) meet minimum performance standards set by the Secretary;

“(B) meet minimum levels set by the Secretary for the capture of carbon dioxide from dilute media; and

“(C) demonstrate in the application of the project for a prize—

“(i) a design for a promising carbon capture technology that will—

“(I) be operated on a demonstration scale; and

“(II) have the potential to achieve significant reduction in the level of carbon dioxide in the atmosphere;

“(ii) a successful bench-scale demonstration of a carbon capture technology; or

“(iii) an operational carbon capture technology on a commercial scale.

“(f) DIRECT AIR CAPTURE TEST CENTER.—

“(1) IN GENERAL.—Not later than 2 years after the date of enactment of this section, the Secretary shall award grants to 1 or more entities for the operation of 1 or more test centers (referred to in this subsection as a ‘Center’) to provide unique testing capabilities for innovative direct air capture and storage technologies.

“(2) PURPOSE.—Each Center shall—

“(A) advance research, development, demonstration, and commercial application of direct air capture and storage technologies;

“(B) support large-scale pilot and demonstration projects and test direct air capture and storage technologies;

“(C) develop front-end engineering design and economic analysis; and

“(D) maintain a public record of pilot and full-scale plant performance.

“(3) SELECTION.—

“(A) IN GENERAL.—The Secretary shall select entities to receive grants under this subsection according to such criteria as the Secretary may develop.

“(B) COMPETITIVE BASIS.—The Secretary shall select entities to receive grants under this subsection on a competitive basis.

“(C) PRIORITY CRITERIA.—In selecting entities to receive grants under this subsection, the Secretary shall prioritize applicants that—

“(i) have access to existing or planned research facilities for direct air capture and storage technologies;

“(ii) are institutions of higher education with established expertise in engineering for direct air capture and storage technologies, or partnerships with such institutions of higher education; or

“(iii) have access to existing research and test facilities for bulk materials design and testing, component design and testing, or professional engineering design.

“(4) FORMULA FOR AWARDED GRANTS.—The Secretary may develop a formula for awarding grants under this subsection.

“(5) SCHEDULE.—

“(A) IN GENERAL.—Each grant awarded under this subsection shall be for a term of not more than 5 years, subject to the availability of appropriations.

“(B) RENEWAL.—The Secretary may renew a grant for 1 or more additional 5-year terms, subject to a competitive merit review and the availability of appropriations.

“(6) TERMINATION.—To the extent otherwise authorized by law, the Secretary may eliminate, and terminate grant funding under this subsection for, a Center during any 5-year term described in paragraph (5) if the Secretary determines that the Center is underperforming.

“(g) PILOT AND DEMONSTRATION PROJECTS.—In supporting the technology development activities under this section, the Secretary is encouraged to support carbon removal pilot and demonstration projects, including—

“(1) pilot projects that test direct air capture systems capable of capturing 10 to 100 tonnes of carbon oxides per year to provide data for demonstration-scale projects; and

“(2) direct air capture demonstration projects capable of capturing greater than 1,000 tonnes of carbon oxides per year.

“(h) INTRAAGENCY COORDINATION.—The direct air capture activities carried out under subsections (c)(1) and (e) shall be carried out in coordination with, and leveraging lessons learned from, the coal and natural gas technology program established under section 962(b)(1).

“(i) ACCOUNTING.—The Secretary shall collaborate with the Administrator of the Environmental Protection Agency and the heads of other relevant Federal agencies to develop and improve accounting frameworks and tools to accurately measure carbon removal and sequestration methods and technologies across the Federal Government.

“(j) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

“(1) \$75,000,000 for fiscal year 2021, of which \$15,000,000 shall be used to carry out subsection (e);

“(2) \$63,500,000 for fiscal year 2022;

“(3) \$66,150,000 for fiscal year 2023;

“(4) \$69,458,000 for fiscal year 2024; and

“(5) \$72,930,000 for fiscal year 2025.”.

(b) TECHNICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600) (as amended by section 1404(a)(2)) is amended by adding at the end of the items relating to subtitle F of title IX the following:

“Sec. 969A. Carbon removal.”.

#### Subtitle E—Nuclear

#### SEC. 1501. LIGHT WATER REACTOR SUSTAINABILITY PROGRAM.

Section 952 of the Energy Policy Act of 2005 (42 U.S.C. 16272) is amended by striking subsection (b) and inserting the following:

“(b) LIGHT WATER REACTOR SUSTAINABILITY PROGRAM.—The Secretary shall carry out a light water reactor sustainability program—

“(1) to ensure the achievement of maximum benefits from existing nuclear generation;

“(2) to accommodate the increase in applications for nuclear power plant license renewals expected as of the date of enactment of this subsection;

“(3) to enable the continued operation of existing nuclear power plants through technology development;

“(4) to improve the performance and reduce the operation and maintenance costs of nuclear power plants;

“(5) to promote the use of high-performance computing to simulate nuclear reactor processes;

“(6) to coordinate with other research and development programs of the Office of Nuclear Energy to ensure that developed technologies and capabilities are part of an integrated investment strategy, the overall focus of which is improving the safety, security, reliability, and economics of operating nuclear power plants; and

“(7) to focus on—

“(A) new capabilities relating to nuclear energy research and development;

“(B) enabling technologies beyond individual programs;

“(C) coordinating capabilities among the research and development programs of the Office of Nuclear Energy;

“(D) examining new classes of materials not considered for nuclear applications;

“(E) high-risk research, which could potentially overcome technological limitations; and

“(F) the potential for industry partnerships to develop technologies relating to storage, hydrogen production, high-temperature process heat, and other relevant areas.”.

#### SEC. 1502. NUCLEAR ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION.

Section 952 of the Energy Policy Act of 2005 (42 U.S.C. 16272) is amended by adding at the end the following:

“(e) ADVANCED REACTOR TECHNOLOGIES DEVELOPMENT PROGRAM.—

“(1) IN GENERAL.—The Secretary shall carry out a program under which the Secretary shall conduct research relating to the development of innovative nuclear reactor technologies that may offer improved safety, functionality, and affordability.

“(2) REQUIREMENTS.—The program under this subsection shall—

“(A) support efforts to reduce long-term technical barriers for advanced nuclear energy systems; and

“(B) be carried out in consultation with the Nuclear Regulatory Commission to ensure identification of any relevant concerns.”.

#### SEC. 1503. ADVANCED FUELS DEVELOPMENT.

Section 953 of the Energy Policy Act of 2005 (42 U.S.C. 16273) is amended—

(1) by redesignating subsections (a) through (d) as paragraphs (1), (3), (4), and (5), respectively, and indenting appropriately;

(2) in paragraph (1) (as so redesignated)—

(A) by striking “this section” and inserting “this subsection”;

(B) by striking “minimize environmental” and inserting “improve fuel cycle performance while minimizing the cost and complexity of processing, environmental impacts,”; and

(C) by striking “the Generation IV”;

(3) by inserting after paragraph (1) (as so redesignated) the following:

“(2) **CONSIDERATIONS.**—In carrying out activities under the program, the Secretary shall consider the potential benefits of those activities for civilian nuclear applications, environmental remediation, and national security.”;

(4) by inserting after paragraph (5) (as so redesignated) the following:

“(6) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Secretary to carry out the program \$40,000,000 for each of fiscal years 2021 through 2025.”;

(5) by inserting before paragraph (1) (as so redesignated) the following:

“(a) **MATERIAL RECOVERY AND WASTE FORM DEVELOPMENT.**—”; and

(6) by adding at the end the following:

“(b) **ADVANCED FUELS.**—

“(1) **IN GENERAL.**—The Secretary shall carry out a program to conduct research relating to—

“(A) next-generation light water reactor fuels that demonstrate improved—

“(i) performance; and

“(ii) accident tolerance; and

“(B) advanced reactor fuels that demonstrate improved—

“(i) proliferation resistance; and

“(ii) use of resources.

“(2) **REQUIREMENTS.**—In carrying out the program under this subsection, the Secretary shall—

“(A) focus on the development of accident-tolerant fuel and cladding concepts that are capable of achieving initial commercialization by December 31, 2025;

“(B) conduct studies regarding the means by which those concepts would impact reactor economics, the fuel cycle, operations, safety, and the environment;

“(C) subject to paragraph (3), publish the results of the studies conducted under subparagraph (B); and

“(D) cooperate with institutions of higher education through the Nuclear Energy University and Integrated Research Projects programs of the Department.

“(3) **SENSITIVE INFORMATION.**—The Secretary shall not publish any information under paragraph (2)(C) that is detrimental to national security, as determined by the Secretary.

“(4) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Secretary to carry out the program under this subsection \$120,000,000 for each of fiscal years 2021 through 2025.”.

#### **SEC. 1504. NUCLEAR SCIENCE AND ENGINEERING SUPPORT.**

(a) **IN GENERAL.**—Section 954 of the Energy Policy Act of 2005 (42 U.S.C. 16274) is amended—

(1) in the section heading, by striking “**UNIVERSITY NUCLEAR**” and inserting “**NUCLEAR**”;

(2) in subsection (b)—

(A) in the matter preceding paragraph (1), by striking “this section” and inserting “this subsection”; and

(B) by redesignating paragraphs (1) through (5) as subparagraphs (A) through (E), respectively, and indenting appropriately;

(3) in subsection (c), by redesignating paragraphs (1) and (2) as subparagraphs (A) and (B), respectively, and indenting appropriately;

(4) in subsection (d)—

(A) in the matter preceding paragraph (1), by striking “this section” and inserting “this subsection”; and

(B) by redesignating paragraphs (1) through (4) as subparagraphs (A) through (D), respectively, and indenting appropriately;

(5) in subsection (e), by striking “this section” and inserting “this subsection”;

(6) in subsection (f)—

(A) by striking “this section” and inserting “this subsection”; and

(B) by striking “subsection (b)(2)” and inserting “paragraph (2)(B)”;

(7) by redesignating subsections (a) through (f) as paragraphs (1), (2), (3), (4), (6), and (7), respectively, and indenting appropriately;

(8) by inserting after paragraph (4) (as so redesignated) the following:

“(5) **RADIOLOGICAL FACILITIES MANAGEMENT.**—

“(A) **IN GENERAL.**—The Secretary shall carry out a program under which the Secretary shall provide project management, technical support, quality engineering and inspection, and nuclear material support to research reactors located at universities.

“(B) **AUTHORIZATION OF APPROPRIATIONS.**—In addition to any amounts appropriated to carry out the program under this subsection, there is authorized to be appropriated to the Secretary to carry out the program under this paragraph \$15,000,000 for each of fiscal years 2021 through 2025.”;

(9) by inserting before paragraph (1) (as so redesignated) the following:

“(a) **UNIVERSITY NUCLEAR SCIENCE AND ENGINEERING SUPPORT.**—”; and

(10) by adding at the end the following:

“(b) **NUCLEAR ENERGY APPRENTICESHIP SUBPROGRAM.**—

“(1) **ESTABLISHMENT.**—In carrying out the program under subsection (a), the Secretary shall establish a nuclear energy apprenticeship subprogram under which the Secretary shall establish competitively awarded traineeships and apprenticeships in industries that are represented by skilled labor unions and with universities to provide focused, graduate-level training to meet highly focused needs through a tailored academic graduate program that delivers a curriculum with a rigorous thesis or dissertation research requirement aligned with the critical needs of the Department with respect to mission-driven workforce.

“(2) **REQUIREMENTS.**—In carrying out the subprogram under this subsection, the Secretary shall—

“(A) encourage appropriate partnerships among National Laboratories, affected universities, and industry; and

“(B) on an annual basis, evaluate the needs of the nuclear energy community to implement traineeships for focused topical areas addressing mission-specific workforce needs.

“(3) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Secretary to carry out the subprogram under this subsection \$5,000,000 for each of fiscal years 2021 through 2025.”.

(b) **CONFORMING AMENDMENT.**—The table of contents of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 600) is amended by striking the item relating to section 954 and inserting the following:

“Sec. 954. Nuclear science and engineering support.”.

#### **SEC. 1505. UNIVERSITY NUCLEAR LEADERSHIP PROGRAM.**

Section 313 of the Energy and Water Development and Related Agencies Appropriations Act, 2009 (42 U.S.C. 16274a), is amended to read as follows:

“**SEC. 313. UNIVERSITY NUCLEAR LEADERSHIP PROGRAM.**

“(a) **DEFINITIONS.**—In this section:

“(1) **ADVANCED NUCLEAR REACTOR.**—The term ‘advanced nuclear reactor’ means—

“(A) a nuclear fission reactor, including a prototype plant (as defined in sections 50.2 and 52.1 of title 10, Code of Federal Regulations (or successor regulations)), with sig-

nificant improvements compared to the most recent generation of fission reactors, including improvements such as—

“(i) additional inherent safety features;

“(ii) lower waste yields;

“(iii) improved fuel performance;

“(iv) increased tolerance to loss of fuel cooling;

“(v) enhanced reliability;

“(vi) increased proliferation resistance;

“(vii) increased thermal efficiency;

“(viii) reduced consumption of cooling water;

“(ix) the ability to integrate into electric applications and nonelectric applications;

“(x) modular sizes to allow for deployment that corresponds with the demand for electricity; or

“(xi) operational flexibility to respond to changes in demand for electricity and to complement integration with intermittent renewable energy; and

“(B) a fusion reactor.

“(2) **INSTITUTION OF HIGHER EDUCATION.**—The term ‘institution of higher education’ has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

“(3) **PROGRAM.**—The term ‘Program’ means the University Nuclear Leadership Program established under subsection (b).

“(b) **ESTABLISHMENT.**—The Secretary of Energy, the Administrator of the National Nuclear Security Administration, and the Chairman of the Nuclear Regulatory Commission shall jointly establish a program, to be known as the ‘University Nuclear Leadership Program’.

“(c) **USE OF FUNDS.**—

“(1) **IN GENERAL.**—Except as provided in paragraph (2), amounts made available to carry out the Program shall be used to provide financial assistance for scholarships, fellowships, and research and development projects at institutions of higher education in areas relevant to the programmatic mission of the applicable Federal agency providing the financial assistance with respect to research, development, demonstration, and deployment activities for technologies relevant to advanced nuclear reactors, including relevant fuel cycle technologies.

“(2) **EXCEPTION.**—Notwithstanding paragraph (1), amounts made available to carry out the Program may be used to provide financial assistance for a scholarship, fellowship, or multiyear research and development project that does not align directly with a programmatic mission of the applicable Federal agency providing the financial assistance, if the activity for which assistance is provided would facilitate the maintenance of the discipline of nuclear science or nuclear engineering.

“(d) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to carry out the Program for fiscal year 2021 and each fiscal year thereafter—

“(1) \$30,000,000 to the Secretary of Energy, of which \$15,000,000 shall be for use by the Administrator of the National Nuclear Security Administration; and

“(2) \$15,000,000 to the Nuclear Regulatory Commission.”.

#### **SEC. 1506. VERSATILE, REACTOR-BASED FAST NEUTRON SOURCE.**

Section 955(c)(1) of the Energy Policy Act of 2005 (42 U.S.C. 16275(c)(1)) is amended—

(1) in the paragraph heading, by striking “MISSION NEED” and inserting “AUTHORIZATION”; and

(2) in subparagraph (A), by striking “determine the mission need” and inserting “provide”.

#### **SEC. 1507. ADVANCED NUCLEAR REACTOR RESEARCH AND DEVELOPMENT GOALS.**

(a) **IN GENERAL.**—Subtitle E of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16271

et seq.) is amended by adding at the end the following:

**“SEC. 959A. ADVANCED NUCLEAR REACTOR RESEARCH AND DEVELOPMENT GOALS.**

“(a) DEFINITIONS.—In this section:

“(1) ADVANCED NUCLEAR REACTOR.—The term ‘advanced nuclear reactor’ means—

“(A) a nuclear fission reactor, including a prototype plant (as defined in sections 50.2 and 52.1 of title 10, Code of Federal Regulations (or successor regulations)), with significant improvements compared to the most recent generation of fission reactors, including improvements such as—

“(i) additional inherent safety features;

“(ii) lower waste yields;

“(iii) improved fuel performance;

“(iv) increased tolerance to loss of fuel cooling;

“(v) enhanced reliability;

“(vi) increased proliferation resistance;

“(vii) increased thermal efficiency;

“(viii) reduced consumption of cooling water;

“(ix) the ability to integrate into electric applications and nonelectric applications;

“(x) modular sizes to allow for deployment that corresponds with the demand for electricity; or

“(xi) operational flexibility to respond to changes in demand for electricity and to complement integration with intermittent renewable energy; and

“(B) a fusion reactor.

“(2) DEMONSTRATION PROJECT.—The term ‘demonstration project’ means an advanced nuclear reactor operated in any manner, including as part of the power generation facilities of an electric utility system, for the purpose of demonstrating the suitability for commercial application of the advanced nuclear reactor.

“(b) PURPOSE.—The purpose of this section is to direct the Secretary, as soon as practicable after the date of enactment of this section, to advance the research and development of domestic advanced, affordable, and clean nuclear energy by—

“(1) demonstrating different advanced nuclear reactor technologies that could be used by the private sector to produce—

“(A) emission-free power at a levelized cost of electricity of \$60 per megawatt-hour or less;

“(B) heat for community heating, industrial purposes, or synthetic fuel production;

“(C) remote or off-grid energy supply; or

“(D) backup or mission-critical power supplies;

“(2) developing subgoals for nuclear energy research programs that would accomplish the goals of the demonstration projects carried out under subsection (c);

“(3) identifying research areas that the private sector is unable or unwilling to undertake due to the cost of, or risks associated with, the research; and

“(4) facilitating the access of the private sector—

“(A) to Federal research facilities and personnel; and

“(B) to the results of research relating to civil nuclear technology funded by the Federal Government.

“(c) DEMONSTRATION PROJECTS.—

“(1) IN GENERAL.—The Secretary shall, to the maximum extent practicable—

“(A) enter into agreements to complete not fewer than 2 demonstration projects by not later than December 31, 2025; and

“(B) establish a program to enter into agreements to complete 1 additional operational demonstration project by not later than December 31, 2035.

“(2) REQUIREMENTS.—In carrying out demonstration projects under paragraph (1), the Secretary shall—

“(A) include diversity in designs for the advanced nuclear reactors demonstrated under this section, including designs using various—

“(i) primary coolants;

“(ii) fuel types and compositions; and

“(iii) neutron spectra;

“(B) seek to ensure that—

“(i) the long-term cost of electricity or heat for each design to be demonstrated under this subsection is cost-competitive in the applicable market;

“(ii) the selected projects can meet the deadline established in paragraph (1) to demonstrate first-of-a-kind advanced nuclear reactor technologies, for which additional information shall be considered, including—

“(I) the technology readiness level of a proposed advanced nuclear reactor technology;

“(II) the technical abilities and qualifications of teams desiring to demonstrate a proposed advanced nuclear reactor technology; and

“(III) the capacity to meet cost-share requirements of the Department;

“(C) ensure that each evaluation of candidate technologies for the demonstration projects is completed through an external review of proposed designs, which review shall—

“(i) be conducted by a panel that includes not fewer than 1 representative of each of—

“(I) an electric utility; and

“(II) an entity that uses high-temperature process heat for manufacturing or industrial processing, such as a petrochemical company, a manufacturer of metals, or a manufacturer of concrete;

“(ii) include a review of cost-competitiveness and other value streams, together with the technology readiness level, of each design to be demonstrated under this subsection; and

“(iii) not be required for a demonstration project that receives no financial assistance from the Department for construction costs;

“(D) for federally funded demonstration projects, enter into cost-sharing agreements with private sector partners in accordance with section 988 for the conduct of activities relating to the research, development, and demonstration of private-sector advanced nuclear reactor designs under the program;

“(E) work with private sector partners to identify potential sites, including Department-owned sites, for demonstrations, as appropriate;

“(F) align specific activities carried out under demonstration projects carried out under this subsection with priorities identified through direct consultations between—

“(i) the Department;

“(ii) National Laboratories;

“(iii) institutions of higher education;

“(iv) traditional end-users (such as electric utilities);

“(v) potential end-users of new technologies (such as users of high-temperature process heat for manufacturing processing, including petrochemical companies, manufacturers of metals, or manufacturers of concrete); and

“(vi) developers of advanced nuclear reactor technology; and

“(G) seek to ensure that the demonstration projects carried out under paragraph (1) do not cause any delay in a deployment of an advanced reactor by private industry and the Department that is underway as of the date of enactment of this section.

“(3) ADDITIONAL REQUIREMENTS.—In carrying out demonstration projects under paragraph (1), the Secretary shall—

“(A) identify candidate technologies that—

“(i) are not developed sufficiently for demonstration within the initial required timeframe described in paragraph (1)(A); but

“(ii) could be demonstrated within the timeframe described in paragraph (1)(B);

“(B) identify technical challenges to the candidate technologies identified in subparagraph (A);

“(C) support near-term research and development to address the highest-risk technical challenges to the successful demonstration of a selected advanced reactor technology, in accordance with—

“(i) subparagraph (B); and

“(ii) the research and development activities under sections 952 and 958;

“(D) establish such technology advisory working groups as the Secretary determines to be appropriate to advise the Secretary regarding the technical challenges identified under subparagraph (B) and the scope of research and development programs to address the challenges, in accordance with subparagraph (C), to be comprised of—

“(i) private-sector advanced nuclear reactor technology developers;

“(ii) technical experts with respect to the relevant technologies at institutions of higher education; and

“(iii) technical experts at the National Laboratories.

“(d) GOALS.—

“(1) IN GENERAL.—The Secretary shall establish goals for research relating to advanced nuclear reactors facilitated by the Department that support the objectives of the program for demonstration projects established under subsection (c).

“(2) COORDINATION.—In developing the goals under paragraph (1), the Secretary shall coordinate, on an ongoing basis, with members of private industry to advance the demonstration of various designs of advanced nuclear reactors.

“(3) REQUIREMENTS.—In developing the goals under paragraph (1), the Secretary shall ensure that—

“(A) research activities facilitated by the Department to meet the goals developed under this subsection are focused on key areas of nuclear research and deployment ranging from basic science to full-design development, safety evaluation, and licensing;

“(B) research programs designed to meet the goals emphasize—

“(i) resolving materials challenges relating to extreme environments, including extremely high levels of—

“(I) radiation fluence;

“(II) temperature;

“(III) pressure; and

“(IV) corrosion; and

“(ii) qualification of advanced fuels;

“(C) activities are carried out that address near-term challenges in modeling and simulation to enable accelerated design and licensing;

“(D) related technologies, such as technologies to manage, reduce, or reuse nuclear waste, are developed;

“(E) nuclear research infrastructure is maintained or constructed, such as—

“(i) currently operational research reactors at the National Laboratories and institutions of higher education;

“(ii) hot cell research facilities;

“(iii) a versatile fast neutron source; and

“(iv) a molten salt testing facility;

“(F) basic knowledge of non-light water coolant physics and chemistry is improved;

“(G) advanced sensors and control systems are developed; and

“(H) advanced manufacturing and advanced construction techniques and materials are investigated to reduce the cost of advanced nuclear reactors.”

(b) TABLE OF CONTENTS.—The table of contents of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 594; 132 Stat. 3160) is amended—

(1) in the item relating to section 917, by striking “Efficiency”;

(2) in the items relating to each of sections 957, 958, and 959 by inserting “Sec.” before the item number; and

(3) by inserting after the item relating to section 959 the following:

“Sec. 959A. Advanced nuclear reactor research and development goals.”.

#### SEC. 1508. NUCLEAR ENERGY STRATEGIC PLAN.

(a) IN GENERAL.—Subtitle E of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16271 et seq.) (as amended by section 1507(a)) is amended by adding at the end the following:

##### “SEC. 959B. NUCLEAR ENERGY STRATEGIC PLAN.

“(a) IN GENERAL.—Not later than 180 days after the date of enactment of this section, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Energy and Commerce and Science, Space, and Technology of the House of Representatives a 10-year strategic plan for the Office of Nuclear Energy of the Department, in accordance with this section.

“(b) REQUIREMENTS.—

“(1) COMPONENTS.—The strategic plan under this section shall designate—

“(A) programs that support the planned accomplishment of—

“(i) the goals established under section 959A; and

“(ii) the demonstration programs identified under subsection (c) of that section; and

“(B) programs that—

“(i) do not support the planned accomplishment of demonstration programs, or the goals, referred to in subparagraph (A); but

“(ii) are important to the mission of the Office of Nuclear Energy, as determined by the Secretary.

“(2) PROGRAM PLANNING.—In developing the strategic plan under this section, the Secretary shall specify expected timelines for, as applicable—

“(A) the accomplishment of relevant objectives under current programs of the Department; or

“(B) the commencement of new programs to accomplish those objectives.

“(c) UPDATES.—Not less frequently than once every 2 years, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Energy and Commerce and Science, Space, and Technology of the House of Representatives an updated 10-year strategic plan in accordance with subsection (b), which shall identify, and provide a justification for, any major deviation from a previous strategic plan submitted under this section.”.

(b) TABLE OF CONTENTS.—The table of contents of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 594; 132 Stat. 3160) (as amended by section 1507(b)(3)) is amended by inserting after the item relating to section 959A the following:

“Sec. 959B. Nuclear energy strategic plan.”.

#### SEC. 1509. ADVANCED NUCLEAR FUEL SECURITY PROGRAM.

(a) IN GENERAL.—Subtitle E of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16271 et seq.) (as amended by section 1508(a)) is amended by adding at the end the following:

##### “SEC. 960. ADVANCED NUCLEAR FUEL SECURITY PROGRAM.

“(a) DEFINITIONS.—In this section:

“(1) HALEU TRANSPORTATION PACKAGE.—The term ‘HALEU transportation package’ means a transportation package that is suitable for transporting high-assay, low-enriched uranium.

“(2) HIGH-ASSAY, LOW-ENRICHED URANIUM.—The term ‘high-assay, low-enriched uranium’

means uranium with an assay greater than 5 weight percent, but less than 20 weight percent, of the uranium-235 isotope.

“(3) HIGH-ENRICHED URANIUM.—The term ‘high-enriched uranium’ means uranium with an assay of 20 weight percent or more of the uranium-235 isotope.

“(b) HIGH-ASSAY, LOW-ENRICHED URANIUM PROGRAM FOR ADVANCED REACTORS.—

“(1) ESTABLISHMENT.—Not later than 1 year after the date of enactment of this section, the Secretary shall establish a program to make available high-assay, low-enriched uranium, through contracts for sale, resale, transfer, or lease, for use in commercial or noncommercial advanced nuclear reactors.

“(2) NUCLEAR FUEL OWNERSHIP.—Each lease under this subsection shall include a provision establishing that the high-assay, low-enriched uranium that is the subject of the lease shall remain the property of the Department, including with respect to responsibility for the storage, use, or final disposition of all radioactive waste created by the irradiation, processing, or purification of any leased high-assay, low-enriched uranium.

“(3) QUANTITY.—In carrying out the program under this subsection, the Secretary shall make available—

“(A) by December 31, 2022, high-assay, low-enriched uranium containing not less than 2 metric tons of the uranium-235 isotope; and

“(B) by December 31, 2025, high-assay, low-enriched uranium containing not less than 10 metric tons of the uranium-235 isotope (as determined including the quantities of the uranium-235 isotope made available before December 31, 2022).

“(4) FACTORS FOR CONSIDERATION.—In carrying out the program under this subsection, the Secretary shall take into consideration—

“(A) options for providing the high-assay, low-enriched uranium under this subsection from a stockpile of uranium owned by the Department (including the National Nuclear Security Administration), including—

“(i) fuel that—

“(I) directly meets the needs of an end-user; but

“(II) has been previously used or fabricated for another purpose;

“(ii) fuel that can meet the needs of an end-user after removing radioactive or other contaminants that resulted from a previous use or fabrication of the fuel for research, development, demonstration, or deployment activities of the Department (including activities of the National Nuclear Security Administration); and

“(iii) fuel from a high-enriched uranium stockpile, which can be blended with lower-assay uranium to become high-assay, low-enriched uranium to meet the needs of an end-user; and

“(B) requirements to support molybdenum-99 production under the American Medical Isotopes Production Act of 2012 (Public Law 112–239; 126 Stat. 2211).

“(5) LIMITATION.—The Secretary shall not barter or otherwise sell or transfer uranium in any form in exchange for services relating to the final disposition of radioactive waste from uranium that is the subject of a lease under this subsection.

“(6) SUNSET.—The program under this subsection shall terminate on the earlier of—

“(A) January 1, 2035; and

“(B) the date on which uranium enriched up to, but not equal to, 20 weight percent can be obtained in the commercial market from domestic suppliers.

“(c) REPORT.—

“(1) IN GENERAL.—Not later than 180 days after the date of enactment of this section, the Secretary shall submit to the appropriate committees of Congress a report that

describes actions proposed to be carried out by the Secretary—

“(A) under the program under subsection (b); or

“(B) otherwise to enable the commercial use of high-assay, low-enriched uranium.

“(2) COORDINATION AND STAKEHOLDER INPUT.—In developing the report under this subsection, the Secretary shall seek input from—

“(A) the Nuclear Regulatory Commission;

“(B) the National Laboratories;

“(C) institutions of higher education;

“(D) producers of medical isotopes;

“(E) a diverse group of entities operating in the nuclear energy industry; and

“(F) a diverse group of technology developers.

“(3) COST AND SCHEDULE ESTIMATES.—The report under this subsection shall include estimated costs, budgets, and timeframes for enabling the use of high-assay, low-enriched uranium.

“(4) REQUIRED EVALUATIONS.—The report under this subsection shall evaluate—

“(A) the costs and actions required to establish and carry out the program under subsection (b), including with respect to—

“(i) proposed preliminary terms for the sale, resale, transfer, and leasing of high-assay, low-enriched uranium (including guidelines defining the roles and responsibilities between the Department and the purchaser, transfer recipient, or lessee); and

“(ii) the potential to coordinate with purchasers, transfer recipients, and lessees regarding—

“(I) fuel fabrication; and

“(II) fuel transport;

“(B) the potential sources and fuel forms available to provide uranium for the program under subsection (b);

“(C) options to coordinate the program under subsection (b) with the operation of the versatile, reactor-based fast neutron source under section 959A;

“(D) the ability of the domestic uranium market to provide materials for advanced nuclear reactor fuel; and

“(E) any associated legal, regulatory, and policy issues that should be addressed to enable—

“(i) the program under subsection (b); and

“(ii) the establishment of a domestic industry capable of providing high-assay, low-enriched uranium for commercial and non-commercial purposes, including with respect to the needs of—

“(I) the Department;

“(II) the Department of Defense; and

“(III) the National Nuclear Security Administration.

“(d) HALEU TRANSPORTATION PACKAGE RESEARCH PROGRAM.—

“(1) IN GENERAL.—As soon as practicable after the date of enactment of this section, the Secretary shall establish a research, development, and demonstration program under which the Secretary shall provide financial assistance, on a competitive basis, to establish the capability to transport high-assay, low-enriched uranium.

“(2) REQUIREMENT.—The focus of the program under this subsection shall be to establish 1 or more HALEU transportation packages that can be certified by the Nuclear Regulatory Commission to transport high-assay, low-enriched uranium to the various facilities involved in producing or using nuclear fuel containing high-assay, low-enriched uranium, such as—

“(A) enrichment facilities;

“(B) fuel processing facilities;

“(C) fuel fabrication facilities; and

“(D) nuclear reactors.”.

(b) CLERICAL AMENDMENT.—The table of contents of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 594; 132 Stat.



3160) (as amended by section 1508(b)) is amended by inserting after the item relating to section 959B the following:

“Sec. 960. Advanced nuclear fuel security program.”.

**SEC. 1510. INTERNATIONAL NUCLEAR ENERGY COOPERATION.**

(a) IN GENERAL.—Subtitle H of Title IX of the Energy Policy Act of 2005 (42 U.S.C. 16341 et seq.) is amended by adding at the end the following:

**“SEC. 986B. INTERNATIONAL NUCLEAR ENERGY COOPERATION.**

“(a) IN GENERAL.—The Secretary shall carry out a program to develop bilateral collaboration initiatives with a variety of countries through—

“(1) research and development agreements;

“(2) other relevant arrangements and action plan updates; and

“(3) maintaining existing multilateral cooperation commitments of—

“(A) the International Framework for Nuclear Energy Cooperation;

“(B) the Generation IV International Forum;

“(C) the International Atomic Energy Agency; and

“(D) any other international collaborative effort with respect to advanced nuclear reactor operations and safety.

“(b) SUBPROGRAM.—

“(1) IN GENERAL.—In carrying out the program under subsection (a), the Secretary shall establish a subprogram that shall—

“(A) support diplomatic, nonproliferation, climate, and international economic objectives for the safe, secure, and peaceful use of nuclear technology in countries developing nuclear energy programs, with a focus on countries that have increased civil nuclear cooperation with Russia and China; and

“(B) be modeled after the International Military Education and Training program of the Department of State.

“(2) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out the subprogram under this subsection \$5,500,000 for each of fiscal years 2021 through 2025.

“(C) REQUIREMENTS.—The program under subsection (a) shall be carried out—

“(1) to facilitate, to the maximum extent practicable, workshops and expert-based exchanges to engage industry, stakeholders, and foreign governments regarding international civil nuclear issues, such as training, financing, safety, and options for multinational cooperation on used nuclear fuel disposal; and

“(2) in coordination with—

“(A) the National Security Council;

“(B) the Secretary of State;

“(C) the Secretary of Commerce; and

“(D) the Nuclear Regulatory Commission.”.

(b) CONFORMING AMENDMENT.—The table of contents of the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600) is amended by inserting after the item relating to section 986A the following:

“Sec. 986B. International nuclear energy cooperation.”.

**SEC. 1511. INTEGRATED ENERGY SYSTEMS PROGRAM.**

(a) PROGRAM.—

(1) ESTABLISHMENT.—

(A) IN GENERAL.—The Secretary shall establish a program, to be known as the “Integrated Energy Systems Program” (referred to in this subsection as the “program”)—

(i) to maximize energy production and efficiency;

(ii) to develop energy systems involving the integration of nuclear energy with renewable energy, fossil energy, and energy storage; and

(iii) to expand the use of emissions-reducing energy technologies into nonelectric sectors to achieve significant reductions in environmental emissions.

(B) PROGRAM ADMINISTRATION; PARTNERS.—The program shall be carried out by the Under Secretary of Energy, in partnership with—

(i) relevant offices within the Department;

(ii) National Laboratories;

(iii) institutions of higher education; and

(iv) the private sector.

(C) GOALS AND MILESTONES.—The Secretary shall establish quantitative goals and milestones for the program.

(2) RESEARCH AREAS.—Research areas under the program may include—

(A) technology innovation to further the expansion of emissions-reducing energy technologies to accommodate a modern, resilient grid system by—

(i) effectively leveraging multiple energy sources;

(ii) enhancing and streamlining engineering design;

(iii) carrying out process demonstrations to optimize performance; and

(iv) streamlining regulatory review;

(B) advanced power cycles, energy extraction, and processing of complex hydrocarbons to produce high-value chemicals;

(C) efficient use of emissions-reducing energy technologies for hydrogen production to support transportation and industrial needs;

(D) enhancement and acceleration of domestic manufacturing and desalinization technologies and processes by optimally using clean energy sources;

(E) more effective thermal energy use, transport, and storage;

(F) the demonstration of nuclear energy delivery for—

(i) the production of chemicals, metals, and fuels;

(ii) the capture, use, and storage of carbon;

(iii) renewable integration with an integrated energy system; and

(iv) conversion of carbon feedstock, such as coal, biomass, natural gas, and refuse waste, to higher value nonelectric commodities;

(G) the development of new analysis capabilities to identify the best ways—

(i) to leverage multiple energy sources in a given region; and

(ii) to quantify the benefits of integrated energy systems; and

(H) any other area that, as determined by the Secretary, meets the purpose and goals of the program.

(3) GRANTS.—The Secretary may award grants under the program to support the goals of the program.

(b) REPORT ON DUPLICATIVE PROGRAMS.—Not later than 1 year after the date of enactment of this Act, and annually thereafter, the Secretary shall submit to Congress a report identifying any program that is duplicative of the program established under subsection (a)(1)(A).

**Subtitle F—Industrial Technologies**

**PART I—INNOVATION**

**SEC. 1601. PURPOSE.**

The purpose of this part and the amendments made by this part is to encourage the development and evaluation of innovative technologies aimed at increasing—

(1) the technological and economic competitiveness of industry and manufacturing in the United States; and

(2) the emissions reduction of nonpower industrial sectors.

**SEC. 1602. COORDINATION OF RESEARCH AND DEVELOPMENT OF ENERGY EFFICIENT TECHNOLOGIES FOR INDUSTRY.**

Section 6(a) of the American Energy Manufacturing Technical Corrections Act (42 U.S.C. 6351(a)) is amended—

(1) by striking “Industrial Technologies Program” each place it appears and inserting “Advanced Manufacturing Office”; and

(2) in the matter preceding paragraph (1), by striking “Office of Energy” and all that follows through “Office of Science” and inserting “Department of Energy”.

**SEC. 1603. INDUSTRIAL EMISSIONS REDUCTION TECHNOLOGY DEVELOPMENT PROGRAM.**

(a) IN GENERAL.—The Energy Independence and Security Act of 2007 is amended by inserting after section 454 (as added by section 1022(b)) the following:

**“SEC. 455. INDUSTRIAL EMISSIONS REDUCTION TECHNOLOGY DEVELOPMENT PROGRAM.**

“(a) DEFINITIONS.—In this section:

“(1) DIRECTOR.—The term ‘Director’ means the Director of the Office of Science and Technology Policy.

“(2) ELIGIBLE ENTITY.—The term ‘eligible entity’ means—

“(A) a scientist or other individual with knowledge and expertise in emissions reduction;

“(B) an institution of higher education;

“(C) a nongovernmental organization;

“(D) a National Laboratory;

“(E) a private entity; and

“(F) a partnership or consortium of 2 or more entities described in subparagraphs (B) through (E).

“(3) EMISSIONS REDUCTION.—

“(A) IN GENERAL.—The term ‘emissions reduction’ means the reduction, to the maximum extent practicable, of net nonwater greenhouse gas emissions to the atmosphere by energy services and industrial processes.

“(B) EXCLUSION.—The term ‘emissions reduction’ does not include the elimination of carbon embodied in the principal products of industrial manufacturing.

“(4) INSTITUTION OF HIGHER EDUCATION.—The term ‘institution of higher education’ has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

“(5) PROGRAM.—The term ‘program’ means the program established under subsection (b)(1).

“(b) INDUSTRIAL EMISSIONS REDUCTION TECHNOLOGY DEVELOPMENT PROGRAM.—

“(1) IN GENERAL.—Not later than 1 year after the date of enactment of the American Energy Innovation Act of 2020, the Secretary, in consultation with the Director, the heads of relevant Federal agencies, National Laboratories, industry, and institutions of higher education, shall establish a crosscutting industrial emissions reduction technology development program of research, development, demonstration, and commercial application to further the development and commercialization of innovative technologies that—

“(A) increase the technological and economic competitiveness of industry and manufacturing in the United States;

“(B) increase the viability and competitiveness of United States industrial technology exports; and

“(C) achieve emissions reduction in nonpower industrial sectors.

“(2) COORDINATION.—In carrying out the program, the Secretary shall—

“(A) coordinate with each relevant office in the Department and any other Federal agency;

“(B) coordinate and collaborate with the Industrial Technology Innovation Advisory Committee established under section 456; and

“(C) coordinate and seek to avoid duplication with the energy-intensive industries program established under section 452.

“(3) LEVERAGE OF EXISTING RESOURCES.—In carrying out the program, the Secretary

shall leverage, to the maximum extent practicable—

“(A) existing resources and programs of the Department and other relevant Federal agencies; and

“(B) public-private partnerships.

“(C) FOCUS AREAS.—The program shall focus on—

“(1) industrial production processes, including technologies and processes that—

“(A) achieve emissions reduction in high-emissions industrial materials production processes, including production processes for iron, steel, steel mill products, aluminum, cement, glass, pulp, paper, and industrial ceramics;

“(B) achieve emissions reduction in medium- and high-temperature heat generation, including—

“(i) through electrification of heating processes;

“(ii) through renewable heat generation technology;

“(iii) through combined heat and power; and

“(iv) by switching to alternative fuels, including hydrogen and nuclear energy;

“(C) achieve emissions reduction in chemical production processes, including by incorporating, if appropriate and practicable, principles, practices, and methodologies of sustainable, green chemistry and engineering;

“(D) leverage smart manufacturing technologies and principles, digital manufacturing technologies, and advanced data analytics to develop advanced technologies and practices in information, automation, monitoring, computation, sensing, modeling, and networking to—

“(i) model and simulate manufacturing production lines;

“(ii) monitor and communicate production line status;

“(iii) manage and optimize energy productivity and cost throughout production; and

“(iv) model, simulate, and optimize the energy efficiency of manufacturing processes;

“(E) minimize the negative environmental impacts of manufacturing and sustainable chemistry while conserving energy and resources, including—

“(i) by designing products that enable reuse, refurbishment, remanufacturing, and recycling;

“(ii) by minimizing waste from industrial processes, including through the reuse of waste as other resources in other industrial processes for mutual benefit; and

“(iii) by increasing resource efficiency; and

“(F) increase the energy efficiency of industrial processes;

“(2) alternative materials that produce fewer emissions during production and result in fewer emissions during use;

“(3) development of net-zero emissions liquid and gaseous fuels;

“(4) emissions reduction in shipping, aviation, and long distance transportation;

“(5) carbon capture technologies for industrial processes;

“(6) other technologies that achieve net-zero emissions in nonpower industrial sectors, as determined by the Secretary, in consultation with the Director; and

“(7) high-performance computing to develop advanced materials and manufacturing processes contributing to the focus areas described in paragraphs (1) through (6), including—

“(A) modeling, simulation, and optimization of the design of energy efficient and sustainable products; and

“(B) the use of digital prototyping and additive manufacturing to enhance product design.

“(d) GRANTS, CONTRACTS, COOPERATIVE AGREEMENTS, AND DEMONSTRATION PROJECTS.—

“(1) GRANTS.—In carrying out the program, the Secretary shall award grants on a competitive basis to eligible entities for projects that the Secretary determines would best achieve the goals of the program.

“(2) CONTRACTS AND COOPERATIVE AGREEMENTS.—In carrying out the program, the Secretary may enter into contracts and cooperative agreements with eligible entities and Federal agencies for projects that the Secretary determines would further the purposes of the program.

“(3) DEMONSTRATION PROJECTS.—In supporting technologies developed under this section, the Secretary shall fund demonstration projects that test and validate technologies described in subsection (c).

“(4) APPLICATION.—An entity seeking funding or a contract or agreement under this subsection shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

“(5) COST SHARING.—In awarding funds under this section, the Secretary shall require cost sharing in accordance with section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).”

(b) TECHNICAL AMENDMENT.—The table of contents of the Energy Independence and Security Act of 2007 (Public Law 110-140; 121 Stat. 1494) (as amended by section 1022(c)) is amended by inserting after the item relating to section 454 the following:

“Sec. 455. Industrial emissions reduction technology development program.”

#### SEC. 1604. INDUSTRIAL TECHNOLOGY INNOVATION ADVISORY COMMITTEE.

(a) IN GENERAL.—The Energy Independence and Security Act of 2007 is amended by inserting after section 455 (as added by section 1603(a)) the following:

#### “SEC. 456. INDUSTRIAL TECHNOLOGY INNOVATION ADVISORY COMMITTEE.

“(a) DEFINITIONS.—In this section:

“(1) COMMITTEE.—The term ‘Committee’ means the Industrial Technology Innovation Advisory Committee established under subsection (b).

“(2) DIRECTOR.—The term ‘Director’ means the Director of the Office of Science and Technology Policy.

“(3) EMISSIONS REDUCTION.—The term ‘emissions reduction’ has the meaning given the term in section 455(a).

“(4) PROGRAM.—The term ‘program’ means the industrial emissions reduction technology development program established under section 455(b)(1).

“(b) ESTABLISHMENT.—Not later than 180 days after the date of enactment of the American Energy Innovation Act of 2020, the Secretary, in consultation with the Director, shall establish an advisory committee, to be known as the ‘Industrial Technology Innovation Advisory Committee’.

“(c) MEMBERSHIP.—

“(1) APPOINTMENT.—The Committee shall be comprised of not fewer than 14 members and not more than 18 members, who shall be appointed by the Secretary, in consultation with the Director.

“(2) REPRESENTATION.—Members appointed pursuant to paragraph (1) shall include—

“(A) not less than 1 representative of each relevant Federal agency, as determined by the Secretary;

“(B) the Chair of the Secretary of Energy Advisory Board, if that position is filled;

“(C) not less than 2 representatives of labor groups;

“(D) not less than 3 representatives of the research community, which shall include academia and National Laboratories;

“(E) not less than 2 representatives of non-governmental organizations;

“(F) not less than 6 representatives of small- and large-scale industry, the collective expertise of which shall cover every focus area described in section 455(c); and

“(G) any other individuals the Secretary, in coordination with the Director, determines to be necessary to ensure that the Committee is comprised of a diverse group of representatives of industry, academia, independent researchers, and public and private entities.

“(3) CHAIR.—The Secretary shall designate a member of the Committee to serve as Chair.

“(d) DUTIES.—

“(1) IN GENERAL.—The Committee shall—

“(A) in consultation with the Secretary and the Director, propose missions and goals for the program, which shall be consistent with the purposes of the program described in section 455(b)(1); and

“(B) advise the Secretary with respect to the program—

“(i) by identifying and evaluating any technologies being developed by the private sector relating to the focus areas described in section 455(c);

“(ii) by identifying technology gaps in the private sector in those focus areas, and making recommendations to address those gaps;

“(iii) by surveying and analyzing factors that prevent the adoption of emissions reduction technologies by the private sector; and

“(iv) by recommending technology screening criteria for technology developed under the program to encourage adoption of the technology by the private sector; and

“(C) develop the strategic plan described in paragraph (2).

“(2) STRATEGIC PLAN.—

“(A) PURPOSE.—The purpose of the strategic plan developed under paragraph (1)(C) is to achieve the goals of the program in the focus areas described in section 455(c).

“(B) CONTENTS.—The strategic plan developed under paragraph (1)(C) shall—

“(i) specify near-term and long-term qualitative and quantitative objectives relating to each focus area described in section 455(c), including research, development, demonstration, and commercial application objectives;

“(ii) specify the anticipated timeframe for achieving the objectives specified under clause (i);

“(iii) include plans for developing emissions reduction technologies that are globally cost-competitive;

“(iv) identify the public and private costs of achieving the objectives specified under clause (i); and

“(v) estimate the economic and employment impact in the United States of achieving those objectives.

“(e) MEETINGS.—

“(1) FREQUENCY.—The Committee shall meet not less frequently than 2 times per year, at the call of the Chair.

“(2) INITIAL MEETING.—Not later than 30 days after the date on which the members are appointed under subsection (b), the Committee shall hold its first meeting.

“(f) COMMITTEE REPORT.—

“(1) IN GENERAL.—Not later than 2 years after the date of enactment of the American Energy Innovation Act of 2020, and not less frequently than once every 3 years thereafter, the Committee shall submit to the Secretary a report on the progress of achieving the purposes of the program.

“(2) CONTENTS.—The report under paragraph (1) shall include—

“(A) a description of any technology innovation opportunities identified by the Committee;

“(B) a description of any technology gaps identified by the Committee under subsection (d)(1)(B)(ii);

“(C) recommendations for improving technology screening criteria and management of the program;

“(D) an evaluation of the progress of the program and the research and development funded under the program;

“(E) any recommended changes to the focus areas of the program described in section 455(c);

“(F) a description of the manner in which the Committee has carried out the duties described in subsection (d)(1) and any relevant findings as a result of carrying out those duties;

“(G) if necessary, an update to the strategic plan developed by the Committee under subsection (d)(1)(C);

“(H) the progress made in achieving the goals set out in that strategic plan;

“(I) a review of the management, coordination, and industry utility of the program;

“(J) an assessment of the extent to which progress has been made under the program in developing commercial, cost-competitive technologies in each focus area described in section 455(c); and

“(K) an assessment of the effectiveness of the program in coordinating efforts within the Department and with other Federal agencies to achieve the purposes of the program.

“(g) REPORT TO CONGRESS.—Not later than 60 days after receiving a report from the Committee under subsection (f), the Secretary shall submit a copy of that report to the Committees on Appropriations and Science, Space, and Technology of the House of Representatives, the Committees on Appropriations and Energy and Natural Resources of the Senate, and any other relevant Committee of Congress.

“(h) APPLICABILITY OF FEDERAL ADVISORY COMMITTEE ACT.—Except as otherwise provided in this section, the Federal Advisory Committee Act (5 U.S.C. App.) shall apply to the Committee.”.

(b) TECHNICAL AMENDMENT.—The table of contents of the Energy Independence and Security Act of 2007 (Public Law 110-140; 121 Stat. 1494) (as amended by section 1603(b)) is amended by inserting after the item relating to section 455 the following:

“Sec. 456. Industrial Technology Innovation Advisory Committee.”.

#### **SEC. 1605. TECHNICAL ASSISTANCE PROGRAM TO IMPLEMENT INDUSTRIAL EMISSIONS REDUCTION.**

(a) IN GENERAL.—The Energy Independence and Security Act of 2007 is amended by inserting after section 456 (as added by section 1604(a)) the following:

#### **“SEC. 457. TECHNICAL ASSISTANCE PROGRAM TO IMPLEMENT INDUSTRIAL EMISSIONS REDUCTION.**

“(a) DEFINITIONS.—In this section:

“(1) ELIGIBLE ENTITY.—The term ‘eligible entity’ means—

“(A) a State;

“(B) a unit of local government;

“(C) a territory or possession of the United States;

“(D) a relevant State or local office, including an energy office;

“(E) a tribal organization (as defined in section 3765 of title 38, United States Code);

“(F) an institution of higher education; and

“(G) a private entity.

“(2) EMISSIONS REDUCTION.—The term ‘emissions reduction’ has the meaning given the term in section 455(a).

“(3) INSTITUTION OF HIGHER EDUCATION.—The term ‘institution of higher education’ has the meaning given the term in section

101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

“(4) PROGRAM.—The term ‘program’ means the program established under subsection (b).

“(b) ESTABLISHMENT.—Not later than 180 days after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall establish a program to provide technical assistance to eligible entities to carry out an activity described in subsection (c).

“(c) ACTIVITIES DESCRIBED.—An activity referred to in subsection (b) is any of the following activities carried out for the purpose of achieving emissions reduction in nonpower industrial sectors:

“(1) Adopting emissions reduction technologies.

“(2) Establishing goals and priorities to accelerate the development and evaluation of relevant technologies.

“(3) Developing collaborations across States, local governments, and territories and possessions of the United States.

“(4) Reviewing the appropriate emissions reduction technologies available for a particular eligible entity.

“(5) Developing a roadmap for implementing emissions reduction technologies for a particular eligible entity.

“(6) Any other activity determined appropriate by the Secretary.

“(d) APPLICATIONS.—

“(1) IN GENERAL.—An eligible entity desiring technical assistance under the program shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

“(2) APPLICATION PROCESS.—The Secretary shall seek applications for technical assistance under the program on a periodic basis, but not less frequently than once every 12 months.

“(3) FACTORS FOR CONSIDERATION.—In selecting eligible entities for technical assistance under the program, the Secretary shall—

“(A) give priority to—

“(i) activities carried out with technical assistance under the program that have the greatest potential for achieving emissions reduction in nonpower industrial sectors;

“(ii) activities carried out in a State in which there are active or inactive industrial facilities that may be used or retrofitted to carry out activities under the focus areas described in section 455(c); and

“(iii) activities carried out in an economically distressed area (as described in section 301(a) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161(a))); and

“(B) ensure that—

“(i) there is geographic diversity among the eligible entities selected; and

“(ii) the activities carried out with technical assistance under the program reflect a majority of the focus areas described in section 455(c).”.

(b) TECHNICAL AMENDMENT.—The table of contents of the Energy Independence and Security Act of 2007 (Public Law 110-140; 121 Stat. 1494) (as amended by section 1604(b)) is amended by inserting after the item relating to section 456 the following:

“Sec. 457. Technical assistance program to implement industrial emissions reduction.”.

#### **PART II—SMART MANUFACTURING**

##### **SEC. 1611. DEFINITIONS.**

In this part:

(1) ENERGY MANAGEMENT SYSTEM.—The term “energy management system” means a business management process based on standards of the American National Standards Institute that enables an organization

to follow a systematic approach in achieving continual improvement of energy performance, including energy efficiency, security, use, and consumption.

(2) INDUSTRIAL ASSESSMENT CENTER.—The term “industrial assessment center” means a center located at an institution of higher education that—

(A) receives funding from the Department;

(B) provides an in-depth assessment of small- and medium-size manufacturer plant sites to evaluate the facilities, services, and manufacturing operations of the plant site; and

(C) identifies opportunities for potential savings for small- and medium-size manufacturer plant sites from energy efficiency improvements, waste minimization, pollution prevention, and productivity improvement.

(3) INFORMATION AND COMMUNICATION TECHNOLOGY.—The term “information and communication technology” means any electronic system or equipment (including the content contained in the system or equipment) used to create, convert, communicate, or duplicate data or information, including computer hardware, firmware, software, communication protocols, networks, and data interfaces.

(4) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(5) NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM.—The term “North American Industry Classification System” means the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data relating to the business economy of the United States.

(6) SMALL AND MEDIUM MANUFACTURERS.—The term “small and medium manufacturers” means manufacturing firms—

(A) classified in the North American Industry Classification System as any of sectors 31 through 33;

(B) with gross annual sales of less than \$100,000,000;

(C) with fewer than 500 employees at the plant site; and

(D) with annual energy bills totaling more than \$100,000 and less than \$2,500,000.

(7) SMART MANUFACTURING.—The term “smart manufacturing” means advanced technologies in information, automation, monitoring, computation, sensing, modeling, artificial intelligence, analytics, and networking that—

(A) digitally—

(i) simulate manufacturing production lines;

(ii) operate computer-controlled manufacturing equipment;

(iii) monitor and communicate production line status; and

(iv) manage and optimize energy productivity and cost throughout production;

(B) model, simulate, and optimize the energy efficiency of a factory building;

(C) monitor and optimize building energy performance;

(D) model, simulate, and optimize the design of energy efficient and sustainable products, including the use of digital prototyping and additive manufacturing to enhance product design;

(E) connect manufactured products in networks to monitor and optimize the performance of the networks, including automated network operations; and

(F) digitally connect the supply chain network.

##### **SEC. 1612. DEVELOPMENT OF NATIONAL SMART MANUFACTURING PLAN.**

(a) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the

Secretary, in consultation with the National Academies, shall develop and complete a national plan for smart manufacturing technology development and deployment to improve the productivity and energy efficiency of the manufacturing sector of the United States.

(b) **CONTENT.**—

(1) **IN GENERAL.**—The plan developed under subsection (a) shall identify areas in which agency actions by the Secretary and other heads of relevant Federal agencies would—

(A) facilitate quicker development, deployment, and adoption of smart manufacturing technologies and processes;

(B) result in greater energy efficiency and lower environmental impacts for all American manufacturers; and

(C) enhance competitiveness and strengthen the manufacturing sectors of the United States.

(2) **INCLUSIONS.**—Agency actions identified under paragraph (1) shall include—

(A) an assessment of previous and current actions of the Department relating to smart manufacturing;

(B) the establishment of voluntary interconnection protocols and performance standards;

(C) the use of smart manufacturing to improve energy efficiency and reduce emissions in supply chains across multiple companies;

(D) actions to increase cybersecurity in smart manufacturing infrastructure;

(E) deployment of existing research results;

(F) the leveraging of existing high-performance computing infrastructure; and

(G) consideration of the impact of smart manufacturing on existing manufacturing jobs and future manufacturing jobs.

(c) **BIENNIAL REVISIONS.**—Not later than 2 years after the date on which the Secretary completes the plan under subsection (a), and not less frequently than once every 2 years thereafter, the Secretary shall revise the plan to account for advancements in information and communication technology and manufacturing needs.

(d) **REPORT.**—Annually until the completion of the plan under subsection (a), the Secretary shall submit to Congress a report on the progress made in developing the plan.

(e) **FUNDING.**—The Secretary shall use unobligated funds of the Department to carry out this section.

**SEC. 1613. LEVERAGING EXISTING AGENCY PROGRAMS TO ASSIST SMALL AND MEDIUM MANUFACTURERS.**

(a) **EXPANSION OF TECHNICAL ASSISTANCE PROGRAMS.**—The Secretary shall expand the scope of technologies covered by the Industrial Assessment Centers of the Department—

(1) to include smart manufacturing technologies and practices; and

(2) to equip the directors of the Industrial Assessment Centers with the training and tools necessary to provide technical assistance in smart manufacturing technologies and practices, including energy management systems, to manufacturers.

(b) **FUNDING.**—The Secretary shall use unobligated funds of the Department to carry out this section.

**SEC. 1614. LEVERAGING SMART MANUFACTURING INFRASTRUCTURE AT NATIONAL LABORATORIES.**

(a) **STUDY.**—

(1) **IN GENERAL.**—Not later than 180 days after the date of enactment of this Act, the Secretary shall conduct a study on how the Department can increase access to existing high-performance computing resources in the National Laboratories, particularly for small and medium manufacturers.

(2) **INCLUSIONS.**—In identifying ways to increase access to National Laboratories under paragraph (1), the Secretary shall—

(A) focus on increasing access to the computing facilities of the National Laboratories; and

(B) ensure that—

(i) the information from the manufacturer is protected; and

(ii) the security of the National Laboratory facility is maintained.

(3) **REPORT.**—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the results of the study.

(b) **ACTIONS FOR INCREASED ACCESS.**—The Secretary shall facilitate access to the National Laboratories studied under subsection (a) for small and medium manufacturers so that small and medium manufacturers can fully use the high-performance computing resources of the National Laboratories to enhance the manufacturing competitiveness of the United States.

**SEC. 1615. STATE MANUFACTURING LEADERSHIP.**

(a) **FINANCIAL ASSISTANCE AUTHORIZED.**—The Secretary may provide financial assistance on a competitive basis to States for the establishment of programs to be used as models for supporting the implementation of smart manufacturing technologies.

(b) **APPLICATIONS.**—

(1) **IN GENERAL.**—To be eligible to receive financial assistance under this section, a State shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

(2) **CRITERIA.**—The Secretary shall evaluate an application for financial assistance under this section on the basis of merit using criteria identified by the Secretary, including—

(A) technical merit, innovation, and impact;

(B) research approach, workplan, and deliverables;

(C) academic and private sector partners; and

(D) alternate sources of funding.

(c) **REQUIREMENTS.**—

(1) **TERM.**—The term of an award of financial assistance under this section shall not exceed 3 years.

(2) **MAXIMUM AMOUNT.**—The amount of an award of financial assistance under this section shall be not more than \$2,000,000.

(3) **MATCHING REQUIREMENT.**—Each State that receives financial assistance under this section shall contribute matching funds in an amount equal to not less than 30 percent of the amount of the financial assistance.

(d) **USE OF FUNDS.**—

(1) **IN GENERAL.**—A State may use financial assistance provided under this section—

(A) to facilitate access to high-performance computing resources for small and medium manufacturers; and

(B) to provide assistance to small and medium manufacturers to implement smart manufacturing technologies and practices.

(e) **EVALUATION.**—The Secretary shall conduct semiannual evaluations of each award of financial assistance under this section—

(1) to determine the impact and effectiveness of programs funded with the financial assistance; and

(2) to provide guidance to States on ways to better execute the program of the State.

(f) **AUTHORIZATION.**—There is authorized to be appropriated to the Secretary to carry out this section \$10,000,000 for each of fiscal years 2021 through 2024.

**SEC. 1616. REPORT.**

The Secretary annually shall submit to Congress and make publicly available a report on the progress made in advancing smart manufacturing in the United States.

**Subtitle G—Vehicles**

**SEC. 1701. OBJECTIVES.**

The objectives of this subtitle are—

(1) to establish a consistent and consolidated authority for the vehicle technology program at the Department;

(2) to develop United States technologies and practices that—

(A) improve the fuel efficiency and emissions of all vehicles produced in the United States; and

(B) reduce vehicle reliance on petroleum-based fuels;

(3) to support domestic research, development, engineering, demonstration, and commercial application and manufacturing of advanced vehicles, engines, and components;

(4) to enable vehicles to move larger volumes of goods and more passengers with less energy and emissions;

(5) to develop cost-effective advanced technologies for wide-scale utilization throughout the passenger, commercial, government, and transit vehicle sectors;

(6) to allow for greater consumer choice of vehicle technologies and fuels;

(7) shorten technology development and integration cycles in the vehicle industry;

(8) to ensure a proper balance and diversity of Federal investment in vehicle technologies; and

(9) to strengthen partnerships between Federal and State governmental agencies and the private and academic sectors.

**SEC. 1702. COORDINATION AND NONDUPLICATION.**

The Secretary shall ensure, to the maximum extent practicable, that the activities authorized by this subtitle do not duplicate those of other programs within the Department or other relevant research agencies.

**SEC. 1703. AUTHORIZATION OF APPROPRIATIONS.**

There are authorized to be appropriated to the Secretary for research, development, engineering, demonstration, and commercial application of vehicles and related technologies in the United States, including activities authorized under this subtitle—

(1) for fiscal year 2021, \$313,567,000;

(2) for fiscal year 2022, \$326,109,000;

(3) for fiscal year 2023, \$339,154,000;

(4) for fiscal year 2024, \$352,720,000; and

(5) for fiscal year 2025, \$366,829,000.

**SEC. 1704. REPORTING.**

(a) **TECHNOLOGIES DEVELOPED.**—Not later than 18 months after the date of enactment of this Act and annually thereafter through 2025, the Secretary shall submit to Congress a report regarding the technologies developed as a result of the activities authorized by this subtitle, with a particular emphasis on whether the technologies were successfully adopted for commercial applications, and if so, whether products relying on those technologies are manufactured in the United States.

(b) **ADDITIONAL MATTERS.**—At the end of each fiscal year through 2025, the Secretary shall submit to the relevant Congressional committees of jurisdiction an annual report describing activities undertaken in the previous year under this subtitle, active industry participants, the status of public-private partnerships, progress of the program in meeting goals and timelines, and a strategic plan for funding of activities across agencies.

**SEC. 1705. VEHICLE RESEARCH AND DEVELOPMENT.**

(a) **PROGRAM.**—

(1) **ACTIVITIES.**—The Secretary shall conduct a program of basic and applied research, development, engineering, demonstration, and commercial application activities on materials, technologies, and processes with the potential to substantially reduce or eliminate petroleum use and the emissions of the passenger and commercial vehicles of the United States, including activities in the areas of—

(A) electrification of vehicle systems;

(B) batteries, ultracapacitors, and other energy storage devices;

(C) power electronics;

(D) vehicle, component, and subsystem manufacturing technologies and processes;

(E) engine efficiency and combustion optimization;

(F) waste heat recovery;

(G) transmission and drivetrains;

(H) hydrogen vehicle technologies, including fuel cells and internal combustion engines, and hydrogen infrastructure, including hydrogen energy storage to enable renewables and provide hydrogen for fuel and power;

(I) natural gas vehicle technologies;

(J) aerodynamics, rolling resistance (including tires and wheel assemblies), and accessory power loads of vehicles and associated equipment;

(K) vehicle weight reduction, including lightweighting materials and the development of manufacturing processes to fabricate, assemble, and use dissimilar materials;

(L) friction and wear reduction;

(M) engine and component durability;

(N) innovative propulsion systems;

(O) advanced boosting systems;

(P) hydraulic hybrid technologies;

(Q) engine compatibility with and optimization for a variety of transportation fuels including natural gas and other liquid and gaseous fuels;

(R) predictive engineering, modeling, and simulation of vehicle and transportation systems;

(S) refueling and charging infrastructure for alternative fueled and electric or plug-in electric hybrid vehicles, including the unique challenges facing rural areas;

(T) gaseous fuels storage systems and system integration and optimization;

(U) sensing, communications, and actuation technologies for vehicle, electrical grid, and infrastructure;

(V) efficient use, substitution, and recycling of potentially critical materials in vehicles, including rare earth elements and precious metals, at risk of supply disruption;

(W) aftertreatment technologies;

(X) thermal management of battery systems;

(Y) retrofitting advanced vehicle technologies to existing vehicles;

(Z) development of common standards, specifications, and architectures for both transportation and stationary battery applications;

(AA) advanced internal combustion engines;

(BB) mild hybrid;

(CC) engine down speeding;

(DD) vehicle-to-vehicle, vehicle-to-pedestrian, and vehicle-to-infrastructure technologies; and

(EE) other research areas as determined by the Secretary.

(2) TRANSFORMATIONAL TECHNOLOGY.—The Secretary shall ensure that the Department continues to support research, development, engineering, demonstration, and commercial application activities and maintains competency in mid- to long-term transformational vehicle technologies with potential to achieve reductions in emissions, including activities in the areas of—

(A) hydrogen vehicle technologies, including fuel cells, hydrogen storage, infrastructure, and activities in hydrogen technology validation and safety codes and standards;

(B) multiple battery chemistries and novel energy storage devices, including nonchemical batteries and electromechanical storage technologies such as hydraulics, flywheels, and compressed air storage;

(C) communication and connectivity among vehicles, infrastructure, and the electrical grid; and

(D) other innovative technologies research and development, as determined by the Secretary.

(3) INDUSTRY PARTICIPATION.—

(A) IN GENERAL.—To the maximum extent practicable, activities under this subtitle shall be carried out in partnership or collaboration with automotive manufacturers, heavy commercial, vocational, and transit vehicle manufacturers, qualified plug-in electric vehicle manufacturers, compressed natural gas vehicle manufacturers, vehicle and engine equipment and component manufacturers, manufacturing equipment manufacturers, advanced vehicle service providers, fuel producers and energy suppliers, electric utilities, universities, National Laboratories, and independent research laboratories.

(B) REQUIREMENTS.—In carrying out this subtitle, the Secretary shall—

(i) determine whether a wide range of companies that manufacture or assemble vehicles or components in the United States are represented in ongoing public-private partnership activities, including firms that have not traditionally participated in federally sponsored research and development activities, and where possible, partner with such firms that conduct significant and relevant research and development activities in the United States;

(ii) leverage the capabilities and resources of, and formalize partnerships with, industry-led stakeholder organizations, nonprofit organizations, industry consortia, and trade associations with expertise in the research and development of, and education and outreach activities in, advanced automotive and commercial vehicle technologies;

(iii) develop more effective processes for transferring research findings and technologies to industry;

(iv) support public-private partnerships, dedicated to overcoming barriers in commercial application of transformational vehicle technologies, that use such industry-led technology development facilities of entities with demonstrated expertise in successfully designing and engineering pre-commercial generations of such transformational technology; and

(v) promote efforts to ensure that technology research, development, engineering, and commercial application activities funded under this subtitle are carried out in the United States.

(4) INTERAGENCY AND INTRAAGENCY COORDINATION.—To the maximum extent practicable, the Secretary shall coordinate research, development, demonstration, and commercial application activities among—

(A) relevant programs within the Department, including—

(i) the Office of Energy Efficiency and Renewable Energy;

(ii) the Office of Science;

(iii) the Office of Electricity Delivery and Energy Reliability;

(iv) the Office of Fossil Energy;

(v) the Advanced Research Projects Agency—Energy; and

(vi) other offices as determined by the Secretary; and

(B) relevant technology research and development programs within other Federal agencies, as determined by the Secretary.

(5) FEDERAL DEMONSTRATION OF TECHNOLOGIES.—The Secretary shall make information available to procurement programs of Federal agencies regarding the potential to demonstrate technologies resulting from activities funded through programs under this subtitle.

(6) INTERGOVERNMENTAL COORDINATION.—The Secretary shall seek opportunities to leverage resources and support initiatives of State and local governments in developing and promoting advanced vehicle technologies, manufacturing, and infrastructure.

(7) CRITERIA.—In awarding grants under the program under this subsection, the Secretary shall give priority to those technologies (either individually or as part of a system) that—

(A) provide the greatest aggregate fuel savings based on the reasonable projected sales volumes of the technology; and

(B) provide the greatest increase in United States employment.

(8) SECONDARY USE APPLICATIONS.—

(A) IN GENERAL.—The Secretary shall carry out a research, development, and demonstration program that—

(i) builds on any work carried out under section 915 of the Energy Policy Act of 2005 (42 U.S.C. 16195);

(ii) identifies possible uses of a vehicle battery after the useful life of the battery in a vehicle has been exhausted;

(iii) conducts long-term testing to verify performance and degradation predictions and lifetime valuations for secondary uses;

(iv) evaluates innovative approaches to recycling materials from plug-in electric drive vehicles and the batteries used in plug-in electric drive vehicles;

(v)(I) assesses the potential for markets for uses described in clause (ii) to develop; and

(II) identifies any barriers to the development of those markets; and

(vi) identifies the potential uses of a vehicle battery—

(I) with the most promise for market development; and

(II) for which market development would be aided by a demonstration project.

(B) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the appropriate committees of Congress an initial report on the findings of the program described in subparagraph (A), including recommendations for stationary energy storage and other potential applications for batteries used in plug-in electric drive vehicles.

(C) SECONDARY USE DEMONSTRATION.—

(i) IN GENERAL.—Based on the results of the program described in subparagraph (A), the Secretary shall develop guidelines for projects that demonstrate the secondary uses and innovative recycling of vehicle batteries.

(ii) PUBLICATION OF GUIDELINES.—Not later than 18 months after the date of enactment of this Act, the Secretary shall—

(I) publish the guidelines described in clause (i); and

(II) solicit applications for funding for demonstration projects.

(iii) PILOT DEMONSTRATION PROGRAM.—Not later than 21 months after the date of enactment of this Act, the Secretary shall select proposals for grant funding under this subsection, based on an assessment of which proposals are mostly likely to contribute to the development of a secondary market for batteries.

(b) MANUFACTURING.—The Secretary shall carry out a research, development, engineering, demonstration, and commercial application program of advanced vehicle manufacturing technologies and practices, including innovative processes—

(1) to increase the production rate and decrease the cost of advanced battery and fuel cell manufacturing;

(2) to vary the capability of individual manufacturing facilities to accommodate different battery chemistries and configurations;

(3) to reduce waste streams, emissions, and energy intensity of vehicle, engine, advanced battery, and component manufacturing processes;

(4) to recycle and remanufacture used batteries and other vehicle components for reuse in vehicles or stationary applications;

(5) to develop manufacturing processes to effectively fabricate, assemble, and produce cost-effective lightweight materials such as advanced aluminum and other metal alloys, polymeric composites, and carbon fiber for use in vehicles;

(6) to produce lightweight high pressure storage systems for gaseous fuels;

(7) to design and manufacture purpose-built hydrogen fuel cell vehicles and components;

(8) to improve the calendar life and cycle life of advanced batteries; and

(9) to produce permanent magnets for advanced vehicles.

#### **SEC. 1706. MEDIUM- AND HEAVY-DUTY COMMERCIAL AND TRANSIT VEHICLES PROGRAM.**

The Secretary, in partnership with relevant research and development programs in other Federal agencies, and a range of appropriate industry stakeholders, shall carry out a program of cooperative research, development, demonstration, and commercial application activities on advanced technologies for medium- to heavy-duty commercial, vocational, recreational, and transit vehicles, including activities in the areas of—

(1) engine efficiency and combustion research;

(2) onboard storage technologies for compressed and liquefied natural gas;

(3) development and integration of engine technologies designed for natural gas operation of a variety of vehicle platforms;

(4) waste heat recovery and conversion;

(5) improved aerodynamics and tire rolling resistance;

(6) energy and space-efficient emissions control systems;

(7) mild hybrid, heavy hybrid, hybrid hydraulic, plug-in hybrid, and electric platforms, and energy storage technologies;

(8) drivetrain optimization;

(9) friction and wear reduction;

(10) engine idle and parasitic energy loss reduction;

(11) electrification of accessory loads;

(12) onboard sensing and communications technologies;

(13) advanced lightweighting materials and vehicle designs;

(14) increasing load capacity per vehicle;

(15) thermal management of battery systems;

(16) recharging infrastructure;

(17) compressed natural gas infrastructure;

(18) advanced internal combustion engines;

(19) complete vehicle and power pack modeling, simulation, and testing;

(20) hydrogen vehicle technologies, including fuel cells and internal combustion engines, and hydrogen infrastructure, including hydrogen energy storage to enable renewables and provide hydrogen for fuel and power;

(21) retrofitting advanced technologies onto existing truck fleets;

(22) advanced boosting systems;

(23) engine down speeding; and

(24) integration of these and other advanced systems onto a single truck and trailer platform.

#### **SEC. 1707. CLASS 8 TRUCK AND TRAILER SYSTEMS DEMONSTRATION.**

(a) IN GENERAL.—The Secretary shall conduct a competitive grant program to demonstrate the integration of multiple advanced technologies on Class 8 truck and trailer platforms, including a combination of technologies listed in section 1706.

(b) APPLICANT TEAMS.—Applicant teams may be comprised of truck and trailer manufacturers, engine and component manufacturers, fleet customers, university researchers, and other applicants as appropriate for the development and demonstration of integrated Class 8 truck and trailer systems.

#### **SEC. 1708. TECHNOLOGY TESTING AND METRICS.**

The Secretary, in coordination with the partners of the interagency research program described in section 1706—

(1) shall develop standard testing procedures and technologies for evaluating the performance of advanced heavy vehicle technologies under a range of representative duty cycles and operating conditions, including for heavy hybrid propulsion systems;

(2) shall evaluate heavy vehicle performance using work performance-based metrics other than those based on miles per gallon, including those based on units of volume and weight transported for freight applications, and appropriate metrics based on the work performed by nonroad systems; and

(3) may construct heavy duty truck and bus testing facilities.

#### **SEC. 1709. NONROAD SYSTEMS PILOT PROGRAM.**

The Secretary shall undertake a pilot program of research, development, demonstration, and commercial applications of technologies to improve total machine or system efficiency for nonroad mobile equipment including agricultural, construction, air, and sea port equipment, and shall seek opportunities to transfer relevant research findings and technologies between the nonroad and on-highway equipment and vehicle sectors.

#### **SEC. 1710. REPEAL OF EXISTING AUTHORITIES.**

(a) IN GENERAL.—Sections 706, 711, 712, and 933 of the Energy Policy Act of 2005 (42 U.S.C. 16051, 16061, 16062, 16233) are repealed.

(b) ENERGY EFFICIENCY.—Section 911 of the Energy Policy Act of 2005 (42 U.S.C. 16191) is amended—

(1) in subsection (a)—

(A) in paragraph (1)(A), by striking “vehicles, buildings,” and inserting “buildings”; and

(B) in paragraph (2)—

(i) by striking subparagraph (A); and

(ii) by redesignating subparagraphs (B) through (E) as subparagraphs (A) through (D), respectively; and

(2) in subsection (c)—

(A) by striking paragraph (3);

(B) by redesignating paragraph (4) as paragraph (3); and

(C) in paragraph (3) (as so redesignated), by striking “(a)(2)(D)” and inserting “(a)(2)(C)”.

#### **Subtitle H—Department of Energy**

#### **SEC. 1801. VETERANS' HEALTH INITIATIVE.**

(a) PURPOSES.—The purposes of this section are to advance Department expertise in artificial intelligence and high-performance computing in order to improve health outcomes for veteran populations by—

(1) supporting basic research through the application of artificial intelligence, high-performance computing, modeling and simulation, machine learning, and large-scale data analytics to identify and solve outcome-defined challenges in the health sciences;

(2) maximizing the impact of the Department of Veterans Affairs' health and genomics data housed at the National Laboratories, as well as data from other sources, on science, innovation, and health care outcomes through the use and advancement of artificial intelligence and high-performance computing capabilities of the Department;

(3) promoting collaborative research through the establishment of partnerships to improve data sharing between Federal agencies, National Laboratories, institutions of higher education, and nonprofit institutions;

(4) establishing multiple scientific computing user facilities to house and provision available data to foster transformational outcomes; and

(5) driving the development of technology to improve artificial intelligence, high-performance computing, and networking relevant to mission applications of the Department, including modeling, simulation, machine learning, and advanced data analytics.

#### **(b) VETERANS HEALTH RESEARCH AND DEVELOPMENT.—**

(1) IN GENERAL.—The Secretary shall establish and carry out a research program in artificial intelligence and high-performance computing, focused on the development of tools to solve large-scale data analytics and management challenges associated with veteran's healthcare, and to support the efforts of the Department of Veterans Affairs to identify potential health risks and challenges utilizing data on long-term healthcare, health risks, and genomic data collected from veteran populations. The Secretary shall carry out this program through a competitive, merit-reviewed process, and consider applications from National Laboratories, institutions of higher education, multi-institutional collaborations, and other appropriate entities.

(2) PROGRAM COMPONENTS.—In carrying out the program established under paragraph (1), the Secretary may—

(A) conduct basic research in modeling and simulation, machine learning, large-scale data analytics, and predictive analysis in order to develop novel or optimized algorithms for prediction of disease treatment and recovery;

(B) develop methods to accommodate large data sets with variable quality and scale, and to provide insight and models for complex systems;

(C) develop new approaches and maximize the use of algorithms developed through artificial intelligence, machine learning, data analytics, natural language processing, modeling and simulation, and develop new algorithms suitable for high-performance computing systems and large biomedical data sets;

(D) advance existing and construct new data enclaves capable of securely storing data sets provided by the Department of Veterans Affairs, Department of Defense, and other sources; and

(E) promote collaboration and data sharing between National Laboratories, research entities, and user facilities of the Department by providing the necessary access and secure data transfer capabilities.

(3) COORDINATION.—In carrying out the program established under paragraph (1), the Secretary is authorized—

(A) to enter into memoranda of understanding in order to carry out reimbursable agreements with the Department of Veterans Affairs and other entities in order to maximize the effectiveness of Department research and development to improve veterans' healthcare;

(B) to consult with the Department of Veterans Affairs and other Federal agencies as appropriate; and

(C) to ensure that data storage meets all privacy and security requirements established by the Department of Veterans Affairs, and that access to data is provided in accordance with relevant Department of Veterans Affairs data access policies, including informed consent.

(4) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources and the Committee on Veterans' Affairs of the Senate, and the Committee on Science, Space, and Technology and the Committee on Veterans'



Affairs of the House of Representatives, a report detailing the effectiveness of—

(A) the interagency coordination between each Federal agency involved in the research program carried out under this subsection;

(B) collaborative research achievements of the program; and

(C) potential opportunities to expand the technical capabilities of the Department.

(5) FUNDING.—There is authorized to be appropriated to the Secretary of Veterans Affairs to carry out this subsection \$27,000,000 during the period of fiscal years 2021 through 2025.

(c) INTERAGENCY COLLABORATION.—

(1) IN GENERAL.—The Secretary is authorized to carry out research, development, and demonstration activities to develop tools to apply to big data that enable Federal agencies, institutions of higher education, non-profit research organizations, and industry to better leverage the capabilities of the Department to solve complex, big data challenges. The Secretary shall carry out these activities through a competitive, merit-reviewed process, and consider applications from National Laboratories, institutions of higher education, multi-institutional collaborations, and other appropriate entities.

(2) ACTIVITIES.—In carrying out the research, development, and demonstration activities authorized under paragraph (1), the Secretary may—

(A) utilize all available mechanisms to prevent duplication and coordinate research efforts across the Department;

(B) establish multiple user facilities to serve as data enclaves capable of securely storing data sets created by Federal agencies, institutions of higher education, non-profit organizations, or industry at National Laboratories; and

(C) promote collaboration and data sharing between National Laboratories, research entities, and user facilities of the Department by providing the necessary access and secure data transfer capabilities.

(3) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report evaluating the effectiveness of the activities authorized under paragraph (1).

(4) FUNDING.—There are authorized to be appropriated to the Secretary to carry out this subsection \$15,000,000 for each of fiscal years 2021 through 2025.

**SEC. 1802. SMALL SCALE LNG ACCESS.**

Section 3 of the Natural Gas Act (15 U.S.C. 717b) is amended by striking subsection (c) and inserting the following:

“(c) EXPEDITED APPLICATION AND APPROVAL PROCESS.—

“(1) IN GENERAL.—For purposes of subsection (a), the following shall be deemed to be consistent with the public interest, and applications for such importation or exportation shall be granted without modification or delay:

“(A) The importation of the natural gas referred to in subsection (b).

“(B) Subject to the last sentence of subsection (a), the exportation of natural gas in a volume up to and including 51,750,000,000 cubic feet per year.

“(C) The exportation of natural gas to a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas.

“(2) EXCLUSION.—Subparagraphs (B) and (C) of paragraph (1) shall not apply to any nation subject to sanctions imposed by the United States.”.

**SEC. 1803. APPALACHIAN ENERGY FOR NATIONAL SECURITY.**

(a) STUDY ON BUILDING ETHANE AND OTHER NATURAL-GAS-LIQUIDS-RELATED PETROCHEMICAL INFRASTRUCTURE.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Defense, the Secretary of the Treasury, and the heads of other relevant Federal departments and agencies and stakeholders, shall conduct a study assessing the potential national and economic security impacts of building ethane and other natural-gas-liquids-related petrochemical infrastructure in the geographical vicinity of the Marcellus, Utica, and Rogersville shale plays in the United States.

(2) CONTENTS.—The study conducted under paragraph (1) shall include—

(A) the identification of potential benefits of the proposed infrastructure to national and economic security, including the identification of potential risks to national and economic security of significant foreign ownership and control of United States domestic petrochemical resources; and

(B) an examination of, with respect to the proposed infrastructure—

(i) types of additional infrastructure needed to fully optimize the potential national security benefits;

(ii) whether geopolitical diversity in areas to which the ethane and other natural gas liquids will be exported from the producing region would undermine or bolster national security;

(iii) the necessity of evaluating the public interest with respect to exports of ethane, propane, butane, and other natural gas liquids, to ensure the potential strategic national and economic security benefits are preserved within the United States; and

(iv) the potential benefits, with respect to significant weather impacts, compared to other regions, of locating the proposed infrastructure in the geographical vicinity of the Marcellus, Utica, and Rogersville shale plays.

(b) REPORTS.—

(1) STATUS REPORTS.—Prior to completion of the study under subsection (a), the Committees on Energy and Natural Resources and Armed Services of the Senate and the Committees on Energy and Commerce and Armed Services of the House of Representatives, from time to time, may request and receive from the Secretary status reports with respect to the study, including any findings.

(2) SUBMISSION AND PUBLICATION OF REPORT.—On completion of the study under subsection (a), the Secretary shall—

(A) submit to the Committees on Energy and Natural Resources and Armed Services of the Senate and the Committees on Energy and Commerce and Armed Services of the House of Representatives a report describing the results of the study; and

(B) publish the report on the website of the Department.

**SEC. 1804. ENERGY AND WATER FOR SUSTAINABILITY.**

(a) NEXUS OF ENERGY AND WATER FOR SUSTAINABILITY.—

(1) DEFINITIONS.—In this subsection:

(A) ENERGY-WATER NEXUS.—The term “energy-water nexus” means the links between—

(i) the water needed to produce fuels, electricity, and other forms of energy; and

(ii) the energy needed to transport, reclaim, and treat water and wastewater.

(B) INTERAGENCY COORDINATION COMMITTEE.—The term “Interagency Coordination Committee” means the Committee on the Nexus of Energy and Water for Sustainability (or the “NEWS Committee”) established under paragraph (2)(A).

(C) NEXUS OF ENERGY AND WATER SUSTAINABILITY OFFICE; NEWS OFFICE.—The term “Nexus of Energy and Water Sustainability Office” or the “NEWS Office” means an office located at the Department and managed in cooperation with the Department of the Interior pursuant to an agreement between the 2 agencies to carry out leadership and administrative functions for the Interagency Coordination Committee.

(D) RD&D.—The term “RD&D” means research, development, and demonstration.

(2) INTERAGENCY COORDINATION COMMITTEE.—

(A) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary and the Secretary of the Interior shall establish the joint NEWS Office and Interagency Coordination Committee on the Nexus of Energy and Water for Sustainability (or the “NEWS Committee”) to carry out the duties described in subparagraph (C).

(B) ADMINISTRATION.—

(i) CHAIRS.—The Secretary and the Secretary of the Interior shall jointly manage the NEWS Office and serve as co-chairs of the Interagency Coordination Committee.

(ii) MEMBERSHIP; STAFFING.—Membership and staffing shall be determined by the co-chairs.

(C) DUTIES.—The Interagency Coordination Committee shall—

(i) serve as a forum for developing common Federal goals and plans on energy-water nexus RD&D activities in coordination with the National Science and Technology Council;

(ii) not later than 1 year after the date of enactment of this Act, and biennially thereafter, issue a strategic plan on energy-water nexus RD&D activities priorities and objectives;

(iii) convene and promote coordination of the activities of Federal departments and agencies on energy-water nexus RD&D activities, including the activities of—

- (I) the Department;
- (II) the Department of the Interior;
- (III) the Corps of Engineers;
- (IV) the Department of Agriculture;
- (V) the Department of Defense;
- (VI) the Department of State;
- (VII) the Environmental Protection Agency;

(VIII) the Council on Environmental Quality;

(IX) the National Institute of Standards and Technology;

(X) the National Oceanic and Atmospheric Administration;

(XI) the National Science Foundation;

(XII) the Office of Management and Budget;

(XIII) the Office of Science and Technology Policy;

(XIV) the National Aeronautics and Space Administration; and

(XV) such other Federal departments and agencies as the Interagency Coordination Committee considers appropriate;

(iv)(I) coordinate and develop capabilities and methodologies for data collection, management, and dissemination of information related to energy-water nexus RD&D activities from and to other Federal departments and agencies; and

(II) promote information exchange between Federal departments and agencies—

(aa) to identify and document Federal and non-Federal programs and funding opportunities that support basic and applied RD&D proposals to advance energy-water nexus related science and technologies;

(bb) to leverage existing programs by encouraging joint solicitations, block grants, and matching programs with non-Federal entities; and

(cc) to identify opportunities for domestic and international public-private partnerships, innovative financing mechanisms, and information and data exchange;

(v) promote the integration of energy-water nexus considerations into existing Federal water, energy, and other natural resource, infrastructure, and science programs at the national and regional levels and with programs administered in partnership with non-Federal entities; and

(vi) not later than 1 year after the date of enactment of this Act, issue a report on the potential benefits and feasibility of establishing an energy-water center of excellence within the National Laboratories.

(D) NO REGULATION.—Nothing in this paragraph grants to the Interagency Coordination Committee the authority to promulgate regulations or set standards.

(E) ADDITIONAL PARTICIPATION.—In developing the strategic plan described in subparagraph (C)(ii), the Secretary shall consult and coordinate with a diverse group of representatives from research and academic institutions, industry, public utility commissions, and State and local governments that have expertise in technologies and practices relating to the energy-water nexus.

(F) REVIEW; REPORT.—At the end of the 5-year period beginning on the date on which the Interagency Coordination Committee and NEWS Office are established, the NEWS Office shall—

(i) review the activities, relevance, and effectiveness of the Interagency Coordination Committee; and

(ii) submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Science, Space, and Technology, Energy and Commerce, and Natural Resources of the House of Representatives a report that—

(I) describes the results of the review conducted under clause (i); and

(II) includes a recommendation on whether the Interagency Coordination Committee should continue.

(3) CROSSCUT BUDGET.—Not later than 30 days after the President submits the budget of the United States Government under section 1105 of title 31, United States Code, the co-chairs of the Interagency Coordination Committee (acting through the NEWS Office) shall submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Science, Space, and Technology, Energy and Commerce, and Natural Resources of the House of Representatives, an interagency budget crosscut report that displays at the program-, project-, and activity-level for each of the Federal agencies that carry out or support (including through grants, contracts, interagency and intraagency transfers, and multiyear and no-year funds) basic and applied RD&D activities to advance the energy-water nexus related science and technologies—

(A) the budget proposed in the budget request of the President for the upcoming fiscal year;

(B) expenditures and obligations for the prior fiscal year; and

(C) estimated expenditures and obligations for the current fiscal year.

(4) TERMINATION.—

(A) IN GENERAL.—The authority provided to the NEWS Office and NEWS Committee under this subsection shall terminate on the date that is 7 years after the date of enactment of this Act.

(B) EFFECT.—The termination of authority under subparagraph (A) shall not affect ongoing interagency planning, coordination, or other activities relating to the energy-water nexus.

(b) INTEGRATING ENERGY AND WATER RESEARCH.—The Secretary shall integrate

water considerations into energy research, development, and demonstration programs and projects of the Department by—

(1) advancing energy and energy efficiency technologies and practices that meet the objectives of—

(A) minimizing freshwater withdrawal and consumption;

(B) increasing water use efficiency; and

(C) utilizing nontraditional water sources;

(2) considering the effects climate variability may have on water supplies and quality for energy generation and fuel production; and

(3) improving understanding of the energy-water nexus (as defined in subsection (a)(1)).

(c) SMART ENERGY AND WATER EFFICIENCY PILOT PROGRAM.—

(1) IN GENERAL.—Subtitle A of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16191 et seq.) is amended by adding at the end the following:

“SEC. 918. SMART ENERGY AND WATER EFFICIENCY PILOT PROGRAM.

“(a) DEFINITIONS.—In this section:

“(1) ELIGIBLE ENTITY.—The term ‘eligible entity’ means—

“(A) a utility;

“(B) a municipality;

“(C) a water district;

“(D) an Indian tribe or Alaska Native village; and

“(E) any other authority that provides water, wastewater, or water reuse services.

“(2) SMART ENERGY AND WATER EFFICIENCY PILOT PROGRAM.—The term ‘smart energy and water efficiency pilot program’ or ‘pilot program’ means the pilot program established under subsection (b).

“(b) SMART ENERGY AND WATER EFFICIENCY PILOT PROGRAM.—

“(1) IN GENERAL.—The Secretary shall establish and carry out a smart energy and water efficiency pilot program in accordance with this section.

“(2) PURPOSE.—The purpose of the smart energy and water efficiency pilot program is to award grants to eligible entities to demonstrate unique, advanced, or innovative technology-based solutions that will—

“(A) improve the net energy balance of water, wastewater, and water reuse systems;

“(B) improve the net energy balance of water, wastewater, and water reuse systems to help communities across the United States make measurable progress in conserving water, saving energy, and reducing costs;

“(C) support the implementation of innovative and unique processes and the installation of established advanced automated systems that provide real-time data on energy and water; and

“(D) improve energy-water conservation and quality and predictive maintenance through technologies that utilize internet connected technologies, including sensors, intelligent gateways, and security embedded in hardware.

“(3) PROJECT SELECTION.—

“(A) IN GENERAL.—The Secretary shall make competitive, merit-reviewed grants under the pilot program to not less than 3, but not more than 5, eligible entities.

“(B) SELECTION CRITERIA.—In selecting an eligible entity to receive a grant under the pilot program, the Secretary shall consider—

“(i) energy and cost savings;

“(ii) the uniqueness, commercial viability, and reliability of the technology to be used;

“(iii) the degree to which the project integrates next-generation sensors software, analytics, and management tools;

“(iv) the anticipated cost-effectiveness of the pilot project through measurable energy savings, water savings or reuse, and infrastructure costs averted;

“(v) whether the technology can be deployed in a variety of geographic regions and the degree to which the technology can be implemented in a wide range of applications ranging in scale from small towns to large cities, including tribal communities;

“(vi) whether the technology has been successfully deployed elsewhere;

“(vii) whether the technology was sourced from a manufacturer based in the United States; and

“(viii) whether the project will be completed in 5 years or less.

“(C) APPLICATIONS.—

“(i) IN GENERAL.—Subject to clause (ii), an eligible entity seeking a grant under the pilot program shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary determines to be necessary.

“(ii) CONTENTS.—An application under clause (i) shall, at a minimum, include—

“(I) a description of the project;

“(II) a description of the technology to be used in the project;

“(III) the anticipated results, including energy and water savings, of the project;

“(IV) a comprehensive budget for the project;

“(V) the names of the project lead organization and any partners;

“(VI) the number of users to be served by the project;

“(VII) a description of the ways in which the proposal would meet performance measures established by the Secretary; and

“(VIII) any other information that the Secretary determines to be necessary to complete the review and selection of a grant recipient.

“(4) ADMINISTRATION.—

“(A) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Secretary shall select grant recipients under this section.

“(B) EVALUATIONS.—

“(i) ANNUAL EVALUATIONS.—The Secretary shall annually carry out an evaluation of each project for which a grant is provided under this section that meets performance measures and benchmarks developed by the Secretary, consistent with the purposes of this section.

“(ii) REQUIREMENTS.—Consistent with the performance measures and benchmarks developed under clause (i), in carrying out an evaluation under that clause, the Secretary shall—

“(I) evaluate the progress and impact of the project; and

“(II) assesses the degree to which the project is meeting the goals of the pilot program.

“(C) TECHNICAL AND POLICY ASSISTANCE.—On the request of a grant recipient, the Secretary shall provide technical and policy assistance.

“(D) BEST PRACTICES.—The Secretary shall make available to the public through the Internet and other means the Secretary considers to be appropriate—

“(i) a copy of each evaluation carried out under subparagraph (B); and

“(ii) a description of any best practices identified by the Secretary as a result of those evaluations.

“(E) REPORT TO CONGRESS.—The Secretary shall submit to Congress a report containing the results of each evaluation carried out under subparagraph (B).

“(C) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out this section \$15,000,000, to remain available until expended.”.

(2) CONFORMING AMENDMENT.—The table of contents of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 594) is amended

by inserting after the item relating to section 917 the following:

“Sec. 918. Smart energy and water efficiency pilot program.”.

#### SEC. 1805. TECHNOLOGY TRANSITIONS.

(a) OFFICE OF TECHNOLOGY TRANSITIONS.—Section 1001 of the Energy Policy Act of 2005 (42 U.S.C. 16391) is amended—

(1) by striking subsection (a) and all that follows through “The Coordinator” in subsection (b) and inserting the following:

“(a) OFFICE OF TECHNOLOGY TRANSITIONS.—

“(1) ESTABLISHMENT.—There is established within the Department an Office of Technology Transitions (referred to in this section as the ‘Office’).

“(2) MISSION.—The mission of the Office shall be—

“(A) to expand the commercial impact of the research investments of the Department; and

“(B) to focus on commercializing technologies that reduce greenhouse gas emissions and technologies that support other missions of the Department.

“(3) GOALS.—

“(A) IN GENERAL.—In carrying out the mission and activities of the Office, the Chief Commercialization Officer appointed under paragraph (4) shall, with respect to commercialization activities, meet not less than two of the goals described in subparagraph (B) and, to the maximum extent practicable, meet all of the goals described in that subparagraph.

“(B) GOALS DESCRIBED.—The goals referred to in subparagraph (A) are the following:

“(i) Reduction of greenhouse gas emissions.

“(ii) Ensuring economic competitiveness.

“(iii) Enhancement of domestic energy security and national security.

“(iv) Enhancement of domestic jobs.

“(v) Any other missions of the Department, as determined by the Secretary.

“(4) CHIEF COMMERCIALIZATION OFFICER.—

“(A) IN GENERAL.—The Office shall be headed by an officer, who shall be known as the ‘Chief Commercialization Officer’, and who shall report directly to, and be appointed by, the Secretary.

“(B) PRINCIPAL ADVISOR.—The Chief Commercialization Officer shall be the principal advisor to the Secretary on all matters relating to technology transfer and commercialization.

“(C) QUALIFICATIONS.—The Chief Commercialization Officer”;

(2) in subsection (c)—

(A) in paragraph (1), by striking “subsection (d)” and inserting “subsection (b)”;

(B) by redesignating paragraphs (1) through (4) as clauses (i) through (iv), respectively, and indenting appropriately; and

(C) by striking the subsection designation and heading and all that follows through “The Coordinator” in the matter preceding clause (i) (as so redesignated) and inserting the following:

“(D) DUTIES.—The Chief Commercialization Officer”;

(3) by adding at the end of subsection (a) (as amended by paragraph (2)(C)) the following:

“(5) COORDINATION.—In carrying out the mission and activities of the Office, the Chief Commercialization Officer shall coordinate with the senior leadership of the Department, other relevant program offices of the Department, National Laboratories, the Technology Transfer Working Group established under subsection (b), the Technology Transfer Policy Board, and other stakeholders (including private industry).”;

(4) by redesignating subsections (d) through (h) as subsections (b) through (f), respectively; and

(5) in subsection (f) (as so redesignated), by striking “subsection (e)” and inserting “subsection (c)”.

(b) REVIEW OF APPLIED ENERGY PROGRAMS.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall conduct a review of all applied energy research and development programs under the Department that focus on researching and developing technologies that reduce emissions.

(2) REQUIREMENTS.—In conducting the review under paragraph (1), the Secretary shall—

(A) identify each program described in that paragraph the mission of which is to research and develop technologies that reduce emissions;

(B) determine the type of services provided by each program identified under subparagraph (A), such as grants and technical assistance;

(C) determine whether there are written program goals for each program identified under subparagraph (A);

(D) examine the extent to which the programs identified under subparagraph (A) overlap or are duplicative; and

(E) develop recommendations—

(i) as to how any overlapping or duplicative programs identified under subparagraph (D) should be restructured or consolidated, including by any necessary legislation;

(ii) as to how to identify technologies described in subparagraph (A) that—

(I) are not served by a single program office at the Department; or

(II) the research and development of which may require collaboration with other Federal agencies; and

(iii) for methods to improve the programs identified under subparagraph (A), including by establishing program goals, assessing workforce considerations and technical skills, or increasing collaboration with other Federal agencies and stakeholders (including private industry).

(3) REPORT.—Not later than 60 days after the Secretary completes the review under paragraph (1), the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Science, Space, and Technology and Energy and Commerce of the House of Representatives a report describing the results of and the recommendations developed under the review.

#### SEC. 1806. ENERGY TECHNOLOGY COMMERCIALIZATION FUND COST-SHARING.

Section 1001 of the Energy Policy Act of 2005 (42 U.S.C. 16391) is amended in subsection (c) (as redesignated by section 1805(a)(4))—

(1) in the subsection heading, by inserting “ENERGY” before “TECHNOLOGY”; and

(2) by striking “matching funds with private partners” and inserting “, in accordance with the cost-sharing requirements under section 988, funds to private partners, including National Laboratories.”.

#### SEC. 1807. STATE LOAN ELIGIBILITY.

(a) DEFINITIONS.—Section 1701 of the Energy Policy Act of 2005 (42 U.S.C. 16511) is amended by adding at the end the following:

“(6) STATE.—The term ‘State’ has the meaning given the term in section 202 of the Energy Conservation and Production Act (42 U.S.C. 6802).

“(7) STATE ENERGY FINANCING INSTITUTION.—

“(A) IN GENERAL.—The term ‘State energy financing institution’ means a quasi-independent entity or an entity within a State agency or financing authority established by a State—

“(i) to provide financing support or credit enhancements, including loan guarantees

and loan loss reserves, for eligible projects; and

“(ii) to create liquid markets for eligible projects, including warehousing and securitization, or take other steps to reduce financial barriers to the deployment of existing and new eligible projects.

“(B) INCLUSION.—The term ‘State energy financing institution’ includes an entity or organization established to achieve the purposes described in clauses (i) and (ii) of subparagraph (A) by an Indian Tribal entity or an Alaska Native Corporation.”.

(b) TERMS AND CONDITIONS.—Section 1702 of the Energy Policy Act of 2005 (42 U.S.C. 16512) is amended—

(1) in subsection (a), by inserting “, including projects receiving financial support or credit enhancements from a State energy financing institution,” after “for projects”;

(2) in subsection (d)(1), by inserting “, including a guarantee for a project receiving financial support or credit enhancements from a State energy financing institution,” after “No guarantee”; and

(3) by adding at the end the following:

“(1) STATE ENERGY FINANCING INSTITUTIONS.—

“(1) ELIGIBILITY.—To be eligible for a guarantee under this title, a project receiving financial support or credit enhancements from a State energy financing institution—

“(A) shall meet the requirements of section 1703(a)(1); and

“(B) shall not be required to meet the requirements of section 1703(a)(2).

“(2) PARTNERSHIPS AUTHORIZED.—In carrying out a project receiving a loan guarantee under this title, State energy financing institutions may enter into partnerships with private entities, Tribal entities, and Alaska Native corporations.

“(3) PROHIBITION ON USE OF APPROPRIATED FUNDS.—Amounts appropriated to the Department before the date of enactment of this subsection shall not be available to be used for the cost of loan guarantees made to State energy financing institutions under this subsection.”.

#### SEC. 1808. ARPA-E REAUTHORIZATION.

(a) GOALS.—Section 5012(c) of the America COMPETES Act (42 U.S.C. 16538(c)) is amended—

(1) in paragraph (1), by striking subparagraph (A) and inserting the following:

“(A) to enhance the economic and energy security of the United States through the development of energy technologies that—

“(i) reduce imports of energy from foreign sources;

“(ii) reduce energy-related emissions, including greenhouse gases;

“(iii) improve the energy efficiency of all economic sectors; and

“(iv) improve the resilience, reliability, and security of infrastructure to produce, deliver, and store energy; and”;

(2) in paragraph (2), in the matter preceding subparagraph (A), by striking “energy” and inserting “advanced”.

(b) RESPONSIBILITIES.—Section 5012(e)(3)(A) of the America COMPETES Act (42 U.S.C. 16538(e)(3)(A)) is amended by striking “energy”.

(c) AWARDS.—Section 5012(f) of the America COMPETES Act (42 U.S.C. 16538(f)) is amended—

(1) by striking “In carrying” and inserting the following:

“(1) IN GENERAL.—In carrying”; and

(2) by adding at the end the following:

“(2) CONSIDERATION OF PRIOR GRANTS.—In awarding a grant under paragraph (1), the Director shall take into account the satisfactory completion of any project carried out by the entity applying for the grant using any prior grant funds awarded to that entity by the Director.”.

(d) REPORTS AND ROADMAPS.—Section 5012(h) of the America COMPETES Act (42 U.S.C. 16538(h)) is amended—

(1) in paragraph (1)—

(A) by striking “describing projects” and inserting the following: “describing—  
“(A) projects”;

(B) in subparagraph (A) (as so designated), by striking the period at the end and inserting “, including projects that examine topics and technologies closely relating to other activities funded by the Department;” and

(C) by adding at the end the following:

“(B) an analysis of whether the Director is in compliance with subsection (i)(1)(A) in supporting projects that examine the topics and technologies described in subparagraph (A); and

“(C) current, proposed, and planned projects to be carried out pursuant to subsection (e)(3)(D).”;

(2) in paragraph (2)—

(A) by striking “October 1, 2010, and October 1, 2013” and inserting “October 1, 2021, and every 4 years thereafter”; and

(B) by striking “3” and inserting “4”.

(e) COORDINATION AND NONDUPLICATION.—Section 5012(i)(1) of the America COMPETES Act (42 U.S.C. 16538(i)(1)) is amended—

(1) by striking “that the activities” and inserting the following: “that—  
“(A) the activities”;

(2) in subparagraph (A) (as so designated), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(B) an award is not provided for a project unless the prospective award recipient demonstrates that—

“(i) the prospective award recipient has made a sufficient attempt to secure private financing, as determined by the Director; or  
“(ii) the project is not independently commercially viable.”.

(f) EVALUATION.—Section 5012(1) of the America COMPETES Act (42 U.S.C. 16538(1)) is amended—

(1) in paragraph (1), by striking “After” and all that follows through “years” and inserting “Not later than 3 years after the date of enactment of the American Energy Innovation Act of 2020”; and

(2) in paragraph (2)—

(A) in the matter preceding subparagraph (A), by striking “shall” and inserting “may”; and

(B) in subparagraph (A), by striking “the recommendation of the National Academy of Sciences” and inserting “a recommendation”.

(g) AUTHORIZATION OF APPROPRIATIONS.—Section 5012(o)(2) of the America COMPETES Act (42 U.S.C. 16538(o)(2)) is amended—

(1) in the matter preceding subparagraph (A), by striking “paragraphs (4) and (5)” and inserting “paragraph (4)”; and

(2) by striking subparagraphs (A) through (E) and inserting the following:

“(A) \$428,000,000 for fiscal year 2021;

“(B) \$497,000,000 for fiscal year 2022;

“(C) \$567,000,000 for fiscal year 2023;

“(D) \$651,000,000 for fiscal year 2024; and

“(E) \$750,000,000 for fiscal year 2025.”.

(h) TECHNICAL AMENDMENTS.—Section 5012 of the America COMPETES Act (42 U.S.C. 16538) is amended—

(1) in subsection (g)(3)(A)(iii), by striking “subpart” each place it appears and inserting “subparagraph”; and

(2) in subsection (o)(4)(B), by striking “(c)(2)(D)” and inserting “(c)(2)(C)”.

#### SEC. 1809. ADJUSTING STRATEGIC PETROLEUM RESERVE MANDATED DRAWDOWNS.

(a) AMERICA’S WATER INFRASTRUCTURE ACT OF 2018.—Section 3009(a)(1) of the America’s Water Infrastructure Act of 2018 (42 U.S.C. 6241 note; Public Law 115-270) is amended by striking “2028” and inserting “2030.”

(b) BIPARTISAN BUDGET ACT OF 2018.—Section 30204(a)(1) of the Bipartisan Budget Act of 2018 (42 U.S.C. 6241 note; Public Law 115-123) is amended—

(1) in subparagraph (B), by striking “2026” and inserting “2029”; and

(2) in subparagraph (C), by striking “2027” and inserting “2030”.

(c) RECONCILIATION ON THE BUDGET FOR 2018.—Section 20003(a)(1) of Public Law 115-97 (42 U.S.C. 6241 note) is amended by striking “2026 through 2027” and inserting “2029 through 2030.”

### TITLE II—SUPPLY CHAIN SECURITY

#### Subtitle A—Mineral Security

##### SEC. 2101. MINERAL SECURITY.

(a) DEFINITIONS.—In this section:

(1) BYPRODUCT.—The term “byproduct” means a critical mineral—

(A) the recovery of which depends on the production of a host mineral that is not designated as a critical mineral; and

(B) that exists in sufficient quantities to be recovered during processing or refining.

(2) CRITICAL MINERAL.—

(A) IN GENERAL.—The term “critical mineral” means any mineral, element, substance, or material designated as critical by the Secretary under subsection (c).

(B) EXCLUSIONS.—The term “critical mineral” does not include—

(i) fuel minerals, including oil, natural gas, or any other fossil fuels; or

(ii) water, ice, or snow.

(3) INDIAN TRIBE.—The term “Indian tribe” has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(4) SECRETARY.—The term “Secretary” means the Secretary of the Interior.

(5) STATE.—The term “State” means—

(A) a State;

(B) the District of Columbia;

(C) the Commonwealth of Puerto Rico;

(D) Guam;

(E) American Samoa;

(F) the Commonwealth of the Northern Mariana Islands; and

(G) the United States Virgin Islands.

(b) POLICY.—

(1) IN GENERAL.—Section 3 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1602) is amended in the second sentence—

(A) by striking paragraph (3) and inserting the following:

“(3) establish an analytical and forecasting capability for identifying critical mineral demand, supply, and other factors to allow informed actions to be taken to avoid supply shortages, mitigate price volatility, and prepare for demand growth and other market shifts;”;

(B) in paragraph (6), by striking “and” after the semicolon at the end; and

(C) by striking paragraph (7) and inserting the following:

“(7) facilitate the availability, development, and environmentally responsible production of domestic resources to meet national material or critical mineral needs;

“(8) avoid duplication of effort, prevent unnecessary paperwork, and minimize delays in the administration of applicable laws (including regulations) and the issuance of permits and authorizations necessary to explore for, develop, and produce critical minerals and to construct critical mineral manufacturing facilities in accordance with applicable environmental and land management laws;

“(9) strengthen—

“(A) educational and research capabilities at not lower than the secondary school level; and

“(B) workforce training for exploration and development of critical minerals and critical mineral manufacturing;

“(10) bolster international cooperation through technology transfer, information sharing, and other means;

“(11) promote the efficient production, use, and recycling of critical minerals;

“(12) develop alternatives to critical minerals; and

“(13) establish contingencies for the production of, or access to, critical minerals for which viable sources do not exist within the United States.”.

(2) CONFORMING AMENDMENT.—Section 2(b) of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1601(b)) is amended by striking “(b) As used in this Act, the term” and inserting the following:

“(b) DEFINITIONS.—In this Act:

“(1) CRITICAL MINERAL.—The term ‘critical mineral’ means any mineral, element, substance, or material designated as critical by the Secretary under section 2101(c) of the American Energy Innovation Act of 2020.

“(2) MATERIALS.—The term”.

(c) CRITICAL MINERAL DESIGNATIONS.—

(1) DRAFT METHODOLOGY AND LIST.—The Secretary, acting through the Director of the United States Geological Survey (referred to in this subsection as the “Secretary”), shall publish in the Federal Register for public comment—

(A) a description of the draft methodology used to identify a draft list of critical minerals;

(B) a draft list of minerals, elements, substances, and materials that qualify as critical minerals; and

(C) a draft list of critical minerals recovered as byproducts.

(2) AVAILABILITY OF DATA.—If available data is insufficient to provide a quantitative basis for the methodology developed under this subsection, qualitative evidence may be used to the extent necessary.

(3) FINAL METHODOLOGY AND LIST.—After reviewing public comments on the draft methodology and the draft lists published under paragraph (1) and updating the methodology and lists as appropriate, not later than 45 days after the date on which the public comment period with respect to the draft methodology and draft lists closes, the Secretary shall publish in the Federal Register—

(A) a description of the final methodology for determining which minerals, elements, substances, and materials qualify as critical minerals;

(B) the final list of critical minerals; and

(C) the final list of critical minerals recovered as byproducts.

(4) DESIGNATIONS.—

(A) IN GENERAL.—For purposes of carrying out this subsection, the Secretary shall maintain a list of minerals, elements, substances, and materials designated as critical, pursuant to the final methodology published under paragraph (3), that the Secretary determines—

(i) are essential to the economic or national security of the United States;

(ii) the supply chain of which is vulnerable to disruption (including restrictions associated with foreign political risk, abrupt demand growth, military conflict, violent unrest, anti-competitive or protectionist behaviors, and other risks throughout the supply chain); and

(iii) serve an essential function in the manufacturing of a product (including energy technology-, defense-, currency-, agriculture-, consumer electronics-, and health care-related applications), the absence of which would have significant consequences for the economic or national security of the United States.

(B) INCLUSIONS.—Notwithstanding the criteria under paragraph (3), the Secretary may

designate and include on the list any mineral, element, substance, or material determined by another Federal agency to be strategic and critical to the defense or national security of the United States.

(C) **REQUIRED CONSULTATION.**—The Secretary shall consult with the Secretaries of Defense, Commerce, Agriculture, and Energy and the United States Trade Representative in designating minerals, elements, substances, and materials as critical under this paragraph.

(5) **SUBSEQUENT REVIEW.**—

(A) **IN GENERAL.**—The Secretary, in consultation with the Secretaries of Defense, Commerce, Agriculture, and Energy and the United States Trade Representative, shall review the methodology and list under paragraph (3) and the designations under paragraph (4) at least every 3 years, or more frequently as the Secretary considers to be appropriate.

(B) **REVISIONS.**—Subject to paragraph (4)(A), the Secretary may—

(i) revise the methodology described in this subsection;

(ii) determine that minerals, elements, substances, and materials previously determined to be critical minerals are no longer critical minerals; and

(iii) designate additional minerals, elements, substances, or materials as critical minerals.

(6) **NOTICE.**—On finalization of the methodology and the list under paragraph (3), or any revision to the methodology or list under paragraph (5), the Secretary shall submit to Congress written notice of the action.

(d) **RESOURCE ASSESSMENT.**—

(1) **IN GENERAL.**—Not later than 4 years after the date of enactment of this Act, in consultation with applicable State (including geological surveys), local, academic, industry, and other entities, the Secretary (acting through the Director of the United States Geological Survey) or a designee of the Secretary, shall complete a comprehensive national assessment of each critical mineral that—

(A) identifies and quantifies known critical mineral resources, using all available public and private information and datasets, including exploration histories; and

(B) provides a quantitative and qualitative assessment of undiscovered critical mineral resources throughout the United States, including probability estimates of tonnage and grade, using all available public and private information and datasets, including exploration histories.

(2) **SUPPLEMENTARY INFORMATION.**—In carrying out this subsection, the Secretary may carry out surveys and field work (including drilling, remote sensing, geophysical surveys, topographical and geological mapping, and geochemical sampling and analysis) to supplement existing information and datasets available for determining the existence of critical minerals in the United States.

(3) **PUBLIC ACCESS.**—Subject to applicable law, to the maximum extent practicable, the Secretary shall make all data and metadata collected from the comprehensive national assessment carried out under paragraph (1) publically and electronically accessible.

(4) **TECHNICAL ASSISTANCE.**—At the request of the Governor of a State or the head of an Indian tribe, the Secretary may provide technical assistance to State governments and Indian tribes conducting critical mineral resource assessments on non-Federal land.

(5) **PRIORITIZATION.**—

(A) **IN GENERAL.**—The Secretary may sequence the completion of resource assessments for each critical mineral such that critical minerals considered to be most critical

under the methodology established under subsection (c) are completed first.

(B) **REPORTING.**—During the period beginning not later than 1 year after the date of enactment of this Act and ending on the date of completion of all of the assessments required under this subsection, the Secretary shall submit to Congress on an annual basis an interim report that—

(i) identifies the sequence and schedule for completion of the assessments if the Secretary sequences the assessments; or

(ii) describes the progress of the assessments if the Secretary does not sequence the assessments.

(6) **UPDATES.**—The Secretary may periodically update the assessments conducted under this subsection based on—

(A) the generation of new information or datasets by the Federal Government; or

(B) the receipt of new information or datasets from critical mineral producers, State geological surveys, academic institutions, trade associations, or other persons.

(7) **ADDITIONAL SURVEYS.**—The Secretary shall complete a resource assessment for each additional mineral or element subsequently designated as a critical mineral under subsection (c)(5)(B) not later than 2 years after the designation of the mineral or element.

(8) **REPORT.**—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the status of geological surveying of Federal land for any mineral commodity—

(A) for which the United States was dependent on a foreign country for more than 25 percent of the United States supply, as depicted in the report issued by the United States Geological Survey entitled “Mineral Commodity Summaries 2020”; but

(B) that is not designated as a critical mineral under subsection (c).

(e) **PERMITTING.**—

(1) **SENSE OF CONGRESS.**—It is the sense of Congress that—

(A) critical minerals are fundamental to the economy, competitiveness, and security of the United States;

(B) to the maximum extent practicable, the critical mineral needs of the United States should be satisfied by minerals responsibly produced and recycled in the United States; and

(C) the Federal permitting process has been identified as an impediment to mineral production and the mineral security of the United States.

(2) **PERFORMANCE IMPROVEMENTS.**—To improve the quality and timeliness of decisions, the Secretary (acting through the Director of the Bureau of Land Management) and the Secretary of Agriculture (acting through the Chief of the Forest Service) (referred to in this subsection as the “Secretaries”) shall, to the maximum extent practicable, with respect to critical mineral production on Federal land, complete Federal permitting and review processes with maximum efficiency and effectiveness, while supporting vital economic growth, by—

(A) establishing and adhering to timelines and schedules for the consideration of, and final decisions regarding, applications, operating plans, leases, licenses, permits, and other use authorizations for mineral-related activities on Federal land;

(B) establishing clear, quantifiable, and temporal permitting performance goals and tracking progress against those goals;

(C) engaging in early collaboration among agencies, project sponsors, and affected stakeholders—

(i) to incorporate and address the interests of those parties; and

(ii) to minimize delays;

(D) ensuring transparency and accountability by using cost-effective information technology to collect and disseminate information regarding individual projects and agency performance;

(E) engaging in early and active consultation with State, local, and Indian tribal governments to avoid conflicts or duplication of effort, resolve concerns, and allow for concurrent, rather than sequential, reviews;

(F) providing demonstrable improvements in the performance of Federal permitting and review processes, including lower costs and more timely decisions;

(G) expanding and institutionalizing permitting and review process improvements that have proven effective;

(H) developing mechanisms to better communicate priorities and resolve disputes among agencies at the national, regional, State, and local levels; and

(I) developing other practices, such as preapplication procedures.

(3) **REVIEW AND REPORT.**—Not later than 1 year after the date of enactment of this Act, the Secretaries shall submit to Congress a report that—

(A) identifies additional measures (including regulatory and legislative proposals, as appropriate) that would increase the timeliness of permitting activities for the exploration and development of domestic critical minerals;

(B) identifies options (including cost recovery paid by permit applicants) for ensuring adequate staffing and training of Federal entities and personnel responsible for the consideration of applications, operating plans, leases, licenses, permits, and other use authorizations for critical mineral-related activities on Federal land;

(C) quantifies the amount of time typically required (including range derived from minimum and maximum durations, mean, median, variance, and other statistical measures or representations) to complete each step (including those aspects outside the control of the executive branch, such as judicial review, applicant decisions, or State and local government involvement) associated with the development and processing of applications, operating plans, leases, licenses, permits, and other use authorizations for critical mineral-related activities on Federal land, which shall serve as a baseline for the performance metric under paragraph (4); and

(D) describes actions carried out pursuant to paragraph (2).

(4) **PERFORMANCE METRIC.**—Not later than 90 days after the date of submission of the report under paragraph (3), the Secretaries, after providing public notice and an opportunity to comment, shall develop and publish a performance metric for evaluating the progress made by the executive branch to expedite the permitting of activities that will increase exploration for, and development of, domestic critical minerals, while maintaining environmental standards.

(5) **ANNUAL REPORTS.**—Beginning with the first budget submission by the President under section 1105 of title 31, United States Code, after publication of the performance metric required under paragraph (4), and annually thereafter, the Secretaries shall submit to Congress a report that—

(A) summarizes the implementation of recommendations, measures, and options identified in subparagraphs (A) and (B) of paragraph (3);

(B) using the performance metric under paragraph (4), describes progress made by the executive branch, as compared to the baseline established pursuant to paragraph (3)(C), on expediting the permitting of activities that will increase exploration for, and development of, domestic critical minerals; and

(C) compares the United States to other countries in terms of permitting efficiency and any other criteria relevant to the globally competitive critical minerals industry.

(6) **INDIVIDUAL PROJECTS.**—Using data from the Secretaries generated under paragraph (5), the Director of the Office of Management and Budget shall prioritize inclusion of individual critical mineral projects on the website operated by the Office of Management and Budget in accordance with section 1122 of title 31, United States Code.

(7) **REPORT OF SMALL BUSINESS ADMINISTRATION.**—Not later than 1 year and 300 days after the date of enactment of this Act, the Administrator of the Small Business Administration shall submit to the applicable committees of Congress a report that assesses the performance of Federal agencies with respect to—

(A) complying with chapter 6 of title 5, United States Code (commonly known as the “Regulatory Flexibility Act”), in promulgating regulations applicable to the critical minerals industry; and

(B) performing an analysis of regulations applicable to the critical minerals industry that may be outmoded, inefficient, duplicative, or excessively burdensome.

(f) **FEDERAL REGISTER PROCESS.**—

(1) **DEPARTMENTAL REVIEW.**—Absent any extraordinary circumstance, and except as otherwise required by law, the Secretary and the Secretary of Agriculture shall ensure that each Federal Register notice described in paragraph (2) shall be—

(A) subject to any required reviews within the Department of the Interior or the Department of Agriculture; and

(B) published in final form in the Federal Register not later than 45 days after the date of initial preparation of the notice.

(2) **PREPARATION.**—The preparation of Federal Register notices required by law associated with the issuance of a critical mineral exploration or mine permit shall be delegated to the organizational level within the agency responsible for issuing the critical mineral exploration or mine permit.

(3) **TRANSMISSION.**—All Federal Register notices regarding official document availability, announcements of meetings, or notices of intent to undertake an action shall be originated in, and transmitted to the Federal Register from, the office in which, as applicable—

(A) the documents or meetings are held; or

(B) the activity is initiated.

(g) **RECYCLING, EFFICIENCY, AND ALTERNATIVES.**—

(1) **ESTABLISHMENT.**—The Secretary of Energy (referred to in this subsection as the “Secretary”) shall conduct a program of research and development—

(A) to promote the efficient production, use, and recycling of critical minerals throughout the supply chain; and

(B) to develop alternatives to critical minerals that do not occur in significant abundance in the United States.

(2) **COOPERATION.**—In carrying out the program, the Secretary shall cooperate with appropriate—

(A) Federal agencies and National Laboratories;

(B) critical mineral producers;

(C) critical mineral processors;

(D) critical mineral manufacturers;

(E) trade associations;

(F) academic institutions;

(G) small businesses; and

(H) other relevant entities or individuals.

(3) **ACTIVITIES.**—Under the program, the Secretary shall carry out activities that include the identification and development of—

(A) advanced critical mineral extraction, production, separation, alloying, or proc-

essing technologies that decrease the energy consumption, environmental impact, and costs of those activities, including—

(i) efficient water and wastewater management strategies;

(ii) technologies and management strategies to control the environmental impacts of radionuclides in ore tailings;

(iii) technologies for separation and processing; and

(iv) technologies for increasing the recovery rates of byproducts from host metal ores;

(B) technologies or process improvements that minimize the use, or lead to more efficient use, of critical minerals across the full supply chain;

(C) technologies, process improvements, or design optimizations that facilitate the recycling of critical minerals, and options for improving the rates of collection of products and scrap containing critical minerals from post-consumer, industrial, or other waste streams;

(D) commercial markets, advanced storage methods, energy applications, and other beneficial uses of critical minerals processing byproducts;

(E) alternative minerals, metals, and materials, particularly those available in abundance within the United States and not subject to potential supply restrictions, that lessen the need for critical minerals; and

(F) alternative energy technologies or alternative designs of existing energy technologies, particularly those that use minerals that—

(i) occur in abundance in the United States; and

(ii) are not subject to potential supply restrictions.

(4) **REPORTS.**—Not later than 2 years after the date of enactment of this Act, and annually thereafter, the Secretary shall submit to Congress a report summarizing the activities, findings, and progress of the program.

(h) **ANALYSIS AND FORECASTING.**—

(1) **CAPABILITIES.**—In order to evaluate existing critical mineral policies and inform future actions that may be taken to avoid supply shortages, mitigate price volatility, and prepare for demand growth and other market shifts, the Secretary (acting through the Director of the United States Geological Survey) or a designee of the Secretary, in consultation with the Energy Information Administration, academic institutions, and others in order to maximize the application of existing competencies related to developing and maintaining computer-models and similar analytical tools, shall conduct and publish the results of an annual report that includes—

(A) as part of the annually published Mineral Commodity Summaries from the United States Geological Survey, a comprehensive review of critical mineral production, consumption, and recycling patterns, including—

(i) the quantity of each critical mineral domestically produced during the preceding year;

(ii) the quantity of each critical mineral domestically consumed during the preceding year;

(iii) market price data or other price data for each critical mineral;

(iv) an assessment of—

(I) critical mineral requirements to meet the national security, energy, economic, industrial, technological, and other needs of the United States during the preceding year;

(II) the reliance of the United States on foreign sources to meet those needs during the preceding year; and

(III) the implications of any supply shortages, restrictions, or disruptions during the preceding year;

(v) the quantity of each critical mineral domestically recycled during the preceding year;

(vi) the market penetration during the preceding year of alternatives to each critical mineral;

(vii) a discussion of international trends associated with the discovery, production, consumption, use, costs of production, prices, and recycling of each critical mineral as well as the development of alternatives to critical minerals; and

(viii) such other data, analyses, and evaluations as the Secretary finds are necessary to achieve the purposes of this subsection; and

(B) a comprehensive forecast, entitled the “Annual Critical Minerals Outlook”, of projected critical mineral production, consumption, and recycling patterns, including—

(i) the quantity of each critical mineral projected to be domestically produced over the subsequent 1-year, 5-year, and 10-year periods;

(ii) the quantity of each critical mineral projected to be domestically consumed over the subsequent 1-year, 5-year, and 10-year periods;

(iii) an assessment of—

(I) critical mineral requirements to meet projected national security, energy, economic, industrial, technological, and other needs of the United States;

(II) the projected reliance of the United States on foreign sources to meet those needs; and

(III) the projected implications of potential supply shortages, restrictions, or disruptions;

(iv) the quantity of each critical mineral projected to be domestically recycled over the subsequent 1-year, 5-year, and 10-year periods;

(v) the market penetration of alternatives to each critical mineral projected to take place over the subsequent 1-year, 5-year, and 10-year periods;

(vi) a discussion of reasonably foreseeable international trends associated with the discovery, production, consumption, use, costs of production, and recycling of each critical mineral as well as the development of alternatives to critical minerals; and

(vii) such other projections relating to each critical mineral as the Secretary determines to be necessary to achieve the purposes of this subsection.

(2) **PROPRIETARY INFORMATION.**—In preparing a report described in paragraph (1), the Secretary shall ensure, consistent with section 5(f) of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1604(f)), that—

(A) no person uses the information and data collected for the report for a purpose other than the development of or reporting of aggregate data in a manner such that the identity of the person or firm who supplied the information is not discernible and is not material to the intended uses of the information;

(B) no person discloses any information or data collected for the report unless the information or data has been transformed into a statistical or aggregate form that does not allow the identification of the person or firm who supplied particular information; and

(C) procedures are established to require the withholding of any information or data collected for the report if the Secretary determines that withholding is necessary to protect proprietary information, including any trade secrets or other confidential information.

(i) **EDUCATION AND WORKFORCE.**—

(1) **WORKFORCE ASSESSMENT.**—Not later than 1 year and 300 days after the date of enactment of this Act, the Secretary of Labor



(in consultation with the Secretary, the Director of the National Science Foundation, institutions of higher education with substantial expertise in mining, institutions of higher education with significant expertise in minerals research, including fundamental research into alternatives, and employers in the critical minerals sector) shall submit to Congress an assessment of the domestic availability of technically trained personnel necessary for critical mineral exploration, development, assessment, production, manufacturing, recycling, analysis, forecasting, education, and research, including an analysis of—

(A) skills that are in the shortest supply as of the date of the assessment;

(B) skills that are projected to be in short supply in the future;

(C) the demographics of the critical minerals industry and how the demographics will evolve under the influence of factors such as an aging workforce;

(D) the effectiveness of training and education programs in addressing skills shortages;

(E) opportunities to hire locally for new and existing critical mineral activities;

(F) the sufficiency of personnel within relevant areas of the Federal Government for achieving the policies described in section 3 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1602); and

(G) the potential need for new training programs to have a measurable effect on the supply of trained workers in the critical minerals industry.

(2) CURRICULUM STUDY.—

(A) IN GENERAL.—The Secretary and the Secretary of Labor shall jointly enter into an arrangement with the National Academy of Sciences and the National Academy of Engineering under which the Academies shall coordinate with the National Science Foundation on conducting a study—

(i) to design an interdisciplinary program on critical minerals that will support the critical mineral supply chain and improve the ability of the United States to increase domestic, critical mineral exploration, development, production, manufacturing, research, including fundamental research into alternatives, and recycling;

(ii) to address undergraduate and graduate education, especially to assist in the development of graduate level programs of research and instruction that lead to advanced degrees with an emphasis on the critical mineral supply chain or other positions that will increase domestic, critical mineral exploration, development, production, manufacturing, research, including fundamental research into alternatives, and recycling;

(iii) to develop guidelines for proposals from institutions of higher education with substantial capabilities in the required disciplines for activities to improve the critical mineral supply chain and advance the capacity of the United States to increase domestic, critical mineral exploration, research, development, production, manufacturing, and recycling; and

(iv) to outline criteria for evaluating performance and recommendations for the amount of funding that will be necessary to establish and carry out the program described in paragraph (3).

(B) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to Congress a description of the results of the study required under subparagraph (A).

(3) PROGRAM.—

(A) ESTABLISHMENT.—The Secretary and the Secretary of Labor shall jointly conduct a competitive grant program under which in-

stitutions of higher education may apply for and receive 4-year grants for—

(i) startup costs for newly designated faculty positions in integrated critical mineral education, research, innovation, training, and workforce development programs consistent with paragraph (2);

(ii) internships, scholarships, and fellowships for students enrolled in programs related to critical minerals;

(iii) equipment necessary for integrated critical mineral innovation, training, and workforce development programs; and

(iv) research of critical minerals and their applications, particularly concerning the manufacture of critical components vital to national security.

(B) RENEWAL.—A grant under this paragraph shall be renewable for up to 2 additional 3-year terms based on performance criteria outlined under paragraph (2)(A)(iv).

(J) NATIONAL GEOLOGICAL AND GEOPHYSICAL DATA PRESERVATION PROGRAM.—Section 351(k) of the Energy Policy Act of 2005 (42 U.S.C. 15908(k)) is amended by striking “\$30,000,000 for each of fiscal years 2006 through 2010” and inserting “\$5,000,000 for each of fiscal years 2021 through 2029, to remain available until expended”.

(K) ADMINISTRATION.—

(1) IN GENERAL.—The National Critical Materials Act of 1984 (30 U.S.C. 1801 et seq.) is repealed.

(2) CONFORMING AMENDMENT.—Section 3(d) of the National Superconductivity and Competitiveness Act of 1988 (15 U.S.C. 5202(d)) is amended in the first sentence by striking “, with the assistance of the National Critical Materials Council as specified in the National Critical Materials Act of 1984 (30 U.S.C. 1801 et seq.),”.

(3) SAVINGS CLAUSES.—

(A) IN GENERAL.—Nothing in this section or an amendment made by this section modifies any requirement or authority provided by—

(i) the matter under the heading “GEOLOGICAL SURVEY” of the first section of the Act of March 3, 1879 (43 U.S.C. 31(a)); or

(ii) the first section of Public Law 87-626 (43 U.S.C. 31(b)).

(B) EFFECT ON DEPARTMENT OF DEFENSE.—Nothing in this section or an amendment made by this section affects the authority of the Secretary of Defense with respect to the work of the Department of Defense on critical material supplies in furtherance of the national defense mission of the Department of Defense.

(C) SECRETARIAL ORDER NOT AFFECTED.—This section shall not apply to any mineral described in Secretarial Order No. 3324, issued by the Secretary on December 3, 2012, in any area to which the order applies.

(4) APPLICATION OF CERTAIN PROVISIONS.—

(A) IN GENERAL.—Subsections (e) and (f) shall apply to—

(i) an exploration project in which the presence of a byproduct is reasonably expected, based on known mineral companionality, geologic formation, mineralogy, or other factors; and

(ii) a project that demonstrates that the byproduct is of sufficient grade that, when combined with the production of a host mineral, the byproduct is economic to recover, as determined by the applicable Secretary in accordance with subparagraph (B).

(B) REQUIREMENT.—In making the determination under subparagraph (A)(ii), the applicable Secretary shall consider the cost effectiveness of the byproducts recovery.

(I) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$50,000,000 for each of fiscal years 2021 through 2029.

**SEC. 2102. RARE EARTH ELEMENT ADVANCED COAL TECHNOLOGIES.**

(a) PROGRAM FOR EXTRACTION AND RECOVERY OF RARE EARTH ELEMENTS AND MINERALS FROM COAL AND COAL BYPRODUCTS.—

(1) IN GENERAL.—The Secretary of Energy, acting through the Assistant Secretary for Fossil Energy (referred to in this section as the “Secretary”), shall carry out a program under which the Secretary shall develop advanced separation technologies for the extraction and recovery of rare earth elements and minerals from coal and coal byproducts.

(2) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out the program described in paragraph (1) \$23,000,000 for each of fiscal years 2021 through 2027.

(b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report evaluating the development of advanced separation technologies for the extraction and recovery of rare earth elements and minerals from coal and coal byproducts, including acid mine drainage from coal mines.

**Subtitle B—Cybersecurity and Grid Security and Modernization**

**PART I—CYBERSECURITY AND GRID SECURITY**

**SEC. 2201. INCENTIVES FOR ADVANCED CYBERSECURITY TECHNOLOGY INVESTMENT.**

Part II of the Federal Power Act is amended by inserting after section 219 (16 U.S.C. 824s) the following:

**“SEC. 219A. INCENTIVES FOR CYBERSECURITY INVESTMENTS.**

“(a) DEFINITIONS.—In this section:

“(1) ADVANCED CYBERSECURITY TECHNOLOGY.—The term ‘advanced cybersecurity technology’ means any technology, operational capability, or service, including computer hardware, software, or a related asset, that enhances the security posture of public utilities through improvements in the ability to protect against, detect, respond to, or recover from a cybersecurity threat (as defined in section 102 of the Cybersecurity Act of 2015 (6 U.S.C. 1501)).

“(2) ADVANCED CYBERSECURITY TECHNOLOGY INFORMATION.—The term ‘advanced cybersecurity technology information’ means information relating to advanced cybersecurity technology or proposed advanced cybersecurity technology that is generated by or provided to the Commission or another Federal agency.

“(b) STUDY.—Not later than 180 days after the date of enactment of this section, the Commission, in consultation with the Secretary of Energy, the North American Electric Reliability Corporation, the Electricity Subsector Coordinating Council, and the National Association of Regulatory Utility Commissioners, shall conduct a study to identify incentive-based, including performance-based, rate treatments for the transmission and sale of electric energy subject to the jurisdiction of the Commission that could be used to encourage—

“(1) investment by public utilities in advanced cybersecurity technology; and

“(2) participation by public utilities in cybersecurity threat information sharing programs.

“(c) INCENTIVE-BASED RATE TREATMENT.—Not later than 1 year after the completion of the study under subsection (b), the Commission shall establish, by rule, incentive-based, including performance-based, rate treatments for the transmission of electric energy in interstate commerce and the sale of electric energy at wholesale in interstate commerce by public utilities for the purpose of benefitting consumers by encouraging—

“(1) investments by public utilities in advanced cybersecurity technology; and

“(2) participation by public utilities in cybersecurity threat information sharing programs.

“(d) **FACTORS FOR CONSIDERATION.**—In issuing a rule pursuant to this section, the Commission may provide additional incentives beyond those identified in subsection (c) in any case in which the Commission determines that an investment in advanced cybersecurity technology or information sharing program costs will reduce cybersecurity risks to—

“(1) defense critical electric infrastructure (as defined in section 215A(a)) and other facilities subject to the jurisdiction of the Commission that are critical to public safety, national defense, or homeland security, as determined by the Commission in consultation with—

“(A) the Secretary of Energy; and

“(B) appropriate Federal agencies; and

“(2) facilities of small or medium-sized public utilities with limited cybersecurity resources, as determined by the Commission.

“(e) **RATEPAYER PROTECTION.**—

“(1) **IN GENERAL.**—Any rate approved under a rule issued pursuant to this section, including any revisions to that rule, shall be subject to the requirements of sections 205 and 206 that all rates, charges, terms, and conditions—

“(A) shall be just and reasonable; and

“(B) shall not be unduly discriminatory or preferential.

“(2) **PROHIBITION OF DUPLICATE RECOVERY.**—Any rule issued pursuant to this section shall preclude rate treatments that allow unjust and unreasonable double recovery for advanced cybersecurity technology.

“(f) **SINGLE-ISSUE RATE FILINGS.**—The Commission shall permit public utilities to apply for incentive-based rate treatment under a rule issued under this section on a single-issue basis by submitting to the Commission a tariff schedule under section 205 that permits recovery of costs and incentives over the depreciable life of the applicable assets, without regard to changes in receipts or other costs of the public utility.

“(g) **PROTECTION OF INFORMATION.**—Advanced cybersecurity technology information that is provided to, generated by, or collected by the Federal Government under subsection (b), (c), or (f) shall be considered to be critical electric infrastructure information under section 215A.”

## **SEC. 2202. RURAL AND MUNICIPAL UTILITY ADVANCED CYBERSECURITY GRANT AND TECHNICAL ASSISTANCE PROGRAM.**

(a) **DEFINITIONS.**—In this section:

(1) **ADVANCED CYBERSECURITY TECHNOLOGY.**—The term “advanced cybersecurity technology” means any technology, operational capability, or service, including computer hardware, software, or a related asset, that enhances the security posture of electric utilities through improvements in the ability to protect against, detect, respond to, or recover from a cybersecurity threat (as defined in section 102 of the Cybersecurity Act of 2015 (6 U.S.C. 1501)).

(2) **ELIGIBLE ENTITY.**—The term “eligible entity” means—

(A) a rural electric cooperative;

(B) a utility owned by a political subdivision of a State, such as a municipally owned electric utility;

(C) a utility owned by any agency, authority, corporation, or instrumentality of 1 or more political subdivisions of a State;

(D) a not-for-profit entity that is in a partnership with not fewer than 6 entities described in subparagraph (A), (B), or (C); and

(E) an investor-owned electric utility that sells less than 4,000,000 megawatt hours of electricity per year.

(3) **PROGRAM.**—The term “Program” means the Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance Program established under subsection (b).

(b) **ESTABLISHMENT.**—Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Federal Energy Regulatory Commission, the North American Electric Reliability Corporation, and the Electricity Subsector Coordinating Council, shall establish a program, to be known as the “Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance Program”, to provide grants and technical assistance to, and enter into cooperative agreements with, eligible entities to protect against, detect, respond to, and recover from cybersecurity threats.

(c) **OBJECTIVES.**—The objectives of the Program shall be—

(1) to deploy advanced cybersecurity technologies for electric utility systems; and

(2) to increase the participation of eligible entities in cybersecurity threat information sharing programs.

(d) **AWARDS.**—

(1) **IN GENERAL.**—The Secretary—

(A) shall award grants and provide technical assistance under the Program to eligible entities on a competitive basis;

(B) shall develop criteria and a formula for awarding grants and providing technical assistance under the Program;

(C) may enter into cooperative agreements with eligible entities that can facilitate the objectives described in subsection (c); and

(D) shall establish a process to ensure that all eligible entities are informed about and can become aware of opportunities to receive grants or technical assistance under the Program.

(2) **PRIORITY FOR GRANTS AND TECHNICAL ASSISTANCE.**—In awarding grants and providing technical assistance under the Program, the Secretary shall give priority to an eligible entity that, as determined by the Secretary—

(A) has limited cybersecurity resources;

(B) owns assets critical to the reliability of the bulk power system; or

(C) owns defense critical electric infrastructure (as defined in section 215A(a) of the Federal Power Act (16 U.S.C. 824o-1(a))).

(e) **PROTECTION OF INFORMATION.**—Information provided to, or collected by, the Federal Government under this section—

(1) shall be exempt from disclosure under section 552(b)(3) of title 5, United States Code; and

(2) shall not be made available by any Federal agency, State, political subdivision of a State, or Tribal authority under any applicable law requiring public disclosure of information or records.

(f) **FUNDING.**—There is authorized to be appropriated to carry out this section \$50,000,000 for each of fiscal years 2021 through 2025, to remain available until expended.

## **SEC. 2203. STATE ENERGY SECURITY PLANS.**

(a) **IN GENERAL.**—Part D of title III of the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.) is amended by adding at the end the following:

### **“SEC. 367. STATE ENERGY SECURITY PLANS.**

“(a) **IN GENERAL.**—Federal financial assistance made available to a State under this part may be used for the development, implementation, review, and revision of a State energy security plan that assesses the State’s existing circumstances and proposes methods to strengthen the ability of the State, in consultation with owners and operators of energy infrastructure in such State, to—

“(1) secure the energy infrastructure of the State against all physical and cybersecurity threats;

“(2) mitigate the risk of energy supply disruptions to the State and enhance the response to, and recovery from, energy disruptions; and

“(3) ensure the State has a reliable, secure, and resilient energy infrastructure.

“(b) **CONTENTS OF PLAN.**—A State energy security plan described in subsection (a) shall—

“(1) address all energy sources and regulated and unregulated energy providers;

“(2) provide a State energy profile, including an assessment of energy production, distribution, and end-use;

“(3) address potential hazards to each energy sector or system, including physical threats and cybersecurity threats and vulnerabilities;

“(4) provide a risk assessment of energy infrastructure and cross-sector interdependencies;

“(5) provide a risk mitigation approach to enhance reliability and end-use resilience; and

“(6) address multi-State, Indian Tribe, and regional coordination planning and response, and to the extent practicable, encourage mutual assistance in cyber and physical response plans.

“(c) **COORDINATION.**—In developing or revising a State energy security plan under this section, the energy office of the State shall, to the extent practicable, coordinate with—

“(1) the public utility or service commission of the State;

“(2) energy providers from the private and public sectors; and

“(3) other entities responsible for maintaining fuel or electric reliability and securing energy infrastructure.

“(d) **FINANCIAL ASSISTANCE.**—A State is not eligible to receive Federal financial assistance under this part, for any purpose, for a fiscal year unless the Governor of such State submits to the Secretary, with respect to such fiscal year—

“(1) a State energy security plan described in subsection (a) that meets the requirements of subsection (b); or

“(2) after an annual review of the State energy security plan by the Governor—

“(A) any necessary revisions to such plan; or

“(B) a certification that no revisions to such plan are necessary.

“(e) **TECHNICAL ASSISTANCE.**—Upon request of the Governor of a State, the Secretary may provide information and technical assistance, and other assistance, in the development, implementation, or revision of a State energy security plan.

“(f) **REQUIREMENT.**—Each State receiving Federal financial assistance under this part shall provide reasonable assurance to the Secretary that the State has established policies and procedures designed to assure that the financial assistance will be used—

“(1) to supplement, and not to supplant, State and local funds; and

“(2) to the maximum extent practicable, to increase the amount of State and local funds that otherwise would be available, in the absence of the financial assistance, for the implementation of the State energy security plan under this section.

“(g) **PROTECTION OF INFORMATION.**—Information provided to, or collected by, the Federal Government under this section—

“(1) shall be exempt from disclosure under section 552(b)(3) of title 5, United States Code; and

“(2) shall not be made available by any Federal agency, State, political subdivision of a State, or Tribal authority pursuant to

any Federal, State, or Tribal law, as applicable, requiring public disclosure of information or records.

“(h) SUNSET.—This section shall expire on October 31, 2024.”.

(b) AUTHORIZATION OF APPROPRIATIONS.—Section 365(f) of the Energy Policy and Conservation Act (42 U.S.C. 6325(f)) is amended—

(1) by striking “\$125,000,000” and inserting “\$90,000,000”; and

(2) by striking “2007 through 2012” and inserting “2021 through 2025”.

(c) TECHNICAL AND CONFORMING AMENDMENTS.—

(1) CONFORMING AMENDMENTS.—Section 363 of the Energy Policy and Conservation Act (42 U.S.C. 6323) is amended—

(A) by striking subsection (e); and

(B) by redesignating subsection (f) as subsection (e).

(2) TECHNICAL AMENDMENT.—Section 366(3)(B)(i) of the Energy Policy and Conservation Act (42 U.S.C. 6326(3)(B)(i)) is amended by striking “approved under section 367”.

(3) REFERENCE.—The matter under the heading “ENERGY CONSERVATION” under the heading “DEPARTMENT OF ENERGY” in title II of the Department of the Interior and Related Agencies Appropriations Act, 1985 (42 U.S.C. 6323a) is amended by striking “sections 361 through 366” and inserting “sections 361 through 367”.

(4) TABLE OF CONTENTS.—The table of contents for part D of title III of the Energy Policy and Conservation Act (Public Law 94-163; 89 Stat. 872; 92 Stat. 3272; 104 Stat. 1006) is amended by adding at the end the following:

“Sec. 367. State energy security plans.”.

#### **SEC. 2204. ENHANCING GRID SECURITY THROUGH PUBLIC-PRIVATE PARTNERSHIPS.**

(a) DEFINITIONS.—In this section:

(1) ELECTRIC RELIABILITY ORGANIZATION.—The term “Electric Reliability Organization” has the meaning given the term in section 215(a) of the Federal Power Act (16 U.S.C. 824o(a)).

(2) ELECTRIC UTILITY; STATE REGULATORY AUTHORITY.—The terms “electric utility” and “State regulatory authority” have the meanings given those terms in section 3 of the Federal Power Act (16 U.S.C. 796).

(b) PROGRAM TO PROMOTE AND ADVANCE PHYSICAL SECURITY AND CYBERSECURITY OF ELECTRIC UTILITIES.—

(1) ESTABLISHMENT.—The Secretary, in consultation with State regulatory authorities, industry stakeholders, the Electric Reliability Organization, and any other Federal agencies that the Secretary determines to be appropriate, shall carry out a program—

(A) to develop, and provide for voluntary implementation of, maturity models, self-assessments, and auditing methods for assessing the physical security and cybersecurity of electric utilities;

(B) to assist with threat assessment and cybersecurity training for electric utilities;

(C) to provide technical assistance for electric utilities subject to the program;

(D) to provide training to electric utilities to address and mitigate cybersecurity supply chain management risks;

(E) to advance the cybersecurity of third-party vendors in partnerships with electric utilities; and

(F) to increase opportunities for sharing best practices and data collection within the electric sector.

(2) SCOPE.—In carrying out the program under paragraph (1), the Secretary shall—

(A) take into consideration—

(i) the different sizes of electric utilities; and

(ii) the regions that electric utilities serve;

(B) prioritize electric utilities with fewer available resources due to size or region; and

(C) to the maximum extent practicable, use and leverage—

(i) existing Department programs; and

(ii) existing programs of the Federal agencies determined to be appropriate under paragraph (1).

(3) PROTECTION OF INFORMATION.—Information provided to, or collected by, the Federal Government pursuant to this subsection—

(A) shall be exempt from disclosure under section 552(b)(3) of title 5, United States Code; and

(B) shall not be made available by any Federal agency, State, political subdivision of a State, or Tribal authority pursuant to any Federal, State, political subdivision of a State, or Tribal law, respectively, requiring public disclosure of information or records.

(c) REPORT ON CYBERSECURITY AND DISTRIBUTION SYSTEMS.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with State regulatory authorities, industry stakeholders, and any other Federal agencies that the Secretary determines to be appropriate, shall submit to Congress a report that assesses—

(A) priorities, policies, procedures, and actions for enhancing the physical security and cybersecurity of electricity distribution systems, including behind-the-meter generation, storage, and load management devices, to address threats to, and vulnerabilities of, electricity distribution systems; and

(B) the implementation of the priorities, policies, procedures, and actions assessed under subparagraph (A), including—

(i) an estimate of potential costs and benefits of the implementation; and

(ii) an assessment of any public-private cost-sharing opportunities.

(2) PROTECTION OF INFORMATION.—Information provided to, or collected by, the Federal Government under this subsection—

(A) shall be exempt from disclosure under section 552(b)(3) of title 5, United States Code; and

(B) shall not be made available by any Federal agency, State, political subdivision of a State, or Tribal authority pursuant to any Federal, State, political subdivision of a State, or Tribal law, respectively, requiring public disclosure of information or records.

#### **SEC. 2205. ENHANCED GRID SECURITY.**

(a) DEFINITIONS.—In this section:

(1) ELECTRIC UTILITY.—The term “electric utility” has the meaning given the term in section 3 of the Federal Power Act (16 U.S.C. 796).

(2) E-ISAC.—The term “E-ISAC” means the Electricity Sector Information Sharing and Analysis Center.

(b) CYBERSECURITY FOR THE ENERGY SECTOR RESEARCH, DEVELOPMENT, AND DEMONSTRATION PROGRAM.—

(1) IN GENERAL.—The Secretary, in consultation with appropriate Federal agencies, the energy sector, the States, and other stakeholders, shall carry out a program—

(A) to develop advanced cybersecurity applications and technologies for the energy sector—

(i) to identify and mitigate vulnerabilities, including—

(I) dependencies on other critical infrastructure; and

(II) impacts from weather and fuel supply; and

(ii) to advance the security of field devices and third-party control systems, including—

(I) systems for generation, transmission, distribution, end use, and market functions;

(II) specific electric grid elements including advanced metering, demand response, distributed generation, and electricity storage;

(III) forensic analysis of infected systems; and

(IV) secure communications;

(B) to leverage electric grid architecture as a means to assess risks to the energy sector, including by implementing an all-hazards approach to communications infrastructure, control systems architecture, and power systems architecture;

(C) to perform pilot demonstration projects with the energy sector to gain experience with new technologies; and

(D) to develop workforce development curricula for energy sector-related cybersecurity.

(2) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection \$65,000,000 for each of fiscal years 2021 through 2029.

(c) ENERGY SECTOR COMPONENT TESTING FOR CYBERRESILIENCE PROGRAM.—

(1) IN GENERAL.—The Secretary shall carry out a program—

(A) to establish a cybertesting and mitigation program to identify vulnerabilities of energy sector supply chain products to known threats;

(B) to oversee third-party cybertesting; and

(C) to develop procurement guidelines for energy sector supply chain components.

(2) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection \$15,000,000 for each of fiscal years 2021 through 2029.

(d) ENERGY SECTOR OPERATIONAL SUPPORT FOR CYBERRESILIENCE PROGRAM.—

(1) IN GENERAL.—The Secretary may carry out a program—

(A) to enhance and periodically test—

(i) the emergency response capabilities of the Department; and

(ii) the coordination of the Department with other agencies, the National Laboratories, and private industry;

(B) to expand cooperation of the Department with the intelligence communities for energy sector-related threat collection and analysis;

(C) to enhance the tools of the Department and E-ISAC for monitoring the status of the energy sector;

(D) to expand industry participation in E-ISAC; and

(E) to provide technical assistance to small electric utilities for purposes of assessing cybermaturity level.

(2) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection \$10,000,000 for each of fiscal years 2021 through 2029.

(e) MODELING AND ASSESSING ENERGY INFRASTRUCTURE RISK.—

(1) IN GENERAL.—The Secretary shall develop an advanced energy security program to secure energy networks, including electric, natural gas, and oil exploration, transmission, and delivery.

(2) SECURITY AND RESILIENCY OBJECTIVE.—The objective of the program developed under paragraph (1) is to increase the functional preservation of the electric grid operations or natural gas and oil operations in the face of natural and human-made threats and hazards, including electric magnetic pulse and geomagnetic disturbances.

(3) ELIGIBLE ACTIVITIES.—In carrying out the program developed under paragraph (1), the Secretary may—

(A) develop capabilities to identify vulnerabilities and critical components that pose major risks to grid security if destroyed or impaired;

(B) provide modeling at the national level to predict impacts from natural or human-made events;

(C) develop a maturity model for physical security and cybersecurity;

(D) conduct exercises and assessments to identify and mitigate vulnerabilities to the electric grid, including providing mitigation recommendations;

(E) conduct research hardening solutions for critical components of the electric grid;

(F) conduct research mitigation and recovery solutions for critical components of the electric grid; and

(G) provide technical assistance to States and other entities for standards and risk analysis.

(4) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to carry out this subsection \$10,000,000 for each of fiscal years 2021 through 2029.

(f) **LEVERAGING EXISTING PROGRAMS.**—The programs established under this section shall be carried out consistent with—

(1) the report of the Department entitled “Roadmap to Achieve Energy Delivery Systems Cybersecurity” and dated 2011;

(2) existing programs of the Department; and

(3) any associated strategic framework that links together academic and National Laboratory researchers, electric utilities, manufacturers, and any other relevant private industry organizations, including the Electricity Sub-sector Coordinating Council.

## PART II—GRID MODERNIZATION

### SEC. 2210. GRID STORAGE PROGRAM.

(a) **IN GENERAL.**—The Secretary shall conduct a program of research, development, and demonstration of electric grid energy storage that addresses the principal challenges identified in the 2013 Department of Energy Strategic Plan for Grid Energy Storage.

(b) **AREAS OF FOCUS.**—The program under this section shall focus on—

(1) materials, electric thermal, electromechanical, and electrochemical systems research;

(2) power conversion technologies research;

(3) developing—

(A) empirical and science-based industry standards to compare the storage capacity, cycle length and capabilities, and reliability of different types of electricity storage; and

(B) validation and testing techniques;

(4) other fundamental and applied research critical to widespread deployment of electricity storage;

(5) device development that builds on results from research described in paragraphs (1), (2), and (4), including combinations of power electronics, advanced optimizing controls, and energy storage as a general purpose element of the electric grid;

(6) grid-scale testing and analysis of storage devices, including test-beds and field trials;

(7) cost-benefit analyses that inform capital expenditure planning for regulators and owners and operators of components of the electric grid;

(8) electricity storage device safety and reliability, including potential failure modes, mitigation measures, and operational guidelines;

(9) standards for storage device performance, control interface, grid interconnection, and interoperability; and

(10) maintaining a public database of energy storage projects, policies, codes, standards, and regulations.

(c) **ASSISTANCE TO STATES.**—The Secretary may provide technical and financial assistance to States, Indian Tribes, or units of local government to participate in or use research, development, or demonstration of technology developed under this section.

(d) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to the Secretary to carry out this section \$50,000,000 for each of fiscal years 2021 through 2029.

(e) **NO EFFECT ON OTHER PROVISIONS OF LAW.**—Nothing in this Act or an amendment made by this Act authorizes regulatory actions that would duplicate or conflict with regulatory requirements, mandatory standards, or related processes under section 215 of the Federal Power Act (16 U.S.C. 824o).

(f) **USE OF FUNDS.**—To the maximum extent practicable, in carrying out this section, the Secretary shall ensure that the use of funds to carry out this section is coordinated among different offices within the Grid Modernization Initiative of the Department and other programs conducting energy storage research.

### SEC. 2211. TECHNOLOGY DEMONSTRATION ON THE DISTRIBUTION SYSTEM.

(a) **IN GENERAL.**—The Secretary shall establish a grant program to carry out eligible projects related to the modernization of the electric grid, including the application of technologies to improve observability, advanced controls, and prediction of system performance on the distribution system.

(b) **ELIGIBLE PROJECTS.**—To be eligible for a grant under subsection (a), a project shall—

(1) be designed to improve the performance and efficiency of the future electric grid, while ensuring the continued provision of safe, secure, reliable, and affordable power;

(2) demonstrate—

(A) secure integration and management of two or more energy resources, including distributed energy generation, combined heat and power, micro-grids, energy storage, electric vehicles, energy efficiency, demand response, and intelligent loads; and

(B) secure integration and interoperability of communications and information technologies; and

(3) be subject to the requirements of section 545(a) of the Energy Security and Independence Act of 2007 (42 U.S.C. 17155(a)).

### SEC. 2212. MICRO-GRID AND HYBRID MICRO-GRID SYSTEMS PROGRAM.

(a) **DEFINITIONS.**—In this section:

(1) **HYBRID MICRO-GRID SYSTEM.**—The term “hybrid micro-grid system” means a stand-alone electrical system that—

(A) is comprised of conventional generation and at least 1 alternative energy resource; and

(B) may use grid-scale energy storage.

(2) **ISOLATED COMMUNITY.**—The term “isolated community” means a community that is powered by a stand-alone electric generation and distribution system without the economic and reliability benefits of connection to a regional electric grid.

(3) **MICRO-GRID SYSTEM.**—The term “micro-grid system” means a standalone electrical system that uses grid-scale energy storage.

(4) **STRATEGY.**—The term “strategy” means the strategy developed pursuant to subsection (b)(2)(B).

(b) **PROGRAM.**—

(1) **ESTABLISHMENT.**—The Secretary shall establish a program to promote the development of—

(A) hybrid micro-grid systems for isolated communities; and

(B) micro-grid systems to increase the resilience of critical infrastructure.

(2) **PHASES.**—The program established under paragraph (1) shall be divided into the following phases:

(A) Phase I, which shall consist of the development of a feasibility assessment for—

(i) hybrid micro-grid systems in isolated communities; and

(ii) micro-grid systems to enhance the resilience of critical infrastructure.

(B) Phase II, which shall consist of the development of an implementation strategy, in accordance with paragraph (3), to promote the development of hybrid micro-grid sys-

tems for isolated communities, particularly for those communities exposed to extreme weather conditions and high energy costs, including electricity, space heating and cooling, and transportation.

(C) Phase III, which shall be carried out in parallel with Phase II and consist of the development of an implementation strategy to promote the development of micro-grid systems that increase the resilience of critical infrastructure.

(D) Phase IV, which shall consist of cost-shared demonstration projects, based upon the strategies developed under subparagraph (B) that include the development of physical and cybersecurity plans to take appropriate measures to protect and secure the electric grid.

(E) Phase V, which shall establish a benefits analysis plan to help inform regulators, policymakers, and industry stakeholders about the affordability, environmental and resilience benefits associated with Phases II, III, and IV.

(3) **REQUIREMENTS FOR STRATEGY.**—In developing the strategy under paragraph (2)(B), the Secretary shall consider—

(A) establishing future targets for the economic displacement of conventional generation using hybrid micro-grid systems, including displacement of conventional generation used for electric power generation, heating and cooling, and transportation;

(B) the potential for renewable resources, including wind, solar, and hydropower, to be integrated into a hybrid micro-grid system;

(C) opportunities for improving the efficiency of existing hybrid micro-grid systems;

(D) the capacity of the local workforce to operate, maintain, and repair a hybrid micro-grid system;

(E) opportunities to develop the capacity of the local workforce to operate, maintain, and repair a hybrid micro-grid system;

(F) leveraging existing capacity within local or regional research organizations, such as organizations based at institutions of higher education, to support development of hybrid micro-grid systems, including by testing novel components and systems prior to field deployment;

(G) the need for basic infrastructure to develop, deploy, and sustain a hybrid micro-grid system;

(H) input of traditional knowledge from local leaders of isolated communities in the development of a hybrid micro-grid system;

(I) the impact of hybrid micro-grid systems on defense, homeland security, economic development, and environmental interests;

(J) opportunities to leverage existing interagency coordination efforts and recommendations for new interagency coordination efforts to minimize unnecessary overhead, mobilization, and other project costs; and

(K) any other criteria the Secretary determines appropriate.

(c) **COLLABORATION.**—The program established under subsection (b)(1) shall be carried out in collaboration with relevant stakeholders, including, as appropriate—

(1) States;

(2) Indian Tribes;

(3) regional entities and regulators;

(4) units of local government;

(5) institutions of higher education; and

(6) private sector entities.

(d) **REPORT.**—Not later than 180 days after the date of enactment of this Act, and annually thereafter until calendar year 2029, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on the efforts to implement the program established under subsection (b)(1) and the status

of the strategy developed under subsection (b)(2)(B).

**SEC. 2213. ELECTRIC GRID ARCHITECTURE, SCENARIO DEVELOPMENT, AND MODELING.**

(A) GRID ARCHITECTURE AND SCENARIO DEVELOPMENT.—

(1) IN GENERAL.—Subject to paragraph (2), the Secretary shall establish and facilitate a collaborative process to develop model grid architecture and a set of future scenarios for the electric grid to examine the impacts of different combinations of resources (including different quantities of distributed energy resources and large-scale, central generation) on the electric grid.

(2) MARKET STRUCTURE.—The grid architecture and scenarios developed under paragraph (1) shall account for differences in market structure, including an examination of the potential for stranded costs in each type of market structure.

(3) FINDINGS.—

(A) IN GENERAL.—Based on the findings of grid architecture developed under paragraph (1), the Secretary shall—

(i) determine whether any additional standards are necessary to ensure the interoperability of grid systems and associated communications networks; and

(ii) if the Secretary makes a determination that additional standards are necessary under subparagraph (A), make recommendations for additional standards, including, as may be appropriate, to the Electric Reliability Organization under section 215 of the Federal Power Act (16 U.S.C. 824o).

(B) CONSIDERATION.—The Electric Reliability Organization shall not be under any obligation to establish any process to consider the recommendations described in subparagraph (A)(ii).

(b) MODELING.—Subject to subsection (c), the Secretary shall—

(1) conduct modeling based on the scenarios developed under subsection (a); and

(2) analyze and evaluate the technical and financial impacts of the models to assist States, utilities, and other stakeholders in—

(A) enhancing strategic planning efforts;

(B) avoiding stranded costs; and

(C) maximizing the cost-effectiveness of future grid-related investments.

(c) INPUT.—The Secretary shall develop the scenarios and conduct the modeling and analysis under subsections (a) and (b) with participation or input, as appropriate, from—

(1) the National Laboratories;

(2) States;

(3) State regulatory authorities;

(4) transmission organizations;

(5) representatives of all sectors of the electric power industry;

(6) academic institutions;

(7) independent research institutes; and

(8) other entities.

(d) EFFECT.—Nothing in this section grants any person a right to receive or review confidential, proprietary, or otherwise protected information concerning grid architecture or scenarios.

**SEC. 2214. VOLUNTARY MODEL PATHWAYS.**

(a) ESTABLISHMENT OF VOLUNTARY MODEL PATHWAYS.—

(1) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act, the Secretary, in consultation with the steering committee established under paragraph (3), shall initiate the development of voluntary model pathways for modernizing the electric grid through a collaborative, public-private effort that—

(A) produces illustrative policy pathways encompassing a diverse range of technologies that can be adapted for State and regional applications by regulators and policymakers;

(B) facilitates the modernization of the electric grid and associated communications networks to achieve the objectives described in paragraph (2);

(C) ensures a reliable, resilient, affordable, safe, and secure electric grid; and

(D) acknowledges and accounts for different priorities, electric systems, and rate structures across States and regions.

(2) OBJECTIVES.—The pathways established under paragraph (1) shall facilitate achievement of as many of the following objectives as practicable:

(A) Near real-time situational awareness of the electric system.

(B) Data visualization.

(C) Advanced monitoring and control of the advanced electric grid.

(D) Enhanced certainty of policies for investment in the electric grid.

(E) Increased innovation.

(F) Greater consumer empowerment.

(G) Enhanced grid resilience, reliability, and robustness.

(H) Improved—

(i) integration of distributed energy resources;

(ii) interoperability of the electric system; and

(iii) predictive modeling and capacity forecasting.

(I) Reduced cost of service for consumers.

(J) Diversification of generation sources.

(3) STEERING COMMITTEE.—Not later than 90 days after the date of enactment of this Act, the Secretary shall establish a steering committee to help develop the pathways under paragraph (1), to be composed of members appointed by the Secretary, consisting of persons with appropriate expertise representing a diverse range of interests in the public, private, and academic sectors, including representatives of—

(A) the Federal Energy Regulatory Commission;

(B) the National Laboratories;

(C) States;

(D) State regulatory authorities;

(E) transmission organizations;

(F) representatives of all sectors of the electric power industry;

(G) institutions of higher education;

(H) independent research institutes; and

(I) other entities.

(b) TECHNICAL ASSISTANCE.—The Secretary may provide technical assistance to States, Indian Tribes, or units of local government to adopt or implement one or more elements of the pathways developed under subsection (a)(1), including on a pilot basis.

**SEC. 2215. PERFORMANCE METRICS FOR ELECTRICITY INFRASTRUCTURE PROVIDERS.**

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Secretary, in consultation with the steering committee established under section 2214(a)(3), shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that includes—

(1) an evaluation of the performance of the electric grid as of the date of the report; and

(2) a description of the projected range of measurable costs and benefits associated with the changes evaluated under the scenarios developed under section 2213.

(b) CONSIDERATIONS FOR DEVELOPMENT OF METRICS.—In developing metrics for the evaluation and projections under subsection (a), the Secretary shall consider—

(1) standard methodologies for calculating improvements or deteriorations in the performance metrics, such as reliability, grid efficiency, power quality, consumer satisfaction, sustainability, and financial incentives;

(2) standard methodologies for calculating potential costs and measurable benefits value to ratepayers, applying the performance metrics developed under paragraph (1);

(3) identification of tools, resources, and deployment models that may enable improved performance through the adoption of emerging, commercially available or advanced grid technologies or solutions, including—

(A) multicustomer micro-grids;

(B) distributed energy resources;

(C) energy storage;

(D) electric vehicles;

(E) electric vehicle charging infrastructure;

(F) integrated information and communications systems;

(G) transactive energy systems; and

(H) advanced demand management systems; and

(4) the role of States and local regulatory authorities in enabling a robust future electric grid to ensure that—

(A) electric utilities remain financially viable;

(B) electric utilities make the needed investments that ensure a reliable, secure, and resilient grid; and

(C) costs incurred to transform to an integrated grid are allocated and recovered responsibly, efficiently, and equitably.

**SEC. 2216. VOLUNTARY STATE, REGIONAL, AND LOCAL ELECTRICITY DISTRIBUTION PLANNING.**

(a) IN GENERAL.—On the request of a State, regional organization, or electric utility, the Secretary shall provide assistance to States, regional organizations, and electric utilities to facilitate the development of State, regional, and local electricity distribution plans by—

(1) conducting a resource assessment and analysis of future demand and distribution requirements; and

(2) developing open source tools for State, regional, and local planning and operations.

(b) RISK AND SECURITY ANALYSIS.—The assessment under subsection (a)(1) shall include—

(1) the evaluation of the physical security, cybersecurity, and associated communications needs of an advanced distribution management system and the integration of distributed energy resources; and

(2) advanced use of grid architecture to analyze risks in an all-hazards approach that includes communications infrastructure, control systems architecture, and power systems architecture.

(c) DESIGNATION.—The information collected for the assessment and analysis under subsection (a)(1)—

(1) shall be considered to be critical electric infrastructure information under section 215A of the Federal Power Act (16 U.S.C. 824o-1); and

(2) shall only be released in compliance with regulations implementing that section.

(d) TECHNICAL ASSISTANCE.—For the purpose of assisting in the development of State and regional electricity distribution plans, the Secretary shall provide technical assistance to—

(1) States;

(2) regional reliability entities; and

(3) other distribution asset owners and operators.

(e) WITHDRAWAL.—A State or any entity that has requested technical assistance under this section may withdraw the request for technical assistance at any time, and on such withdrawal, the Secretary shall terminate all assistance efforts.

(f) EFFECT.—Nothing in this section authorizes the Secretary to require any State, regional organization, regional reliability entity, asset owner, or asset operator to

adopt any model, tool, plan, analysis, or assessment.

#### SEC. 2217. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to the Secretary to carry out sections 2211 through 2216 \$200,000,000 for each of fiscal years 2021 through 2029.

#### Subtitle C—Workforce Development

#### SEC. 2301. DEFINITIONS.

In this subtitle:

(1) **WIOA TERMS.**—The terms “community-based organization”, “economic development agency”, “recognized postsecondary credential”, and “State” have the meanings given the terms in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

(2) **APPRENTICESHIP PROGRAM.**—The term “apprenticeship program” means an apprenticeship registered under the Act of August 16, 1937 (commonly known as the “National Apprenticeship Act”) (50 Stat. 664, chapter 663; 29 U.S.C. 50 et seq.), including, as in effect on December 30, 2019, any requirement, standard, or rule promulgated under that Act.

(3) **AREA CAREER AND TECHNICAL EDUCATION SCHOOL.**—The term “area career and technical education school” has the meaning given the term in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302).

(4) **BOARD.**—The term “Board” means the 21st Century Energy Workforce Advisory Board established under section 2304(a).

(5) **COVERED FACILITY OF THE NATIONAL NUCLEAR SECURITY ADMINISTRATION.**—The term “covered facility of the National Nuclear Security Administration” means a national security laboratory or a nuclear weapons production facility (as those terms are defined in section 4002 of the Atomic Energy Defense Act (50 U.S.C. 2501)).

(6) **ELIGIBLE SPONSOR.**—The term “eligible sponsor” means a public organization or an organization described in section 501(c) of the Internal Revenue Code of 1986 and exempt from tax under section 501(a) of that Code, that—

(A) with respect to an apprenticeship program, administers such program through a partnership that may include—

- (i) a business;
- (ii) an employer or industry association;
- (iii) a labor-management organization;
- (iv) a local workforce development board or State workforce development board;

(v) a 2- or 4-year institution of higher education that offers an educational program leading to an associate’s or bachelor’s degree in conjunction with a certificate of completion of apprenticeship;

(vi) the Armed Forces (including the National Guard and Reserves);

(vii) a community-based organization;

(viii) a labor organization with significant energy experience; or

(ix) an economic development agency; and

(B) with respect to a preapprenticeship program, is a local educational agency, a secondary school, an area career and technical education school, a State workforce development board, a local workforce development board, a labor organization, or a community-based organization, that administers such program with any required coordination and necessary approvals from the Secretary of Labor or a State department of labor.

(7) **INDIAN TRIBE.**—The term “Indian tribe” has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(8) **INSTITUTION OF HIGHER EDUCATION.**—The term “institution of higher education” has the meaning given the term in section 101 and subparagraphs (A) and (B) of section

102(a)(1) of the Higher Education Act of 1965 (20 U.S.C. 1001, 1002(a)(1)).

(9) **LABOR ORGANIZATION.**—The term “labor organization” has the meaning given the term in section 2 of the National Labor Relations Act (29 U.S.C. 152).

(10) **LOCAL EDUCATIONAL AGENCY.**—The term “local educational agency” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

(11) **LOCAL WORKFORCE DEVELOPMENT BOARD.**—The term “local workforce development board” has the meaning given the term “local board” in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

(12) **MINORITY-SERVING INSTITUTION.**—The term “minority-serving institution” means an institution of higher education eligible to receive funds under section 320 or 371(a) of the Higher Education Act of 1965 (20 U.S.C. 1059g, 1067q(a)).

(13) **PREAPPRENTICESHIP.**—The term “preapprenticeship”, used with respect to a program, means an initiative or set of strategies that—

(A) is designed to prepare participants to enter an apprenticeship program;

(B) is carried out by an eligible sponsor that has a documented partnership with 1 or more sponsors of apprenticeship programs; and

(C) includes each of the following:

(i) Training (including a curriculum for the training) aligned with industry standards related to an apprenticeship program and reviewed and approved annually by sponsors of the apprenticeship program within the documented partnership that will prepare participants by teaching the skills and competencies needed to enter 1 or more apprenticeship programs.

(ii) Hands-on training and theoretical education for participants that does not displace a paid employee.

(iii) A formal agreement with a sponsor of an apprenticeship program that would enable participants who successfully complete the preapprenticeship program—

(I) to enter directly into the apprenticeship program if a place in the program is available and if the participant meets the qualifications of the apprenticeship program; and

(II) to earn credits towards the apprenticeship program.

(14) **SECONDARY SCHOOL.**—The term “secondary school” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

(15) **STATE WORKFORCE DEVELOPMENT BOARD.**—The term “State workforce development board” has the meaning given the term “State board” in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

(16) **TRIBAL ORGANIZATION.**—The term “tribal organization” has the meaning given the term in section 3765 of title 38, United States Code.

#### SEC. 2302. ADDRESSING INSUFFICIENT COMPENSATION OF EMPLOYEES AND OTHER PERSONNEL OF THE FEDERAL ENERGY REGULATORY COMMISSION.

(a) **IN GENERAL.**—Section 401 of the Department of Energy Organization Act (42 U.S.C. 7171) is amended by adding at the end the following:

“(k) **ADDRESSING INSUFFICIENT COMPENSATION OF EMPLOYEES AND OTHER PERSONNEL OF THE COMMISSION.**—

“(1) **IN GENERAL.**—Notwithstanding any other provision of law, if the Chairman publicly certifies that compensation for a category of employees or other personnel of the Commission is insufficient to retain or at-

tract employees and other personnel to allow the Commission to carry out the functions of the Commission in a timely, efficient, and effective manner, the Chairman may fix the compensation for the category of employees or other personnel without regard to chapter 51 and subchapter III of chapter 53 of title 5, United States Code, or any other civil service law.

“(2) **CERTIFICATION REQUIREMENTS.**—A certification issued under paragraph (1) shall—

“(A) apply with respect to a category of employees or other personnel responsible for conducting work of a scientific, technological, engineering, or mathematical nature;

“(B) specify a maximum amount of reasonable compensation for the category of employees or other personnel;

“(C) be valid for a 5-year period beginning on the date on which the certification is issued;

“(D) be no broader than necessary to achieve the objective of retaining or attracting employees and other personnel to allow the Commission to carry out the functions of the Commission in a timely, efficient, and effective manner; and

“(E) include an explanation for why the other approaches available to the Chairman for retaining and attracting employees and other personnel are inadequate.

“(3) **RENEWAL.**—

“(A) **IN GENERAL.**—Not later than 90 days before the date of expiration of a certification issued under paragraph (1), the Chairman shall determine whether the certification should be renewed for a subsequent 5-year period.

“(B) **REQUIREMENT.**—If the Chairman determines that a certification should be renewed under subparagraph (A), the Chairman may renew the certification, subject to the certification requirements under paragraph (2) that were applicable to the initial certification.

“(4) **NEW HIRES.**—

“(A) **IN GENERAL.**—An employee or other personnel that is a member of a category of employees or other personnel that would have been covered by a certification issued under paragraph (1), but was hired during a period in which the certification has expired and has not been renewed under paragraph (3) shall not be eligible for compensation at the level that would have applied to the employee or other personnel if the certification had been in effect on the date on which the employee or other personnel was hired.

“(B) **COMPENSATION OF NEW HIRES ON RENEWAL.**—On renewal of a certification under paragraph (3), the Chairman may fix the compensation of the employees or other personnel described in subparagraph (A) at the level established for the category of employees or other personnel in the certification.

“(5) **RETENTION OF LEVEL OF FIXED COMPENSATION.**—A category of employees or other personnel, the compensation of which was fixed by the Chairman in accordance with paragraph (1), may, at the discretion of the Chairman, have the level of fixed compensation for the category of employees or other personnel retained, regardless of whether a certification described under that paragraph is in effect with respect to the compensation of the category of employees or other personnel.

“(6) **CONSULTATION REQUIRED.**—The Chairman shall consult with the Director of the Office of Personnel Management in implementing this subsection, including in the determination of the amount of compensation with respect to each category of employees or other personnel.

“(7) **EXPERTS AND CONSULTANTS.**—

“(A) **IN GENERAL.**—Subject to subparagraph (B), the Chairman may—



“(i) obtain the services of experts and consultants in accordance with section 3109 of title 5, United States Code;

“(ii) compensate those experts and consultants for each day (including travel time) at rates not in excess of the rate of pay for level IV of the Executive Schedule under section 5315 of that title; and

“(iii) pay to the experts and consultants serving away from the homes or regular places of business of the experts and consultants travel expenses and per diem in lieu of subsistence at rates authorized by sections 5702 and 5703 of that title for persons in Government service employed intermittently.

“(B) LIMITATIONS.—The Chairman shall—

“(i) to the maximum extent practicable, limit the use of experts and consultants pursuant to subparagraph (A); and

“(ii) ensure that the employment contract of each expert and consultant employed pursuant to subparagraph (A) is subject to renewal not less frequently than annually.”.

(b) REPORTS.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and every 2 years thereafter for 10 years, the Chairman of the Federal Energy Regulatory Commission shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report on information relating to hiring, vacancies, and compensation at the Federal Energy Regulatory Commission.

(2) INCLUSIONS.—Each report under paragraph (1) shall include—

(A) an analysis of any trends with respect to hiring, vacancies, and compensation at the Federal Energy Regulatory Commission; and

(B) a description of the efforts to retain and attract employees or other personnel responsible for conducting work of a scientific, technological, engineering, or mathematical nature at the Federal Energy Regulatory Commission.

(c) APPLICABILITY.—The amendment made by subsection (a) shall apply beginning on the date that is 30 days after the date of enactment of this Act.

#### **SEC. 2303. REPORT ON THE AUTHORITY OF THE SECRETARY TO IMPLEMENT FLEXIBLE COMPENSATION MODELS.**

Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to Congress a report examining the full scope of the hiring authority made available to the Secretary by the Office of Personnel Management to implement flexible compensation models, including pay for performance and pay banding, throughout the Department, including at the National Laboratories, for the purposes of hiring, recruiting, and retaining employees responsible for conducting work of a scientific, technological, engineering, or mathematical nature.

#### **SEC. 2304. 21ST CENTURY ENERGY WORKFORCE ADVISORY BOARD.**

(a) ESTABLISHMENT.—The Secretary shall establish a board, to be known as the “21st Century Energy Workforce Advisory Board”, to develop a strategy for the Department that, with respect to the role of the Department in the support and development of a skilled energy workforce—

(1) meets the current and future industry and labor needs of the energy sector;

(2) provides opportunities for students to become qualified for placement in traditional energy sector and clean energy sector jobs;

(3) identifies areas in which the Department can effectively utilize the technical expertise of the Department to support the workforce activities of other Federal agencies;

(4) strengthens and engages the workforce training programs of the Department and the National Laboratories in carrying out the Minorities in Energy Initiative of the Department and other Department workforce priorities;

(5) develops plans to support and retrain displaced and unemployed energy sector workers; and

(6) prioritizes education and job training for underrepresented groups, including racial and ethnic minorities, Indian tribes, women, veterans, and socioeconomically disadvantaged individuals.

(b) MEMBERSHIP.—

(1) IN GENERAL.—The Board shall be composed of not fewer than 10 and not more than 15 members, with the initial members of the Board to be appointed by the Secretary not later than 1 year after the date of enactment of this Act.

(2) REQUIREMENT.—The Board shall include not fewer than 1 representative of a labor organization with significant energy experience who has been nominated by a national labor federation.

(3) QUALIFICATIONS.—Each individual appointed to the Board under paragraph (1) shall have expertise in—

(A) the field of economics or workforce development;

(B) relevant traditional energy industries or clean energy industries;

(C) secondary or postsecondary education;

(D) energy workforce development or apprenticeship programs of States or units of local government;

(E) relevant organized labor organizations; or

(F) bringing underrepresented groups, including racial and ethnic minorities, women, veterans, and socioeconomically disadvantaged individuals, into the workforce.

(4) LIMITATION.—No individual shall be appointed to the Board who is an employee or a board member of an entity applying for a grant under section 2305 or 2306.

(c) ADVISORY BOARD REVIEW AND RECOMMENDATIONS.—

(1) DETERMINATION BY BOARD.—In developing the strategy required under subsection (a), the Board shall—

(A) determine whether there are opportunities to more effectively and efficiently use the capabilities of the Department in the development of a skilled energy workforce;

(B) identify ways in which the Department could work with other relevant Federal agencies, States, units of local government, institutions of higher education, labor organizations, Indian tribes and tribal organizations, and industry in the development of a skilled energy workforce;

(C) identify ways in which the Department and National Laboratories can—

(i) increase outreach to minority-serving institutions; and

(ii) make resources available to increase the number of skilled minorities and women trained to go into the energy- and manufacturing-related sectors;

(iii) increase outreach to displaced and unemployed energy sector workers; and

(iv) make resources available to provide training to displaced and unemployed energy sector workers to reenter the energy workforce; and

(D)(i) identify the energy sectors in greatest need of workforce training; and

(ii) in consultation with the Secretary of Labor, develop guidelines for the skills necessary to develop a workforce trained to work in those energy sectors.

(2) REQUIRED ANALYSIS.—In developing the strategy required under subsection (a), the Board shall analyze the effectiveness of—

(A) existing Department-directed support; and

(B) developing energy workforce training programs.

(3) REPORT.—

(A) IN GENERAL.—Not later than 1 year after the date on which the Board is established under this section, and biennially thereafter until the date on which the Board is terminated under subsection (g), the Board shall submit to the Secretary a report containing, with respect to the strategy required under subsection (a)—

(i) the findings of the Board; and

(ii) the proposed energy workforce strategy of the Board.

(B) RESPONSE OF THE SECRETARY.—Not later than 60 days after the date on which a report is submitted to the Secretary under subparagraph (A), the Secretary shall—

(i) submit to the Board a response to the report that—

(I) describes whether the Secretary approves or disapproves of each recommendation of the Board under subparagraph (A); and

(II) if the Secretary approves of a recommendation, provides an implementation plan for the recommendation; and

(ii) submit to Congress—

(I) the report of the Board under subparagraph (A); and

(II) the response of the Secretary under clause (i).

(C) PUBLIC AVAILABILITY OF REPORT.—

(i) IN GENERAL.—The Board shall make each report under subparagraph (A) available to the public on the earlier of—

(I) the date on which the Board receives the response of the Secretary under subparagraph (B)(i); and

(II) the date that is 90 days after the date on which the Board submitted the report to the Secretary.

(ii) REQUIREMENT.—If the Board has received a response to a report from the Secretary under subparagraph (B)(i), the Board shall make that response publicly available with the applicable report.

(d) ENERGY JOBS SURVEY AND ANALYSIS.—

(1) IN GENERAL.—The Secretary, acting through the Administrator of the Energy Information Administration, shall—

(A) conduct a voluntary survey of employers in the energy, energy efficiency, and motor vehicle sectors of the economy of the United States; and

(B) perform an analysis of the employment figures and demographics in those sectors, including the number of personnel in each sector who devote a substantial portion of working hours, as determined by the Secretary, to compliance matters.

(2) METHODOLOGY.—In conducting the survey and analysis under paragraph (1), the Secretary shall employ a methodology that—

(A) was approved in 2016 by the Office of Management and Budget for use in the document entitled “OMB Control Number 1910-5179”;

(B) uses a representative, stratified sampling of businesses in the United States; and

(C) is designed to elicit a comparable number of responses from businesses in each State and with the same North American Industry Classification System codes as were received for the 2016 and 2017 reports entitled “U.S. Energy and Employment Report”.

(3) CONSULTATION.—In conducting the survey and analysis under paragraph (1), the Secretary shall consult with key stakeholders, including—

(A) as the Secretary determines to be appropriate, the heads of relevant Federal agencies and offices, including—

(i) the Secretary of Commerce;

(ii) the Secretary of Transportation;

(iii) the Director of the Bureau of the Census;

(iv) the Commissioner of the Bureau of Labor Statistics; and

(v) the Administrator of the Environmental Protection Agency;

(B) officials of State agencies responsible for maintaining State employment data;

(C) the State Energy Advisory Board established by section 365(g) of the Energy Policy and Conservation Act (42 U.S.C. 6325(g));

(D) energy industry trade associations; and

(E) labor organizations with significant energy experience.

(e) REPORTS BY THE SECRETARY.—

(1) REPORT ON WORKFORCE BOARD.—Not later than 180 days before the date of expiration of a term of the Board under subsection (g), the Secretary shall submit to the Committees on Energy and Natural Resources and Appropriations of the Senate and the Committees on Energy and Commerce and Appropriations of the House of Representatives a report that—

(A) describes the effectiveness and accomplishments of the Board during the applicable term;

(B) contains a determination of the Secretary as to whether the Board should be renewed; and

(C) if the Secretary determines that the Board should be renewed, any recommendations as to whether and how the scope and functions of the Board should be modified.

(2) ENERGY AND EMPLOYMENT REPORT.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and annually thereafter, the Secretary shall—

(i) make publicly available on the website of the Department a report, to be entitled the “U.S. Energy and Employment Report”, describing the employment figures and demographics in the energy, energy efficiency, and motor vehicle sectors of the United States based on the survey and analysis conducted under subsection (d); and

(ii) subject to the requirements of the Confidential Information Protection and Statistical Efficiency Act of 2002 (44 U.S.C. 3501 note; Public Law 107-347), make the data collected under subsection (d) publicly available on the website of the Department.

(B) CONTENTS.—

(i) IN GENERAL.—The report under subparagraph (A) shall include employment figures and demographic data for—

(I) the energy sector of the economy of the United States, including—

(aa) the electric power generation and fuels sectors; and

(bb) the transmission, storage, and distribution sectors;

(II) the energy efficiency sector of the economy of the United States; and

(III) the motor vehicle sector of the economy of the United States.

(ii) INCLUSION.—With respect to each sector described in clause (i), the report under subparagraph (A) shall include employment figures and demographic data sorted by—

(I) each technology, subtechnology, and fuel type of those sectors; and

(II) subject to the requirements of the Confidential Information Protection and Statistical Efficiency Act of 2002 (44 U.S.C. 3501 note; Public Law 107-347)—

(aa) each State;

(bb) each territory of the United States;

(cc) the District of Columbia; and

(dd) to the maximum extent practicable, each county (or equivalent jurisdiction) in the United States.

(f) OUTREACH TO MINORITY-SERVING INSTITUTIONS, VETERANS, AND DISPLACED AND UNEMPLOYED ENERGY WORKERS.—In developing the strategy under subsection (a), the Board shall—

(1) give special consideration to increasing outreach to minority-serving institutions,

veterans, and displaced and unemployed energy workers;

(2) make resources available to—

(A) minority-serving institutions, with the objective of increasing the number of skilled minorities and women trained to go into the energy and manufacturing sectors;

(B) institutions that serve veterans, with the objective of increasing the number veterans in the energy industry by ensuring that veterans have the credentials and training necessary to secure careers in the energy industry; and

(C) institutions that serve displaced and unemployed energy workers to increase the number of individuals trained for jobs in the energy industry;

(3) encourage the energy industry to improve the opportunities for students of minority-serving institutions, veterans, and displaced and unemployed energy workers to participate in internships, preapprenticeships, and cooperative work-study programs in the energy industry; and

(4) work with the National Laboratories to increase the participation of underrepresented groups, veterans, and displaced and unemployed energy workers in internships, fellowships, training programs, and employment at the National Laboratories.

(g) TERM.—

(1) IN GENERAL.—Subject to paragraph (2), the Board shall terminate on September 30, 2025.

(2) EXTENSIONS.—The Secretary may renew the Board for 1 or more 5-year periods by submitting, not later than the date described in subsection (e)(1), a report described in that subsection that contains a determination by the Secretary that the Board should be renewed.

#### SEC. 2305. NATIONAL LABORATORY JOBS ACCESS PILOT PROGRAM.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Labor, shall establish a pilot program to award, on a competitive basis, grants to eligible entities described in subsection (c) for the Federal share of the costs of technical, skills-based preapprenticeship and apprenticeship programs that provide employer-driven or recognized postsecondary credentials.

(b) REQUIREMENTS.—A program funded by a grant awarded under this section shall develop and deliver customized and competency-based training that—

(1) is focused on skills and qualifications needed to meet the immediate and on-going needs of traditional and emerging technician positions (including machinists and cyber security technicians) at the National Laboratories and covered facilities of the National Nuclear Security Administration;

(2) creates an apprenticeship program or preapprenticeship partnership with a National Laboratory or covered facility of the National Nuclear Security Administration; and

(3) creates an apprenticeship program or preapprenticeship program with the Secretary of Labor or a State department of labor in coordination with a National Laboratory or covered facility of the National Nuclear Security Administration.

(c) ELIGIBLE ENTITIES.—To be eligible to receive a grant under this section, an entity shall be an eligible sponsor that—

(1) demonstrates experience in implementing and operating apprenticeship programs or preapprenticeship programs;

(2) (A) has a relationship with a National Laboratory or covered facility of the National Nuclear Security Administration;

(B) has knowledge of technician workforce needs of such laboratory or facility and the

associated security requirements of such laboratory or facility; and

(C) is eligible to enter into an agreement with such laboratory or facility that would be paid for in part or entirely from grant funds received under this section;

(3) demonstrates the ability to recruit and support individuals who plan to work in the energy industry in the successful completion of relevant job training and education programs;

(4) provides students who complete a program funded by a grant awarded under this section with a recognized postsecondary credential; and

(5) demonstrates successful outcomes connecting graduates of preapprenticeship or apprenticeship programs to careers relevant to such programs.

(d) APPLICATIONS.—An eligible entity desiring a grant under this section shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

(e) PRIORITY.—In selecting eligible entities to receive grants under this section, the Secretary shall prioritize applicants that—

(1) house the preapprenticeship or apprenticeship programs in an institution of higher education that includes basic science and math education in the curriculum of the institution of higher education;

(2) work with the Secretary of Defense and the Secretary of Veterans Affairs or veteran service organizations recognized by the Secretary of Veterans Affairs under section 5902 of title 38, United States Code, to transition members of the Armed Forces and veterans to careers in the energy sector;

(3) work with—

(A) Indian tribes;

(B) tribal organizations; and

(C) Native American veterans (as defined in section 3765 of title 38, United States Code), including veterans who are descendants of Natives (as defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602));

(4) apply as a State or regional consortia to leverage best practices already available in the State or region in which an institution of higher education is located;

(5) have a State-supported entity included in the consortium applying for the grant;

(6) provide support services and career coaching;

(7) provide introductory energy workforce development training;

(8) work with minority-serving institutions to provide job training to increase the number of skilled minorities and women in the energy sector; or

(9) provide job training for displaced and unemployed workers in the energy sector.

(f) ADDITIONAL CONSIDERATION.—In making grants under this section, the Secretary shall consider regional diversity.

(g) LIMITATION ON APPLICATIONS.—An eligible entity may not submit, either individually or as part of a joint application, more than 1 application for a grant under this section during any 1 fiscal year.

(h) LIMITATIONS ON AMOUNT OF GRANT.—The amount of an individual grant for any 24-month period shall not exceed \$500,000.

(i) FEDERAL SHARE.—The Federal share of the cost of a preapprenticeship or apprenticeship program carried out using a grant under this section shall be not greater than 50 percent.

(j) REPORT.—Not later than 1 year after the date on which the first grant is awarded under this section, and annually thereafter for 5 years, the Secretary shall submit to Congress and make publicly available on the website of the Department a report on the pilot program established under this section, including a description of—

(1) the entities receiving grants;  
 (2) the activities carried out using the grants;  
 (3) best practices used to leverage the investment of the Federal Government; and  
 (4) an assessment of the results achieved by the pilot program, including the rate of employment at the National Laboratories for participants after completing a preapprenticeship or apprenticeship program carried out using a grant awarded under this section.

(k) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to carry out this section \$5,000,000 for each of fiscal years 2021 through 2025.

#### **SEC. 2306. CLEAN ENERGY WORKFORCE PILOT PROGRAM.**

(a) **DEFINITIONS.**—In this section:

(1) **ELIGIBLE ENTITY.**—The term “eligible entity” means a business, labor organization, or labor management organization that—

(A)(i) is directly involved with energy efficiency, renewable energy technology, or reduction in greenhouse gas emissions, as determined by the Secretary of Labor in consultation with the Secretary; or

(ii) works on behalf of a business or labor management organization that is directly involved with energy efficiency, renewable energy technology, or reduction in greenhouse gas emissions, as determined by the Secretary of Labor in consultation with the Secretary; or

(B) provides services related to—  
 (i) energy efficiency and renewable energy technology deployment and maintenance;

(ii) grid modernization; or

(iii) reduction in greenhouse gas emissions through the use of other low-carbon technologies.

(2) **LABOR MANAGEMENT ORGANIZATION.**—The term “labor management organization” includes a nonprofit organization or qualified youth or conservation corps that provides training to individuals to work for an eligible entity that is a business, or works on behalf of an eligible entity that is a business.

(3) **PILOT PROGRAM.**—The term “pilot program” means the pilot program established under subsection (b).

(b) **ESTABLISHMENT.**—The Secretary of Labor, in consultation with the Secretary and in accordance with section 169(b) of the Workforce Innovation and Opportunity Act (29 U.S.C. 3224(b)), shall establish a pilot program to provide competitively awarded cost-shared grants to eligible entities to pay for—

(1) on-the-job training of a new or existing employee to work—

(A) in renewable energy, energy efficiency, or grid modernization; or

(B) on the reduction of greenhouse gas emissions; or

(2) preapprenticeship programs that provide a direct pathway to a career working—

(A) in renewable energy, energy efficiency, or grid modernization; or

(B) on the reduction of greenhouse gas emissions.

(c) **GRANTS.**—

(1) **IN GENERAL.**—An eligible entity desiring a grant under the pilot program shall submit to the Secretary of Labor an application at such time, in such manner, and containing such information as the Secretary of Labor may require.

(2) **PRIORITY FOR TARGETED COMMUNITIES.**—In providing grants under the pilot program, the Secretary of Labor, in consultation with the Secretary shall give priority to an eligible entity that—

(A) recruits employees—

(i) from the 1 or more communities that are served by the eligible entity; and

(ii) that are minorities, women, veterans, or individuals who are transitioning from fossil energy sector jobs;

(B) provides trainees with the opportunity to obtain real-world experience;

(C) has fewer than 100 employees; and

(D) in the case of a preapprenticeship program, demonstrates—

(i) a multi-year record of—

(I) successfully recruiting minorities, women, and veterans for training; and

(II) supporting those individuals in the successful completion of the preapprenticeship program; and

(ii) a successful multi-year record of placing the majority of the graduates of the preapprenticeship program into apprenticeship programs.

(3) **USE OF GRANT FOR FEDERAL SHARE.**—

(A) **IN GENERAL.**—An eligible entity shall use a grant received under the pilot program to pay the Federal share of the cost of—

(i) providing on-the-job training for an employee, in accordance with subparagraph (B); or

(ii) in the case of a preapprenticeship program—

(I) recruiting minorities, women, and veterans for training;

(II) supporting those individuals in the successful completion of the preapprenticeship program; and

(III) carrying out any other activity of the preapprenticeship program, as determined to be appropriate by the Secretary of Labor, in consultation with the Secretary.

(B) **FEDERAL SHARE AMOUNT.**—The Federal share described in subparagraph (A) shall not exceed—

(i) for activities described in clause (i) of that subparagraph—

(I) in the case of an eligible entity with 20 or fewer employees, 45 percent of the cost of on-the-job-training for an employee;

(II) in the case of an eligible entity with not fewer than 21 employees and not more than 99 employees, 37.5 percent of the cost of on-the-job-training for an employee; and

(III) in the case of an eligible entity with not fewer than 100 employees, 25 percent of the cost of on-the-job-training for an employee; and

(ii) for activities described in clause (ii) of that subparagraph, 50 percent.

(4) **EMPLOYER PAYMENT OF NON-FEDERAL SHARE.**—

(A) **IN GENERAL.**—The non-Federal share of the cost of providing on-the-job training for an employee under a grant received under the pilot program shall be paid in cash or in kind by the employer of the employee receiving the training.

(B) **INCLUSIONS.**—The non-Federal share described in subparagraph (A)(i) may include the amount of wages paid by the employer to the employee during the time that the employee is receiving on-the-job training, as fairly evaluated by the Secretary of Labor.

(5) **GRANT AMOUNT.**—An eligible entity may not receive more than \$100,000 per fiscal year in grant funds under the pilot program.

(d) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to carry out this section \$15,000,000 for each of fiscal years 2021 through 2023.

### **TITLE III—CODE MAINTENANCE**

#### **SEC. 3001. REPEAL OF OFF-HIGHWAY MOTOR VEHICLES STUDY.**

(a) **REPEAL.**—Part I of title III of the Energy Policy and Conservation Act (42 U.S.C. 6373) is repealed.

(b) **CONFORMING AMENDMENT.**—The table of contents for the Energy Policy and Conservation Act (Public Law 94-163; 89 Stat. 871) is amended—

(1) by striking the item relating to part I of title III; and

(2) by striking the item relating to section 385.

#### **SEC. 3002. REPEAL OF METHANOL STUDY.**

Section 400EE of the Energy Policy and Conservation Act (42 U.S.C. 6374d) is amended—

(1) by striking subsection (a); and

(2) by redesignating subsections (b) and (c) as subsections (a) and (b), respectively.

#### **SEC. 3003. REPEAL OF STATE UTILITY REGULATORY ASSISTANCE.**

(a) **REPEAL.**—Section 207 of the Energy Conservation and Production Act (42 U.S.C. 6807) is repealed.

(b) **CONFORMING AMENDMENT.**—The table of contents for the Energy Conservation and Production Act (Public Law 94-385; 90 Stat. 1126) is amended by striking the item relating to section 207.

#### **SEC. 3004. REPEAL OF AUTHORIZATION OF APPROPRIATIONS PROVISION.**

(a) **REPEAL.**—Section 208 of the Energy Conservation and Production Act (42 U.S.C. 6808) is repealed.

(b) **CONFORMING AMENDMENT.**—The table of contents for the Energy Conservation and Production Act (Public Law 94-385; 90 Stat. 1126) is amended by striking the item relating to section 208.

#### **SEC. 3005. REPEAL OF RESIDENTIAL ENERGY EFFICIENCY STANDARDS STUDY.**

(a) **REPEAL.**—Section 253 of the National Energy Conservation Policy Act (42 U.S.C. 8232) is repealed.

(b) **CONFORMING AMENDMENT.**—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206) is amended by striking the item relating to section 253.

#### **SEC. 3006. REPEAL OF WEATHERIZATION STUDY.**

(a) **REPEAL.**—Section 254 of the National Energy Conservation Policy Act (42 U.S.C. 8233) is repealed.

(b) **CONFORMING AMENDMENT.**—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206) is amended by striking the item relating to section 254.

#### **SEC. 3007. REPEAL OF REPORT TO CONGRESS.**

(a) **REPEAL.**—Section 273 of the National Energy Conservation Policy Act (42 U.S.C. 8236b) is repealed.

(b) **CONFORMING AMENDMENT.**—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206) is amended by striking the item relating to section 273.

#### **SEC. 3008. REPEAL OF SURVEY OF ENERGY SAVING POTENTIAL.**

(a) **REPEAL.**—Section 550 of the National Energy Conservation Policy Act (42 U.S.C. 8258b) is repealed.

(b) **CONFORMING AMENDMENTS.**—

(1) The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206; 106 Stat. 2851) is amended by striking the item relating to section 550.

(2) Section 543(d)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8253(d)(2)) is amended by striking “, incorporating any relevant information obtained from the survey conducted pursuant to section 550”.

#### **SEC. 3009. REPEAL OF REPORT BY GENERAL SERVICES ADMINISTRATION.**

(a) **REPEAL.**—Section 154 of the Energy Policy Act of 1992 (42 U.S.C. 8262a) is repealed.

(b) **CONFORMING AMENDMENTS.**—

(1) The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 154.

(2) Section 159 of the Energy Policy Act of 1992 (42 U.S.C. 8262e) is amended by striking subsection (c).

**SEC. 3010. REPEAL OF INTERGOVERNMENTAL ENERGY MANAGEMENT PLANNING AND COORDINATION WORKSHOPS.**

(a) REPEAL.—Section 156 of the Energy Policy Act of 1992 (42 U.S.C. 8262b) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 156.

**SEC. 3011. REPEAL OF INSPECTOR GENERAL AUDIT SURVEY AND PRESIDENT'S COUNCIL ON INTEGRITY AND EFFICIENCY REPORT TO CONGRESS.**

(a) REPEAL.—Section 160 of the Energy Policy Act of 1992 (42 U.S.C. 8262f) is amended by striking the section designation and heading and all that follows through “(c) INSPECTOR GENERAL REVIEW.—Each Inspector General” and inserting the following:

**“SEC. 160. INSPECTOR GENERAL REVIEW.**

“Each Inspector General”.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 160 and inserting the following:

“Sec. 160. Inspector General review.”.

**SEC. 3012. REPEAL OF PROCUREMENT AND IDENTIFICATION OF ENERGY EFFICIENT PRODUCTS PROGRAM.**

(a) REPEAL.—Section 161 of the Energy Policy Act of 1992 (42 U.S.C. 8262g) is repealed.

(b) CONFORMING AMENDMENTS.—

(1) The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 161.

(2) Section 548(b) of the National Energy Conservation Policy Act (42 U.S.C. 8258(b)) (as amended by section 1033(a)) is amended—

(A) in paragraph (3), by inserting “and” after the semicolon at the end;

(B) by striking paragraph (4); and

(C) by redesignating paragraph (5) as paragraph (4).

**SEC. 3013. REPEAL OF PHOTOVOLTAIC ENERGY PROGRAM.**

(a) REPEAL.—Part 4 of title V of the National Energy Conservation Policy Act (42 U.S.C. 8271 et seq.) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206) is amended—

(1) by striking the item relating to part 4 of title V; and

(2) by striking the items relating to sections 561 through 570.

**SEC. 3014. REPEAL OF NATIONAL ACTION PLAN FOR DEMAND RESPONSE.**

(a) REPEAL.—Part 5 of title V of the National Energy Conservation Policy Act (42 U.S.C. 8279) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206; 121 Stat. 1665) is amended—

(1) by striking the item relating to part 5 of title V; and

(2) by striking the item relating to section 571.

**SEC. 3015. REPEAL OF ENERGY AUDITOR TRAINING AND CERTIFICATION.**

(a) REPEAL.—Subtitle F of title V of the Energy Security Act (42 U.S.C. 8285 et seq.) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Security Act (Public Law 96-294; 94 Stat. 611) is amended—

(1) by striking the item relating to subtitle F of title V; and

(2) by striking the items relating to sections 581 through 584.

**SEC. 3016. REPEAL OF NATIONAL COAL POLICY STUDY.**

(a) REPEAL.—Section 741 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8451) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 741.

**SEC. 3017. REPEAL OF STUDY ON COMPLIANCE PROBLEM OF SMALL ELECTRIC UTILITY SYSTEMS.**

(a) REPEAL.—Section 744 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8454) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 744.

**SEC. 3018. REPEAL OF STUDY OF SOCIO-ECONOMIC IMPACTS OF INCREASED COAL PRODUCTION AND OTHER ENERGY DEVELOPMENT.**

(a) REPEAL.—Section 746 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8456) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 746.

**SEC. 3019. REPEAL OF STUDY OF THE USE OF PETROLEUM AND NATURAL GAS IN COMBUSTORS.**

(a) REPEAL.—Section 747 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8457) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 747.

**SEC. 3020. REPEAL OF AUTHORIZATION OF APPROPRIATIONS.**

(a) REPEAL.—Subtitle F of title VII of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8461) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended—

(1) by striking the item relating to subtitle F of title VII; and

(2) by striking the item relating to section 751.

**SEC. 3021. REPEAL OF SUBMISSION OF REPORTS.**

(a) REPEAL.—Section 807 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8483) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 807.

**SEC. 3022. REPEAL OF ELECTRIC UTILITY CONSERVATION PLAN.**

(a) REPEAL.—Section 808 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8484) is repealed.

(b) CONFORMING AMENDMENTS.—

(1) TABLE OF CONTENTS.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 808.

(2) REPORT ON IMPLEMENTATION.—Section 712 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8422) is amended—

(A) by striking “(a) GENERALLY.”; and

(B) by striking subsection (b).

**SEC. 3023. EMERGENCY ENERGY CONSERVATION REPEALS.**

(a) REPEALS.—

(1) Section 201 of the Emergency Energy Conservation Act of 1979 (42 U.S.C. 8501) is amended by striking the section designation and heading and all that follows through “(b) PURPOSES.—The purposes” and inserting the following:

**“SEC. 201. PURPOSES.**

“The purposes”.

(2) Part B of title II of the Emergency Energy Conservation Act of 1979 (42 U.S.C. 8521 et seq.) is repealed.

(3) Section 241 of the Emergency Energy Conservation Act of 1979 (42 U.S.C. 8531) is repealed.

(b) CONFORMING AMENDMENTS.—

(1) The table of contents for the Emergency Energy Conservation Act of 1979 (Public Law 96-102; 93 Stat. 749) is amended—

(A) by striking the item relating to section 201 and inserting the following:

“Sec. 201. Purposes.”;

(B) by striking the item relating to part B of title II; and

(C) by striking the items relating to sections 221, 222, and 241.

(2) Section 251(b) of the Emergency Energy Conservation Act of 1979 (42 U.S.C. 8541(b)) is amended—

(A) by striking “or 221” each place it appears; and

(B) by striking “(as the case may be)”.

**SEC. 3024. ENERGY SECURITY ACT REPEALS.**

(a) BIOMASS ENERGY DEVELOPMENT PLANS.—Subtitle A of title II of the Energy Security Act (42 U.S.C. 8811 et seq.) is repealed.

(b) MUNICIPAL WASTE BIOMASS ENERGY.—Subtitle B of title II of the Energy Security Act (42 U.S.C. 8831 et seq.) is repealed.

(c) USE OF GASOLIN IN FEDERAL MOTOR VEHICLES.—Section 271 of the Energy Security Act (42 U.S.C. 8871) is repealed.

(d) CONFORMING AMENDMENTS.—

(1) The table of contents for the Energy Security Act (Public Law 96-294; 94 Stat. 611) is amended—

(A) by striking the items relating to subtitle A of title II;

(B) by striking the items relating to subtitle B of title II;

(C) by striking the item relating to section 204 and inserting the following:

“Sec. 204. Funding.”;

and

(D) by striking the item relating to section 271.

(2) Section 203 of the Biomass Energy and Alcohol Fuels Act of 1980 (42 U.S.C. 8802) is amended—

(A) by striking paragraph (16); and

(B) by redesignating paragraphs (17) through (19) as paragraphs (16) through (18), respectively.

(3) Section 204 of the Energy Security Act (42 U.S.C. 8803) is amended—

(A) in the section heading, by striking “FOR SUBTITLES A AND B”; and

(B) in subsection (a)—

(i) in paragraph (1), by adding “and” after the semicolon at the end;

(ii) in paragraph (2), by striking “; and” at the end and inserting a period; and

(iii) by striking paragraph (3).

**SEC. 3025. NUCLEAR SAFETY RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 1980 REPEALS.**

Sections 5 and 6 of the Nuclear Safety Research, Development, and Demonstration Act of 1980 (42 U.S.C. 9704, 9705) are repealed.

**SEC. 3026. REPEAL OF RENEWABLE ENERGY AND ENERGY EFFICIENCY TECHNOLOGY COMPETITIVENESS ACT OF 1989.**

(a) REPEAL.—The Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989 (42 U.S.C. 12001 et seq.) is repealed.

(b) CONFORMING AMENDMENTS.—

(1) Section 6(b)(3) of the Federal Non-nuclear Energy Research and Development Act of 1974 (42 U.S.C. 5905(b)(3)) (as amended by section 1205(c)(2)) is amended—

(A) in subparagraph (P), by adding “and” after the semicolon;

(B) by striking subparagraph (Q); and

(C) by redesignating subparagraph (R) as subparagraph (Q).

(2) Section 1204 of the Energy Policy Act of 1992 (42 U.S.C. 13313) is amended—

(A) in subsection (b), in the matter preceding paragraph (1), in the first sentence, by striking “, in consultation with” and all that follows through “under section 6 of the Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989,”; and

(B) in subsection (c), by striking “, in consultation with the Advisory Committee,”.

**SEC. 3027. REPEAL OF HYDROGEN RESEARCH, DEVELOPMENT, AND DEMONSTRATION PROGRAM.**

The Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 (42 U.S.C. 12401 et seq.) is repealed.

**SEC. 3028. REPEAL OF STUDY ON ALTERNATIVE FUEL USE IN NONROAD VEHICLES AND ENGINES.**

(a) IN GENERAL.—Section 412 of the Energy Policy Act of 1992 (42 U.S.C. 13238) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 412.

**SEC. 3029. REPEAL OF LOW INTEREST LOAN PROGRAM FOR SMALL BUSINESS FLEET PURCHASES.**

(a) IN GENERAL.—Section 414 of the Energy Policy Act of 1992 (42 U.S.C. 13239) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 414.

**SEC. 3030. REPEAL OF TECHNICAL AND POLICY ANALYSIS FOR REPLACEMENT FUEL DEMAND AND SUPPLY INFORMATION.**

(a) IN GENERAL.—Section 506 of the Energy Policy Act of 1992 (42 U.S.C. 13256) is repealed.

(b) CONFORMING AMENDMENTS.—

(1) The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 506.

(2) Section 507(m) of the Energy Policy Act of 1992 (42 U.S.C. 13257(m)) is amended by striking “and section 506”.

**SEC. 3031. REPEAL OF 1992 REPORT ON CLIMATE CHANGE.**

(a) IN GENERAL.—Section 1601 of the Energy Policy Act of 1992 (42 U.S.C. 13381) is repealed.

(b) CONFORMING AMENDMENTS.—

(1) The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 1601.

(2) Section 1602(a) of the Energy Policy Act of 1992 (42 U.S.C. 13382(a)) is amended, in the matter preceding paragraph (1), in the third sentence, by striking “the report required under section 1601 and”.

**SEC. 3032. REPEAL OF DIRECTOR OF CLIMATE PROTECTOR ESTABLISHMENT.**

(a) IN GENERAL.—Section 1603 of the Energy Policy Act of 1992 (42 U.S.C. 13383) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 1603.

**SEC. 3033. REPEAL OF 1994 REPORT ON GLOBAL CLIMATE CHANGE EMISSIONS.**

(a) IN GENERAL.—Section 1604 of the Energy Policy Act of 1992 (42 U.S.C. 13384) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992

(Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 1604.

**SEC. 3034. REPEAL OF TELECOMMUTING STUDY.**

(a) IN GENERAL.—Section 2028 of the Energy Policy Act of 1992 (42 U.S.C. 13438) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 2028.

**SEC. 3035. REPEAL OF ADVANCED BUILDINGS FOR 2005 PROGRAM.**

(a) IN GENERAL.—Section 2104 of the Energy Policy Act of 1992 (42 U.S.C. 13454) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 2104.

**SEC. 3036. REPEAL OF ENERGY RESEARCH, DEVELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION ADVISORY BOARD.**

(a) IN GENERAL.—Section 2302 of the Energy Policy Act of 1992 (42 U.S.C. 13522) is repealed.

(b) CONFORMING AMENDMENTS.—

(1) The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 2302.

(2) Section 6 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5905) is amended—

(A) in subsection (a), in the matter preceding paragraph (1), in the first sentence, by striking “, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992,”; and

(B) in subsection (b)—

(i) in paragraph (1), in the first sentence, by striking “, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992,”; and

(ii) in paragraph (2), in the second sentence, by striking “, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992,”; and

(C) in subsection (c), in the first sentence, by striking “, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992,”.

(3) Section 2011(c) of the Energy Policy Act of 1992 (42 U.S.C. 13411(c)) is amended, in the second sentence, by striking “, and with the Advisory Board established under section 2302”.

(4) Section 2304 of the Energy Policy Act of 1992 (42 U.S.C. 13523), is amended—

(A) in subsection (a), by striking “, in consultation with the Advisory Board established under section 2302,”; and

(B) in subsection (c), in the matter preceding paragraph (1), in the first sentence, by striking “, with the advice of the Advisory Board established under section 2302 of this Act,”.

**SEC. 3037. REPEAL OF STUDY ON USE OF ENERGY FUTURES FOR FUEL PURCHASE.**

(a) IN GENERAL.—Section 3014 of the Energy Policy Act of 1992 (42 U.S.C. 13552) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 3014.

**SEC. 3038. REPEAL OF ENERGY SUBSIDY STUDY.**

(a) IN GENERAL.—Section 3015 of the Energy Policy Act of 1992 (42 U.S.C. 13553) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amend-

ed by striking the item relating to section 3015.

**SEC. 3039. ELIMINATION AND CONSOLIDATION OF CERTAIN AMERICA COMPETES PROGRAMS.**

(a) ELIMINATION OF PROGRAM AUTHORITIES.—

(1) NUCLEAR SCIENCE TALENT EXPANSION PROGRAM FOR INSTITUTIONS OF HIGHER EDUCATION.—Section 5004 of the America COMPETES Act (42 U.S.C. 16532) is repealed.

(2) HYDROCARBON SYSTEMS SCIENCE TALENT EXPANSION PROGRAM FOR INSTITUTIONS OF HIGHER EDUCATION.—Section 5005 of the America COMPETES Act (42 U.S.C. 16533) is amended—

(A) by striking subsection (e); and

(B) in subsection (f)—

(i) by striking paragraph (2);

(ii) by striking the subsection designation and heading and all that follows through “There are” in paragraph (1) and inserting the following:

“(e) AUTHORIZATION OF APPROPRIATIONS.—There are”; and

(iii) by redesignating subparagraphs (A) through (F) as paragraphs (1) through (6), respectively, and indenting appropriately.

(3) DISCOVERY SCIENCE AND ENGINEERING INNOVATION INSTITUTES.—Section 5008 of the America COMPETES Act (42 U.S.C. 16535) is repealed.

(4) ELIMINATION OF DUPLICATIVE AUTHORITY FOR EDUCATION PROGRAMS.—Sections 3181 and 3185 of the Department of Energy Science Education Enhancement Act (42 U.S.C. 73811, 42 U.S.C. 7381n) are repealed.

(5) MENTORING PROGRAM.—Section 3195 of the Department of Energy Science Education Enhancement Act (42 U.S.C. 7381r) is repealed.

(b) REPEAL OF AUTHORIZATIONS.—

(1) DEPARTMENT OF ENERGY EARLY CAREER AWARDS FOR SCIENCE, ENGINEERING, AND MATHEMATICS RESEARCHERS.—Section 5006 of the America COMPETES Act (42 U.S.C. 16534) is amended by striking subsection (h).

(2) PROTECTING AMERICA'S COMPETITIVE EDGE (PACE) GRADUATE FELLOWSHIP PROGRAM.—Section 5009 of the America COMPETES Act (42 U.S.C. 16536) is amended by striking subsection (f).

(3) DISTINGUISHED SCIENTIST PROGRAM.—Section 5011 of the America COMPETES Act (42 U.S.C. 16537) is amended by striking subsection (j).

(c) CONSOLIDATION OF DUPLICATIVE PROGRAM AUTHORITIES.—

(1) UNIVERSITY NUCLEAR SCIENCE AND ENGINEERING SUPPORT.—Section 954 of the Energy Policy Act of 2005 (42 U.S.C. 16274) (as amended by section 1504(a)) is amended in subsection (a)—

(A) in paragraph (1), by inserting “nuclear chemistry,” after “nuclear engineering,”; and

(B) in paragraph (2)—

(i) by redesignating subparagraphs (C) through (E) as subparagraphs (D) through (F), respectively; and

(ii) by inserting after subparagraph (B) the following:

“(C) award grants, not to exceed 5 years in duration, to institutions of higher education with existing academic degree programs in nuclear sciences and related fields—

“(i) to increase the number of graduates in nuclear science and related fields;

“(ii) to enhance the teaching and research of advanced nuclear technologies;

“(iii) to undertake collaboration with industry and National Laboratories; and

“(iv) to bolster or sustain nuclear infrastructure and research facilities of institutions of higher education, such as research and training reactors and laboratories.”.

(2) CONSOLIDATION OF DEPARTMENT OF ENERGY EARLY CAREER AWARDS FOR SCIENCE, ENGINEERING, AND MATHEMATICS RESEARCHERS PROGRAM AND DISTINGUISHED SCIENTIST PROGRAM.—

(A) FUNDING.—Section 971(c) of the Energy Policy Act of 2005 (42 U.S.C. 16311(c)) is amended by adding at the end the following:

“(8) For the Department of Energy early career awards for science, engineering, and mathematics researchers program under section 5006 of the America COMPETES Act (42 U.S.C. 16534) and the distinguished scientist program under section 5011 of that Act (42 U.S.C. 16537), \$150,000,000 for each of fiscal years 2018 through 2022, of which not more than 65 percent of the amount made available for a fiscal year under this paragraph may be used to carry out section 5006 or 5011 of that Act.”.

(B) DEPARTMENT OF ENERGY EARLY CAREER AWARDS FOR SCIENCE, ENGINEERING, AND MATHEMATICS RESEARCHERS.—Section 5006 of the America COMPETES Act (42 U.S.C. 16534) is amended—

(i) in subsection (b)(1)—  
(I) in the matter preceding subparagraph (A)—

(aa) by inserting “average” before “amount”; and

(bb) by inserting “for each year” before “shall”;

(II) in subparagraph (A), by striking “\$80,000” and inserting “\$190,000”; and

(III) in subparagraph (B), by striking “\$125,000” and inserting “\$490,000”;

(ii) in subsection (c)(1)(C)—

(I) in clause (i)—

(aa) by striking “assistant professor or equivalent title” and inserting “untenured assistant or associate professor”; and  
(bb) by inserting “or” after the semicolon at the end;

(II) by striking clause (ii); and

(III) by redesignating clause (iii) as clause (ii);

(iii) in subsection (d), by striking “on a competitive, merit-reviewed basis” and inserting “through a competitive process using merit-based peer review”;

(iv) in subsection (e)—

(I) by striking the subsection designation and heading and all that follows through “to be eligible” in paragraph (1) and inserting the following:

“(e) SELECTION PROCESS AND CRITERIA.—To be eligible”;

and

(II) by striking paragraph (2); and

(v) in subsection (f)(1), by striking “non-profit, nondegree-granting research organizations” and inserting “National Laboratories”.

(3) SCIENCE EDUCATION PROGRAMS.—Section 3164 of the Department of Energy Science Education Enhancement Act (42 U.S.C. 7381a) is amended—

(A) in subsection (b)—

(i) by striking paragraphs (1) and (2) and inserting the following:

“(1) IN GENERAL.—The Director of the Office of Science (referred to in this subsection as the ‘Director’) shall provide for appropriate coordination of science, technology, engineering, and mathematics education programs across all functions of the Department.

“(2) ADMINISTRATION.—In carrying out paragraph (1), the Director shall—

“(A) consult with—

“(i) the Assistant Secretary of Energy with responsibility for energy efficiency and renewable energy programs; and

“(ii) the Deputy Administrator for Defense Programs of the National Nuclear Security Administration; and

“(B) seek to increase the participation and advancement of women and underrepresented minorities at every level of science,

technology, engineering, and mathematics education.”; and

(ii) in paragraph (3)—

(I) in subparagraph (D), by striking “and” at the end;

(II) by redesignating subparagraph (E) as subparagraph (F); and

(III) by inserting after subparagraph (D) the following:

“(E) represent the Department as the principal interagency liaison for all coordination activities under the President for science, technology, engineering, and mathematics education programs; and”;

(B) in subsection (d)—

(i) by striking “The Secretary” and inserting the following:

“(1) IN GENERAL.—The Secretary”; and

(ii) by adding at the end the following:

“(2) REPORT.—Not later than 180 days after the date of enactment of this paragraph, the Director shall submit a report describing the impact of the activities assisted with the Fund established under paragraph (1) to—

“(A) the Committee on Science, Space, and Technology of the House of Representatives; and

“(B) the Committee on Energy and Natural Resources of the Senate.”.

(4) PROTECTING AMERICA’S COMPETITIVE EDGE (PACE) GRADUATE FELLOWSHIP PROGRAM.—Section 5009 of the America COMPETES Act (42 U.S.C. 16536) is amended—

(A) in subsection (c)—

(i) in paragraph (1) by striking “, involving” and all that follows through “Secretary”; and

(ii) in paragraph (2), by striking subparagraph (B) and inserting the following:

“(B) to demonstrate excellent academic performance and understanding of scientific or technical subjects; and”;

(B) in subsection (d)(1)(B)(i), by inserting “full or partial” before “graduate tuition”; and

(C) in subsection (e), in the matter preceding paragraph (1), by striking “Director of Science, Engineering, and Mathematics Education” and inserting “Director of the Office of Science.”.

(d) CONFORMING AMENDMENTS.—The table of contents for the America COMPETES ACT (Public Law 110-69; 121 Stat. 573) is amended by striking the items relating to sections 5004 and 5008.

#### SEC. 3040. REPEAL OF PRIOR LIMITATION ON COMPENSATION OF THE SECRETARY OF THE INTERIOR.

(a) IN GENERAL.—The Joint Resolution entitled “Joint Resolution ensuring that the compensation and other emoluments attached to the office of Secretary of the Interior are those which were in effect on January 1, 2005”, approved January 16, 2009 (5 U.S.C. 5312 note; Public Law 111-1), is repealed.

(b) EFFECTIVE DATE.—This section shall take effect as though enacted on March 2, 2017.

**SA 1408.** Ms. MURKOWSKI submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

Amend the title so as to read: “A bill to promote clean American energy innovation, strengthen national security, improve global competitiveness, and protect the environment.”.

**SA 1409.** Mr. THUNE submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms.

MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle B of title I, add the following:

#### SEC. 12. UPPER MISSOURI RIVER BASIN REPOWERING FEASIBILITY STUDY.

(a) DEFINITIONS.—In this section:

(1) MAINSTEM DAM.—The term “mainstem dam” means each of the major dams operated by the Secretary of the Army in the Upper Missouri River Basin, including—

(A) Fort Peck Dam in the State of Montana;

(B) Garrison Dam in the State of North Dakota; and

(C) Oahe Dam, Big Bend Dam, Fort Randall Dam, and Gavins Point Dam in the State of South Dakota.

(2) UPPER MISSOURI RIVER BASIN.—The term “Upper Missouri River Basin” means the Missouri River Water Management Division (as defined by the Secretary of the Army) located above the Gavins Point Dam in the State of South Dakota.

(b) AUTHORIZATION OF STUDY.—The Secretary shall conduct a study on the potential for hydroelectric repowering in the Upper Missouri River Basin.

(c) CONTENTS.—The study under subsection (b) shall include an examination of the potential for repowering the existing mainstem dams in the Upper Missouri River Basin, including—

(1) possible upgrades to existing hydroelectric infrastructure to improve the capacity and efficiency of generation; and

(2) the estimated additional generating capacity associated with upgrades under paragraph (1).

(d) COORDINATION.—In carrying out the study under subsection (b), the Secretary may coordinate with the Secretary of Defense and the Secretary of the Interior.

(e) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to the appropriate committees of Congress a report describing the results of the study under subsection (b).

**SA 1410.** Mr. THUNE submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle B of title I, add the following:

#### SEC. 12. UPPER MISSOURI BASIN HYDRO-POWER FEASIBILITY STUDY.

(a) IN GENERAL.—The Secretary shall conduct a study on the potential for hydroelectric expansion and development in the Upper Missouri Basin.

(b) CONTENTS.—The study under subsection (a) shall include an examination of the potential for adding hydroelectric capacity to existing, nonpowered dams in the Upper Missouri Basin, including—

(1) an assessment of dams with hydroelectric capacity of 1 megawatt or more; and

(2) for existing dams with a hydroelectric capacity of less than 1 megawatt, the possible use of innovative technologies to add hydroelectric capacity.

(c) COORDINATION.—In carrying out the study under subsection (a), the Secretary may coordinate with the Secretary of Defense and the Secretary of the Interior.



(d) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to the appropriate committees of Congress a report describing the results of the study under subsection (a).

**SA 1411.** Mr. THUNE submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 232, line 18, strike “\$10,000,000” and insert “\$9,500,000”.

On page 414, after line 23, insert the following:

**SEC. 1810. WIND BLADE RECYCLING PRIZE COMPETITION.**

Section 1008 of the Energy Policy Act of 2005 (42 U.S.C. 16396) (as amended by section 1301(f)) is amended by adding at the end the following:

“(h) WIND BLADE RECYCLING PRIZE COMPETITION.—

“(1) IN GENERAL.—The Secretary shall establish an award program, to be known as the ‘Wind Blade Recycling Prize Competition’ (referred to in this subsection as the ‘program’), under which the Secretary shall carry out prize competitions and make awards to advance the recycling of wind blade materials.

“(2) FREQUENCY.—To the maximum extent practicable, the Secretary shall carry out a competition under the program not less frequently than once every calendar year.

“(3) ELIGIBILITY.—

“(A) IN GENERAL.—To be eligible to win a prize under the program, an individual or entity—

“(i) shall have complied with the requirements of the competition as described in the announcement for that competition published in the Federal Register by the Secretary under paragraph (6);

“(ii) in the case of a private entity, shall be incorporated in the United States and maintain a primary place of business in the United States; and

“(iii) in the case of an individual, whether participating singly or in a group, shall be a citizen of, or an alien lawfully admitted for permanent residence in, the United States.

“(B) EXCLUSIONS.—The following entities and individuals shall not be eligible to win a prize under the program:

“(i) A Federal entity.

“(ii) A Federal employee (including an employee of a National Laboratory) acting within the scope of employment.

“(4) AWARDS.—In carrying out the program, the Secretary shall award cash prizes, in amounts to be determined by the Secretary, to each individual or entity selected through a competitive process to develop methods or technologies to recycle or reuse wind blade materials from domestic wind energy facilities.

“(5) CRITERIA.—

“(A) IN GENERAL.—The Secretary shall establish objective, merit-based criteria for awarding the prizes in each competition carried out under the program.

“(B) REQUIREMENTS.—The criteria established under subparagraph (A) shall prioritize advancements in methods or technologies that present the greatest potential for large-scale commercial deployment.

“(C) CONSULTATION.—In establishing criteria under subparagraph (A), the Secretary shall consult with appropriate members of private industry involved in the commercial deployment of wind energy facilities.

“(6) ADVERTISING AND SOLICITATION OF COMPETITORS.—

“(A) IN GENERAL.—The Secretary shall announce each prize competition under the program by publishing a notice in the Federal Register.

“(B) REQUIREMENTS.—Each notice published under subparagraph (A) shall describe the essential elements of the competition, such as—

“(i) the subject of the competition;

“(ii) the duration of the competition;

“(iii) the eligibility requirements for participation in the competition;

“(iv) the process for participants to register for the competition;

“(v) the amount of the prize; and

“(vi) the criteria for awarding the prize.

“(7) JUDGES.—

“(A) IN GENERAL.—For each prize competition under the program, the Secretary shall assemble a panel of qualified judges to select the winner or winners of the competition on the basis of the criteria established under paragraph (5).

“(B) SELECTION.—The judges for each competition shall include appropriate members of private industry involved in the commercial production and deployment of wind blades.

“(C) CONFLICTS.—An individual may not serve as a judge in a prize competition under the program if the individual, the spouse of the individual, any child of the individual, or any other member of the household of the individual—

“(i) has a personal or financial interest in, or is an employee, officer, director, or agent of, any entity that is a registered participant in the prize competition for which the individual will serve as a judge; or

“(ii) has a familial or financial relationship with a registered participant in the prize competition for which the individual will serve as a judge.

“(8) REPORT TO CONGRESS.—Not later than 60 days after the date on which the first prize is awarded under the program, and annually thereafter, the Secretary shall submit to Congress a report that—

“(A) identifies each award recipient;

“(B) describes the advanced methods or technologies developed by each award recipient; and

“(C) specifies actions being taken by the Department toward commercial application of all methods or technologies with respect to which a prize has been awarded under the program.

“(9) ANTI-DEFICIENCY ACT.—The Secretary shall carry out the program in accordance with section 1341 of title 31, United States Code (commonly referred to as the ‘Anti-Deficiency Act’).

“(10) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection \$2,000,000, to remain available until expended.”.

**SA 1412.** Mr. MENENDEZ submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

Beginning on page 321, line 8, strike “Secretary” and all that follows through “Secretary” on page 322, line 2, and insert the following: “Secretary, with the concurrence of the Secretary of State, shall carry out a program to develop bilateral collaboration initiatives with a variety of countries through—

“(1) research and development agreements;

“(2) other relevant arrangements and action plan updates; and

“(3) maintaining existing multilateral cooperation commitments of—

“(A) the International Framework for Nuclear Energy Cooperation;

“(B) the Generation IV International Forum;

“(C) the International Atomic Energy Agency; and

“(D) any other international collaborative effort with respect to advanced nuclear reactor operations and safety.

“(b) SUBPROGRAM.—

“(1) IN GENERAL.—In carrying out the program under subsection (a), the Secretary, with the concurrence of the Secretary of State,

**SA 1413.** Mr. MENENDEZ submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

Beginning on page 321, line 8, of the amendment, strike “Secretary” and all that follows through “Secretary” on page 322, line 2, and insert the following: “Secretary, with the concurrence of the Secretary of State, shall carry out a program to develop bilateral collaboration initiatives with a variety of countries through—

“(1) research and development agreements;

“(2) other relevant arrangements and action plan updates; and

“(3) maintaining existing multilateral cooperation commitments of—

“(A) the International Framework for Nuclear Energy Cooperation;

“(B) the Generation IV International Forum;

“(C) the International Atomic Energy Agency; and

“(D) any other international collaborative effort with respect to advanced nuclear reactor operations and safety.

“(b) SUBPROGRAM.—

“(1) IN GENERAL.—In carrying out the program under subsection (a), the Secretary, with the concurrence of the Secretary of State,

**SA 1414.** Ms. CORTEZ MASTO submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

**TITLE IV—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986**

**SEC. 4001. EXTENSION AND PHASEOUT OF ENERGY CREDIT.**

(a) EXTENSIONS.—Section 48 of the Internal Revenue Code of 1986 is amended—

(1) in subsection (a)—

(A) in paragraph (2)(A)(i)(II), by striking “January 1, 2022” and inserting “January 1, 2027”; and

(B) in paragraph (3)(A)—

(i) in clause (ii), by striking “January 1, 2022” and inserting “January 1, 2027”; and

(ii) in clause (vii), by striking “January 1, 2022” and inserting “January 1, 2027”; and

(2) in subsection (c)—

(A) in paragraph (1)(D), by striking “January 1, 2022” and inserting “January 1, 2027”; and

(B) in paragraph (2)(D), by striking “January 1, 2022” and inserting “January 1, 2027”; and

(C) in paragraph (3)(A)(iv), by striking “January 1, 2022” and inserting “January 1, 2027”; and

(D) in paragraph (4)(C), by striking “January 1, 2022” and inserting “January 1, 2027”.

(b) PHASEOUTS.—

(1) SOLAR ENERGY PROPERTY.—Section 48(a)(6) of the Internal Revenue Code of 1986 is amended—

(A) in subparagraph (A)—

(i) by striking “January 1, 2022, the energy percentage” and inserting “January 1, 2027, the energy percentage”;

(ii) in clause (i), by striking “after December 31, 2019, and before January 1, 2021” and inserting “after December 31, 2024, and before January 1, 2026”; and

(iii) in clause (ii), by striking “after December 31, 2020, and before January 1, 2022” and inserting “after December 31, 2025, and before January 1, 2027”; and

(B) in subparagraph (B), by striking “begins before January 1, 2022, and which is not placed in service before January 1, 2024” and inserting “begins before January 1, 2027, and which is not placed in service before January 1, 2029”.

(2) FIBER-OPTIC SOLAR, QUALIFIED FUEL CELL, AND QUALIFIED SMALL WIND ENERGY PROPERTY.—Section 48(a)(7) of such Code is amended—

(A) in subparagraph (A)—

(i) in clause (i), by striking “after December 31, 2019, and before January 1, 2021” and inserting “after December 31, 2024, and before January 1, 2026”; and

(ii) in clause (ii), by striking “after December 31, 2020, and before January 1, 2022” and inserting “after December 31, 2025, and before January 1, 2027”; and

(B) in subparagraph (B), by striking “January 1, 2024” and inserting “January 1, 2029”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to periods after December 31, 2019.

#### SEC. 4002. EXTENSION AND PHASEOUT OF CREDIT FOR RESIDENTIAL ENERGY EFFICIENT PROPERTY.

(a) APPLICABLE PERCENTAGE.—Subsection (g) of section 25D of the Internal Revenue Code of 1986 is amended—

(1) in paragraph (1), by striking “January 1, 2020” and inserting “January 1, 2025”;

(2) in paragraph (2), by striking “after December 31, 2019, and before January 1, 2021” and inserting “after December 31, 2024, and before January 1, 2026”; and

(3) in paragraph (3), by striking “after December 31, 2020, and before January 1, 2022” and inserting “after December 31, 2025, and before January 1, 2027”.

(b) TERMINATION.—Subsection (h) of section 25D of such Code is amended by striking “December 31, 2021” and inserting “December 31, 2026”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2019.

**SA 1415.** Ms. CORTEZ MASTO (for herself and Ms. ROSEN) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### TITLE IV—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986

##### SEC. 4001. EXTENSION AND PHASEOUT OF ENERGY CREDIT.

(a) EXTENSIONS.—Section 48 of the Internal Revenue Code of 1986 is amended—

(1) in subsection (a)—

(A) in paragraph (2)(A)(i)(II), by striking “January 1, 2022” and inserting “January 1, 2027”; and

(B) in paragraph (3)(A)—

(i) in clause (ii), by striking “January 1, 2022” and inserting “January 1, 2027”; and

(ii) in clause (vii), by striking “January 1, 2022” and inserting “January 1, 2027”; and

(2) in subsection (c)—

(A) in paragraph (1)(D), by striking “January 1, 2022” and inserting “January 1, 2027”;

(B) in paragraph (2)(D), by striking “January 1, 2022” and inserting “January 1, 2027”;

(C) in paragraph (3)(A)(iv), by striking “January 1, 2022” and inserting “January 1, 2027”; and

(D) in paragraph (4)(C), by striking “January 1, 2022” and inserting “January 1, 2027”.

(b) PHASEOUTS.—

(1) SOLAR ENERGY PROPERTY.—Section 48(a)(6) of the Internal Revenue Code of 1986 is amended—

(A) in subparagraph (A)—

(i) by striking “January 1, 2022, the energy percentage” and inserting “January 1, 2027, the energy percentage”;

(ii) in clause (i), by striking “after December 31, 2019, and before January 1, 2021” and inserting “after December 31, 2024, and before January 1, 2026”; and

(iii) in clause (ii), by striking “after December 31, 2020, and before January 1, 2022” and inserting “after December 31, 2025, and before January 1, 2027”; and

(B) in subparagraph (B), by striking “begins before January 1, 2022, and which is not placed in service before January 1, 2024” and inserting “begins before January 1, 2027, and which is not placed in service before January 1, 2029”.

(2) FIBER-OPTIC SOLAR, QUALIFIED FUEL CELL, AND QUALIFIED SMALL WIND ENERGY PROPERTY.—Section 48(a)(7) of such Code is amended—

(A) in subparagraph (A)—

(i) in clause (i), by striking “after December 31, 2019, and before January 1, 2021” and inserting “after December 31, 2024, and before January 1, 2026”; and

(ii) in clause (ii), by striking “after December 31, 2020, and before January 1, 2022” and inserting “after December 31, 2025, and before January 1, 2027”; and

(B) in subparagraph (B), by striking “January 1, 2024” and inserting “January 1, 2029”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to periods after December 31, 2019.

##### SEC. 4002. ENHANCING THE ENERGY CREDIT FOR MICROTURBINES, COMBINED HEAT AND POWER SYSTEMS, GEOTHERMAL HEAT PUMPS, AND GEOTHERMAL ENERGY.

(a) IN GENERAL.—Section 48(a)(2)(A)(i) of the Internal Revenue Code of 1986 is amended—

(1) by striking subclause (I);

(2) by redesignating subclause (II), as amended by section 4001 of this Act, as subclause (I);

(3) by inserting after subclause (I), as redesignated by paragraph (2), the following:

“(II) energy property described in paragraph (3)(A)(iii) but only with respect to property the construction of which begins before January 1, 2027, and”;

(4) by amending subclause (III) to read as follows:

“(III) energy property described in clause (ii), (iv), (v), (vi), or (vii) of paragraph (3)(A), and”;

(5) by striking subclause (IV).

(b) EFFECTIVE DATE.—The amendments made by this section shall apply to periods after December 31, 2019, in taxable years ending after such date, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).

##### SEC. 4003. EXTENSION AND PHASEOUT OF CREDIT FOR RESIDENTIAL ENERGY EFFICIENT PROPERTY.

(a) APPLICABLE PERCENTAGE.—Subsection (g) of section 25D of the Internal Revenue Code of 1986 is amended—

(1) in paragraph (1), by striking “January 1, 2020” and inserting “January 1, 2025”;

(2) in paragraph (2), by striking “after December 31, 2019, and before January 1, 2021” and inserting “after December 31, 2024, and before January 1, 2026”; and

(3) in paragraph (3), by striking “after December 31, 2020, and before January 1, 2022” and inserting “after December 31, 2025, and before January 1, 2027”.

(b) TERMINATION.—Subsection (h) of section 25D of such Code is amended by striking “December 31, 2021” and inserting “December 31, 2026”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2019.

**SA 1416.** Mr. HOEVEN (for himself and Mr. CRAMER) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

##### SEC. \_\_\_\_\_. EXTENSION OF REFINED COAL PRODUCTION TAX CREDIT.

(a) EXTENSION OF PERIOD DURING WHICH REFINED COAL CAN BE PRODUCED.—Section 45(e)(8) of the Internal Revenue Code of 1986 is amended by adding at the end the following new subparagraph:

“(E) EXTENSION OF CREDIT PERIOD FOR CERTAIN REFINED COAL FACILITIES.—In the case of a refined coal production facility which does not produce steel industry fuel and which is placed in service before January 1, 2012, clauses (i) and (ii)(II) of subparagraph (A) shall each be applied by substituting ‘20-year period’ for ‘10-year period’.”.

(b) EXTENSION OF PERIOD DURING WHICH REFINED COAL FACILITIES CAN BE QUALIFIED.—Subparagraph (B) of section 45(d)(8) of the Internal Revenue Code of 1986 is amended—

(1) by striking “placed in service after” and inserting “placed in service—

“(i) after”;

(2) by striking the period at the end and inserting “, or”;

(3) by adding at the end the following new clause:

“(ii) after December 31, 2019, and before January 1, 2023.”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to coal produced and sold after the date of the enactment of this Act, in taxable years ending after such date.

**SA 1417.** Mr. HOEVEN (for himself, Ms. SMITH, Mr. CRAMER, Mr. BARRASSO, Mr. DAINES, Mrs. CAPITO, and Mr. TESTER) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

#### TITLE \_\_\_\_\_CARBON CAPTURE MODERNIZATION

##### SEC. \_\_\_\_\_. SHORT TITLE.

This title may be cited as the “Carbon Capture Modernization Act”.

**SEC. 02. MODIFICATIONS OF QUALIFYING ADVANCED COAL PROJECT CREDIT.**

(a) SEQUESTRATION REQUIREMENT FOR CERTAIN EQUIPMENT.—Section 48A(e)(1)(G) of the Internal Revenue Code of 1986 is amended by inserting “and 60 percent in the case of an application for a reallocation of credits under subsection (d)(4) with respect to an electrical generating unit in existence on October 3, 2008” after “under subsection (d)(4)”.

(b) NAMEPLATE GENERATING CAPACITY REQUIREMENT.—Section 48A(e)(1)(C) of such Code is amended by striking “400 megawatts” and inserting “200 megawatts”.

(c) ADVANCED COAL-BASED GENERATION TECHNOLOGY REQUIREMENTS.—

(1) IN GENERAL.—Section 48A(f)(1) of such Code is amended by striking “generation technology if—” and all that follows through “the unit is designed” and inserting “generation technology if the unit is designed”.

(2) CONFORMING AMENDMENTS.—Section 48A(f) of such Code is amended—

(A) by striking all that precedes “the purpose of this section” and inserting the following:

“(f) ADVANCED COAL-BASED GENERATION TECHNOLOGY.—For”.

(B) by striking “in subparagraph (B)” in the second sentence of paragraph (1) and inserting “in this subsection”; and

(C) by striking paragraphs (2) and (3).

(d) PERFORMANCE REQUIREMENTS IN CASE OF BEST AVAILABLE CONTROL TECHNOLOGY.—Section 48A(f) of such Code, as amended by this Act, is amended by adding at the end the following: “In the case of a retrofit of a unit which has undergone a best available control technology analysis after August 8, 2005, with respect to the removal or emissions of any pollutant which is SO<sub>2</sub> or NO<sub>x</sub>, the removal or emissions design level with respect to such pollutant shall be the level determined in such analysis.”.

(e) CLARIFICATION OF REALLOCATION AUTHORITY.—Section 48A(d)(4) of the Internal Revenue Code of 1986 is amended—

(1) in subparagraph (A)—

(A) by striking “Not later than 6 years after the date of enactment of this section, the” and inserting “The”, and

(B) by inserting “and every 6 months thereafter until all credits available under this section have been allowed” after “the date which is 6 years after the date of enactment of this section”.

(2) in subparagraph (B)—

(A) by striking “may reallocate credits available under clauses (i) and (ii) of paragraph (3)(B)” and inserting “shall reallocate credits remaining available under paragraph (3)”.

(B) by striking “or” at the end of clause (i), and

(C) by striking clause (ii) and inserting the following:

“(ii) any applicant for certification which submitted an accepted application has subsequently failed to satisfy the requirements under paragraph (2)(D), or

“(iii) any certification made pursuant to paragraph (2) has been revoked pursuant to paragraph (2)(E).”, and

(3) in subparagraph (C)—

(A) by striking “clause (i) or (ii) of paragraph (3)(B)” and inserting “paragraph (3)”,

(B) by striking “is authorized to” and inserting “shall”, and

(C) by striking “an additional program” and inserting “additional programs”.

(f) EFFECTIVE DATE.—

(1) IN GENERAL.—Except as provided in paragraph (2), the amendments made by this section shall apply to allocations and reallocations after the date of the enactment of this Act.

(2) REALLOCATION.—The amendments made by subsection (e) shall apply to credits re-

maining available under section 48A(d)(3) of the Internal Revenue Code of 1986 on the date of the enactment of this Act.

**SA 1418.** Mr. HOEVEN (for himself, Mr. CRAMER, and Mr. DAINES) submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title II, add the following:

**Subtitle D—Miscellaneous****SEC. 24. COMPLIANCE WITH BLM PERMITTING.**

(a) IN GENERAL.—Notwithstanding any other provision of law but subject to any State requirements, a Bureau of Land Management drilling permit shall not be required under the Federal Oil and Gas Royalty Management Act of 1982 (30 U.S.C. 1701 et seq.) or section 3164.1 of title 43, Code of Federal Regulations (or a successor regulation), for an action occurring within an oil and gas drilling or spacing unit if—

(1) less than 50 percent of the minerals within the oil and gas drilling or spacing unit are minerals owned by the Federal Government; and

(2) the Federal Government does not own or lease the surface estate within the boundaries of the oil and gas drilling or spacing unit.

(b) EFFECT.—Nothing in this Act affects the right of the Federal Government to receive royalties due to the Federal Government from the production of the Federal minerals within the oil and gas drilling or spacing unit.

**SA 1419.** Ms. ERNST (for herself and Mr. KING) submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle C of title II, add the following:

**SEC. 23. WIND ENERGY WORKFORCE DEVELOPMENT.**

(a) WIND TECHNICIAN TRAINING GRANT PROGRAM.—

(1) IN GENERAL.—Title XI of the Energy Policy Act of 2005 (42 U.S.C. 16411 et seq.) is amended by adding at the end the following:

**“SEC. 1107. WIND TECHNICIAN TRAINING GRANT PROGRAM.**

“(a) DEFINITION OF ELIGIBLE ENTITY.—In this section, the term ‘eligible entity’ means a community college or technical school that offers a wind training program.

“(b) GRANT PROGRAM.—The Secretary shall establish a program under which the Secretary shall award grants, on a competitive basis, to eligible entities to purchase large pieces of wind component equipment (such as nacelles, towers, and blades) for use in training wind technician students.

“(c) FUNDING.—Of the amounts made available to the Secretary for administrative expenses to carry out other programs under the authority of the Secretary, the Secretary shall use to carry out this section \$2,000,000 for each of fiscal years 2020 through 2025.”.

(2) CLERICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 601) is amended by inserting after the item relating to section 1106 the following:

“Sec. 1107. Wind technician training grant program.”.

(b) VETERANS IN WIND ENERGY.—

(1) IN GENERAL.—Title XI of the Energy Policy Act of 2005 (42 U.S.C. 16411 et seq.) (as amended by subsection (a)(1)) is amended by adding at the end the following:

**“SEC. 1108. VETERANS IN WIND ENERGY.**

“(a) IN GENERAL.—The Secretary shall establish a program to prepare veterans for careers in the wind energy industry that shall be modeled off of the Solar Ready Vets pilot program formerly administered by the Department of Energy and the Department of Defense.

“(b) FUNDING.—Of the amounts made available to the Secretary for administrative expenses to carry out other programs under the authority of the Secretary, the Secretary shall use to carry out this section \$2,000,000 for each of fiscal years 2020 through 2025.”.

(2) CLERICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 601) (as amended by subsection (a)(2)) is amended by inserting after the item relating to section 1107 the following:

“Sec. 1108. Veterans in wind energy.”.

(c) STUDY AND REPORT ON WIND TECHNICIAN WORKFORCE.—

(1) IN GENERAL.—The Secretary shall convene a task force comprised of 1 or more representatives of each of the stakeholders described in paragraph (2) that shall—

(A) conduct a study to assess the needs of wind technicians in the workforce;

(B) create a comprehensive list that—

(i) lists each type of wind technician position available in the United States; and

(ii) describes the skill sets required for each type of position listed under clause (i); and

(C) not later than 1 year after the date of enactment of this Act, make publicly available and submit to Congress a report that—

(i) describes the results of that study;

(ii) includes the comprehensive list described in subparagraph (B); and

(iii) provides recommendations—

(I) for creating a credentialing program that may be administered by community colleges, technical schools, and other training institutions; and

(II) that reflect best practices for wind technician training programs, as identified by representatives of the wind industry.

(2) STAKEHOLDERS DESCRIBED.—The stakeholders referred to in paragraph (1) are—

(A) the Department of Defense;

(B) the Department of Education;

(C) the Department of Energy;

(D) the Department of Labor;

(E) the Department of Veterans Affairs;

(F) technical schools and community colleges that have wind technician training programs; and

(G) the wind industry.

(3) FUNDING.—Of the amounts made available to the Secretary for administrative expenses to carry out other programs under the authority of the Secretary, the Secretary shall use to carry out this subsection \$500,000.

**SA 1420.** Mr. THUNE submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ RURAL DEVELOPMENT LOANS AND GRANTS.**

(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary of Agriculture (referred to in this section as the “Secretary”) shall initiate a

rulemaking to permit the Secretary to enter into collateral assignment agreements with intermediaries for the purposes of permitting rural utilities to participate in the rural development loan and grant program established under section 313B of the Rural Electrification Act of 1936 (7 U.S.C. 940c-2) without providing an irrevocable letter of credit.

(b) REQUIREMENTS.—In the rulemaking under subsection (a), the Secretary shall—

(1) establish alternatives to irrevocable letters of credit that do not subject the Department of Agriculture to increased cost or financial risk; and

(2) provide that bonds, the assignment of a mortgage of an intermediary, or the assignment of collateral shall be acceptable collateral mechanisms.

**SA 1421.** Mr. THUNE submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle H of title I, insert the following:

**SEC. 18. TRIBAL HYDROELECTRIC LOAN GUARANTEE PROGRAM.**

Section 2602(c) of the Energy Policy Act of 1992 (25 U.S.C. 3502(c)) is amended by adding at the end the following:

“(8) TRIBAL HYDROELECTRIC LOAN GUARANTEE PROGRAM.—

“(A) IN GENERAL.—As part of the loan guarantee program under this subsection, the Secretary of Energy shall provide loan guarantees to support Tribal investment in small-scale hydroelectric power generation, with a focus on whirlpool turbines and other run-of-river technologies.

“(B) FUNDS.—Of the amounts made available to carry out this subsection, not less than \$20,000,000 shall be used to carry out subparagraph (A).”.

**SA 1422.** Ms. CORTEZ MASTO submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 101, line 11, insert “National Academy of Sciences, the” before “National Laboratories”.

On page 101, line 13, insert a comma after “(42 U.S.C. 15801)”.

On page 101, line 23, strike “for” and insert “and renewable energy use in”.

On page 103, line 13, strike “and”.

On page 103, between lines 13 and 14, insert the following:

(E) an evaluation, and recommendations for improvement, of data center power usage effectiveness, average temperature, average humidity, renewable energy use, renewable energy storage, and data center uptime; and

On page 103, line 14, strike “(E)” and insert “(F)”.

**SA 1423.** Ms. CORTEZ MASTO submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 10, line 2, strike “and”.

On page 10, line 7, strike the period and insert “; and”.

On page 10, between lines 7 and 8, insert the following:

(vi) zero-emissions vehicle infrastructure.

On page 11, before line 1, insert the following:

(4) ZERO-EMISSIONS VEHICLE.—The term “zero-emissions vehicle” means—

(A) a zero-emission vehicle, as defined in section 88.102-94 of title 40, Code of Federal Regulations (or successor regulations); and

(B) a vehicle that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational mode or condition.

(5) ZERO-EMISSIONS VEHICLE INFRASTRUCTURE.—The term “zero-emissions vehicle infrastructure” means infrastructure used to charge or fuel a zero-emissions vehicle.

Beginning on page 12, strike line 21 and all that follows through page 13, line 18, and insert the following:

(a) DEFINITIONS.—In this section:

(1) SCHOOL.—The term “school” means—

(A) an elementary school or secondary school (as defined in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801));

(B) an institution of higher education (as defined in section 102(a) of the Higher Education Act of 1965 (20 U.S.C. 1002(a)));

(C) a school of the defense dependents’ education system under the Defense Dependents’ Education Act of 1978 (20 U.S.C. 921 et seq.) or established under section 2164 of title 10, United States Code;

(D) a school operated by the Bureau of Indian Education;

(E) a tribally controlled school (as defined in section 5212 of the Tribally Controlled Schools Act of 1988 (25 U.S.C. 2511)); and

(F) a Tribal College or University (as defined in section 316(b) of the Higher Education Act of 1965 (20 U.S.C. 1059c(b))).

(2) ZERO-EMISSIONS VEHICLE; ZERO-EMISSIONS VEHICLE INFRASTRUCTURE.—The terms “zero-emissions vehicle” and “zero-emissions vehicle infrastructure” have the meaning given those terms in section 1002(a).

On page 14, line 1, strike “and energy retrofitting projects” and insert “energy retrofitting, and zero-emissions vehicle and zero-emissions vehicle infrastructure projects”.

On page 14, lines 16 and 17, strike “and energy retrofitting projects” and insert “energy retrofitting, and zero-emissions vehicle and zero-emissions vehicle infrastructure projects”.

On page 14, line 23, strike “and energy retrofitting projects” and insert “energy retrofitting, and zero-emissions vehicle and zero-emissions vehicle infrastructure projects”.

On page 15, lines 11 and 12, strike “and energy retrofitting projects” and insert “energy retrofitting, and zero-emissions vehicle and zero-emissions vehicle infrastructure projects”.

On page 15, between lines 17 and 18, insert the following:

(C) to install zero-emissions vehicle infrastructure on school grounds for—

(i) exclusive use of school buses, school fleets, or students; or

(ii) the general public;

(D) to purchase or lease zero-emissions vehicles, including school buses, fleet vehicles, and other operational vehicles;

On page 15, line 18, strike “(C)” and insert “(E)”.

On page 15, line 22, strike “(D)” and insert “(F)”.

On page 16, lines 1 and 2, strike “and energy retrofit projects” and insert “energy retrofitting, and zero-emissions vehicle and zero-emissions vehicle infrastructure projects”.

On page 16, lines 14 and 15, strike “and energy retrofitting projects” and insert “energy retrofitting, and zero-emissions vehicle and zero-emissions vehicle infrastructure projects”.

On page 16, lines 19 and 20, strike “and energy retrofitting projects” and insert “energy retrofitting, and zero-emissions vehicle and zero-emissions vehicle infrastructure projects”.

On page 176, line 4, strike “and”.

On page 176, line 5, strike the period and insert “; and”.

On page 176, between lines 5 and 6, insert the following:

(e) transportation sector electrification.

On page 179, line 19, strike “and”.

On page 179, line 21, strike the period and insert “; and”.

On page 179, between lines 21 and 22, insert the following:

(dd) technologies used for transportation sector electrification.

On page 189, line 17, strike the period and insert “, including by electrifying the transportation sector, including through electric vehicle charging.”.

On page 333, line 13, insert “, including through the use of zero-emissions vehicles (as defined in section 1002(a) of the American Energy Innovation Act of 2020)” before the semicolon.

On page 361, line 11, insert “, including energy storage to enable renewable energy generation,” after “infrastructure”.

On page 372, line 15, insert “, including energy storage and renewable energy generation” before the semicolon.

On page 513, line 5, strike “and”.

On page 513, line 7, strike the period and insert “; and”.

On page 513, between lines 7 and 8, insert the following:

(IV) the zero-emissions vehicle and zero-emissions vehicle infrastructure (as those terms are defined in section 1002(a)) sectors.

**SA 1424.** Ms. CORTEZ MASTO submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle G of title I, add the following:

**SEC. 1711. GREEN SPACES, GREEN VEHICLES INITIATIVE.**

(a) DEFINITIONS.—In this section:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term “appropriate committees of Congress” means—

(A) the Committee on Energy and Commerce of the House of Representatives;

(B) the Committee on Natural Resources of the House of Representatives;

(C) the Committee on Appropriations of the House of Representatives;

(D) the Committee on Energy and Natural Resources of the Senate; and

(E) the Committee on Appropriations of the Senate.

(2) COVERED LAND.—The term “covered land” means—

(A) National Forest System land;

(B) National Park System land; and

(C) any land owned by a unit of local government or Indian Tribe (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304))—

(i) that is located not more than 25 miles from land described in subparagraph (A) or (B); and

(ii) with respect to which the Secretary or an appropriate agency head has entered into an agreement with the owner of the land for the installation of zero-emissions vehicle infrastructure on the land, after making a determination that the infrastructure to be installed under the agreement is related to providing zero-emissions vehicles with access to land described in subparagraph (A) or (B).

(3) **SECRETARY.**—The term “Secretary” means the Secretary, acting through the Assistant Secretary for Energy Efficiency and Renewable Energy.

(4) **ZERO-EMISSIONS VEHICLE INFRASTRUCTURE.**—The term “zero-emissions vehicle infrastructure” means infrastructure used to charge or fuel a zero-emissions vehicle.

(5) **ZERO-EMISSIONS VEHICLE.**—The term “zero-emissions vehicle” means—

(A) a zero-emission vehicle (as defined in section 88.102-94 of title 40, Code of Federal Regulations (or successor regulations)); or

(B) a vehicle that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions.

(b) **ESTABLISHMENT OF GREEN SPACES, GREEN VEHICLES INITIATIVE.**—

(1) **IN GENERAL.**—The Secretary shall collaborate with the Secretary of the Interior and the Secretary of Agriculture on an initiative, to be known as the “Green Spaces, Green Vehicles Initiative”, to facilitate the installation and use of zero-emissions vehicle infrastructure on covered land.

(2) **DUTIES.**—The Secretary, the Secretary of the Interior, and the Secretary of Agriculture shall, consistent with any laws, rules, general management plans, land and resource management plans, or other organizing documents applicable to the applicable covered land, facilitate the installation and use of zero-emissions vehicle infrastructure on covered land—

(A) by entering into agreements with public, private, or nonprofit entities for the acquisition, installation, and operation, including use-fee processing and collection, on covered land of publicly accessible zero-emissions vehicle infrastructure that is directly related to the charging or fueling of a vehicle in accordance with this section;

(B) by acquiring, in coordination with the Administrator of General Services, zero-emissions vehicles, including shuttle vehicles, for the fleets of the Forest Service and the National Park Service;

(C) by providing information to the public, including by publishing a map on any relevant agency website, regarding the availability of existing and planned zero-emissions vehicle infrastructure on covered land; and

(D) by allowing for the use of charging infrastructure by employees of the Forest Service and the National Park Service to charge vehicles used by the employees in commuting to or from work.

(3) **CONSIDERATIONS.**—In determining the location for zero-emissions vehicle infrastructure acquired and installed on covered land under paragraph (2), the Secretary and the Secretary of the Interior or the Secretary of Agriculture, as applicable, shall consider whether a proposed location would—

(A) complement, to the extent feasible, alternative fueling corridor networks established under section 151 of title 23, United States Code;

(B) meet current or anticipated market demands for charging or fueling infrastructure;

(C) enable or accelerate the construction of charging or fueling infrastructure that would be unlikely to be completed without Federal assistance;

(D) support the use of zero-emissions vehicles by Federal fleets and visitors to Federal facilities; and

(E) support the electric grid through smart charging, battery storage, renewable generation capacity, or microgrids.

(4) **LOCATION OF INFRASTRUCTURE.**—Any zero-emissions vehicle infrastructure acquired, installed, or operated under paragraph (2) shall be located on covered land.

(5) **FUNDING.**—

(A) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to carry out this subsection \$50,000,000 for each fiscal year.

(B) **LIMITATIONS ON USE OF FUNDS.**—

(i) **FEDERAL FLEETS.**—Not more than 20 percent of any funds appropriated to carry out this subsection may be used to acquire zero-emissions vehicles under paragraph (2)(B).

(ii) **URBANIZED AREAS.**—Not more than 30 percent of any funds appropriated to carry out this subsection may be used to acquire, install, or operate zero-emissions vehicle infrastructure in an urbanized area (as designated by the Bureau of the Census).

(iii) **ADMINISTRATIVE COSTS.**—Not more than 2 percent of any funds appropriated to carry out this subsection may be used for administrative costs.

(c) **AGREEMENTS FOR SHUTTLE OR OTHER TRANSPORTATION SERVICES ON NATIONAL FOREST SYSTEM LAND AND NATIONAL PARK SYSTEM LAND.**—In entering into an agreement with an entity to provide shuttle or other transportation services on or to covered land, the Secretary of the Interior and the Secretary of Agriculture, as applicable, shall give priority consideration to an entity that would provide the applicable services using zero-emissions vehicles.

(d) **ALTERNATIVE FUEL USE BY LIGHT DUTY FEDERAL VEHICLES.**—Section 400AA(a) of the Energy Policy and Conservation Act (42 U.S.C. 6374(a)) is amended by adding at the end the following:

“(5) For purposes of making a determination under paragraph (1) as to whether the acquisition of alternative fueled vehicles is practicable for the fleet of the Forest Service or the National Park Service, the Secretary, in cooperation with the Secretary of Agriculture or the Secretary of the Interior, as applicable, shall take into account the availability on National Forest System land or National Park System land, as applicable, of zero-emissions vehicle infrastructure (as defined in section 1711(a) of the American Energy Innovation Act of 2020) acquired and installed under section 1711(b) of the American Energy Innovation Act of 2020.

“(6)(A) Notwithstanding any other provision of law, the Secretary, in cooperation with the Secretary of Agriculture or the Secretary of the Interior, as applicable, shall develop a strategy to, by 2030, increase the number of zero-emissions vehicles (as defined in section 1711(a) of the American Energy Innovation Act of 2020) in the fleet and shuttle operations of each of the Forest Service and the National Park Service to the greater of—

“(i) a number that is equal to 125 percent of the number of zero-emissions vehicles in the fleet and shuttle operations of each agency on the date of enactment of this paragraph; and

“(ii) a number that is equal to 25 percent of all vehicles in the fleet and shuttle operations of each agency.

“(B) The strategy developed under subparagraph (A) shall be updated not less frequently than once every 2 years.”

(e) **REPORT.**—Not later than 2 years after the date of enactment of this Act, and biennially thereafter, the Secretary, the Secretary of the Interior, and the Secretary of Agriculture shall submit to the appropriate committees of Congress a report that describes—

(1) the location of—

(A) any zero-emissions vehicle infrastructure acquired, installed, or operated, or planned to be acquired, installed, or operated, under subsection (b)(2)(A); and

(B) any zero-emissions vehicles acquired for the fleet of the Forest Service or the National Park Service under subsection (b)(2)(B);

(2) the amount of Federal funds expended to carry out each duty under subsection (b)(2);

(3) any allocation of costs or benefits between the Federal Government and private or nonprofit entities under an agreement entered into by the Secretary, the Secretary of the Interior, or the Secretary of Agriculture, as applicable, under subsection (b)(2)(A);

(4) the justifications for the expenditure of funds to carry out subsection (b) during the period covered by the report, including, with respect to any zero-emissions vehicle infrastructure installed during the period covered by the report, an analysis of each of the considerations under subsection (b)(3);

(5) if applicable, any challenges in acquiring the necessary workforce to install, operate, or maintain—

(A) any zero-emissions vehicle infrastructure acquired, installed, or operated, or planned to be acquired, installed, or operated, under subsection (b)(2)(A); and

(B) any zero-emissions vehicles acquired for the fleet of the Forest Service or the National Park Service under subsection (b)(2)(B);

(6) with respect to each agreement for shuttle or other transportation services on or to covered land entered into by the Secretary of the Interior or the Secretary of Agriculture during the period covered by the report, how the Secretary of the Interior or the Secretary of Agriculture, as applicable, complied with the requirements of subsection (c);

(7) the strategy developed under paragraph (6)(A) of section 400AA(a) of the Energy Policy and Conservation Act (42 U.S.C. 6374(a)) (including any updates to the strategy under paragraph (6)(B) of that section); and

(8) any recommendations of the Secretary with respect to any additional funding or authority needed to carry out paragraph (6) of section 400AA(a) of the Energy Policy and Conservation Act (42 U.S.C. 6374(a)).

**SA 1425.** Ms. CORTEZ MASTO submitted an amendment intended to be proposed by her to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_\_. ELECTRIC VEHICLE WORKING GROUP.**

(a) **ESTABLISHMENT OF WORKING GROUP.**—

(1) **IN GENERAL.**—Not later than 240 days after the date of enactment of this Act, the Secretary of Transportation and the Secretary of Energy (referred to in this section as the “Secretaries”) shall jointly establish a working group (referred to in this section as the “working group”) to make recommendations on the development, adoption, and integration of light and heavy duty electric vehicles into the transportation and energy systems of the United States.

(2) **MEMBERSHIP.**—

(A) **IN GENERAL.**—The working group shall be composed of—

(i) the Secretaries (or designees), who shall be co-chairs of the working group; and

(ii) not more than 25 members to be appointed by the Secretaries, of whom—

(I) not more than 6 shall be Federal stakeholders as described in subparagraph (B); and

(II) not more than 19 shall be non-Federal stakeholders as described in subparagraph (C).

(B) **FEDERAL STAKEHOLDERS.**—The working group—

(i) shall include not less than 1 representative of each of—

(I) the Department of Transportation;

(II) the Department of Energy;  
(III) the Environmental Protection Agency;

(IV) the Council on Environmental Quality; and

(V) the General Services Administration; and

(ii) may include a representative of any other Federal agency the Secretaries consider to be appropriate.

(C) NON-FEDERAL STAKEHOLDERS.—The working group—

(i) shall include not less than 1 representative of each of—

(I) a manufacturer of electric vehicles or the relevant components of electric vehicles;

(II) an owner, operator, or manufacturer of electric vehicle charging equipment;

(III) the public utility industry;

(IV) a public utility regulator or association of public utility regulators;

(V) the transportation fueling distribution industry;

(VI) the energy provider industry;

(VII) the automotive dealing industry;

(VIII) the passenger transportation industry;

(IX) an organization representing a unit of local government;

(X) a regional transportation or planning agency;

(XI) an organization representing State departments of transportation;

(XII) an organization representing State departments of energy or State energy planners;

(XIII) an expert in intelligent transportation systems and technologies;

(XIV) organized labor;

(XV) the trucking industry;

(XVI) Tribal governments; and

(XVII) the property development industry; and

(ii) may include a representative of any other non-Federal stakeholder that the Secretaries consider to be appropriate.

(3) MEETINGS.—

(A) IN GENERAL.—The working group shall meet not less frequently than once every 120 days.

(B) REMOTE PARTICIPATION.—A member of the working group may participate in a meeting of the working group via teleconference or similar means.

(4) COORDINATION.—In carrying out the duties of the working group, the working group shall coordinate and consult with any existing Federal interagency working groups on fleet conversion or other similar matters related to electric vehicles.

(b) JOINT REPORT AND STRATEGY ON ELECTRIC VEHICLE ADOPTION, OPPORTUNITIES, AND CHALLENGES.—

(1) IN GENERAL.—The Secretaries, in consultation with the working group, shall submit to Congress by each of the deadlines described in paragraph (2)—

(A) a report on the status of electric vehicle adoption and opportunities for and challenges to expanding adoption of electric vehicles, including—

(i) a description of the barriers and opportunities to scaling up electric vehicle adoption nationwide, with recommendations for issues relating to—

(I) consumer behavior;

(II) charging infrastructure needs, including standardization;

(III) manufacturing and battery costs, including the raw material shortages for batteries and electric motor magnets;

(IV) the adoption of electric vehicles for low- and moderate-income individuals and underserved communities, including charging infrastructure access and vehicle purchase financing;

(V) business models for charging electric vehicles outside the home, including wired and wireless charging;

(VI) charging infrastructure permitting and regulatory issues;

(VII) the connections between housing and transportation costs and emissions;

(VIII) freight transportation, including local, port and drayage, regional, and long-haul trucking;

(IX) intercity passenger travel;

(X) the need or potential for model building codes for charging infrastructure;

(XI) the process by which governments collect a user fee for the contribution of electric vehicles to funding roadway improvements and potential investments in charging infrastructure;

(XII) State and local level policies, incentives, and zoning efforts;

(XIII) the installation of highway corridor signage;

(XIV) cybersecurity of charging infrastructure;

(XV) secondary markets and recycling for batteries;

(XVI) grid integration;

(XVII) energy storage; and

(XVIII) specific regional or local issues that—

(aa) are associated with—

(AA) the issues described in subclauses (I) through (XVII); or

(BB) urban or rural environments; and

(bb) may not appear nationwide, but hamper a nationwide adoption or coordination of electric vehicles;

(ii) examples of successful public and private models and demonstration projects that encourage electric vehicle adoption; and

(iii) an analysis of current efforts to overcome the barriers described in clause (i); and

(B) a strategy that describes how the Federal Government, States, units of local government, and industry can—

(i) set quantitative targets for transportation electrification;

(ii) overcome the barriers described in subparagraph (A)(i);

(iii) identify areas of opportunity in research and development to improve battery manufacturing, mineral mining, recycling costs, material recovery, and battery performance for electric vehicles;

(iv) enhance Federal interagency coordination to promote electric vehicle adoption;

(v) promote electric vehicle knowledge and expertise within State and local governments;

(vi) prepare the workforce for the adoption of electric vehicles, including through collaboration with labor unions, colleges and other educational institutions, and relevant manufacturers;

(vii) expand electric vehicle and charging infrastructure—

(I) knowledge and use among Federal, State, and local governments, school districts, and private entities; and

(II) adoption among the fleets of the entities described in subclause (I);

(viii) expand knowledge of the benefits of electric vehicles among the general public;

(ix) maintain the global competitiveness of the United States in the electric vehicle and charging infrastructure markets;

(x) provide clarity in regulations to improve national uniformity with respect to electric vehicles; and

(xi) ensure the sustainable integration of electric vehicles into the national electric grid.

(2) DEADLINES.—A joint report and strategy under paragraph (1) shall be submitted by—

(A) for the first report, not later than 18 months after the date on which the working group is established under subsection (a)(1);

(B) for the second report, not later than 2 years after the date on which the first report is required to be submitted under subparagraph (A); and

(C) for the third report, not later than 2 years after the date on which the second report is required to be submitted under subparagraph (B).

(3) INFORMATION.—

(A) IN GENERAL.—The Secretaries may enter into an agreement with the Transportation Research Board of the National Academies of Sciences, Engineering, and Medicine to provide, track, or report data, information, or research to assist the Secretaries in carrying out paragraph (1).

(B) USE OF EXISTING INFORMATION.—In developing the report and strategy under paragraph (1), the Secretaries and the working group shall consider existing Federal, State, local, private sector, and academic data and information relating to electric vehicles and, to the maximum extent practicable, coordinate with the entities that publish that information—

(i) to prevent duplication of efforts by the Federal Government; and

(ii) to leverage existing information and complementary efforts.

(c) ELECTRIC VEHICLE RESOURCE GUIDE.—

(1) IN GENERAL.—The Secretaries shall electronically publish and update a resource guide to provide information to increase knowledge about electric vehicles and necessary charging infrastructure for consumers, State, local, and Tribal governments (including transit agencies or authorities, public tolling authorities, metropolitan planning organizations, public utility commissions, and public service companies), and businesses that sell motor vehicles.

(2) INCLUSIONS.—A resource guide under paragraph (1) shall include—

(A) information on—

(i) the general characteristics of electric vehicles (including passenger vehicles, electric vehicles for public transportation, school buses, and electric vehicles for commercial use); and

(ii) the types of charging solutions available to consumers, including, to the maximum extent practicable, a digitally accessible compilation of existing mapping of publicly available charging stations in the United States;

(B) information on electrifying business and government vehicle fleets;

(C) information on Federal grant programs available to State and local governments for the purchase of electric vehicles for public transportation;

(D) a description of current financial and nonfinancial incentives for electric vehicles; and

(E) any other information that—

(i) a representative of industry or State or local government requests to be included; and

(ii) the working group recommends and determines to be appropriate.

(3) USE OF EXISTING GUIDES.—In publishing and maintaining the resource guide under paragraph (1), the Secretaries and the working group shall consider existing Federal, State, local, private sector, and academic guides relating to electric vehicles and, to the maximum extent practicable, coordinate with the entities publishing those guides—

(A) to prevent duplication of efforts by the Federal Government; and

(B) to leverage existing information and complementary efforts.

(4) RESOURCE GUIDE OUTREACH.—The Secretaries, in consultation with the working group, shall conduct outreach to consumers, State, local, and Tribal governments (including transit agencies or authorities, public tolling authorities, metropolitan planning



organizations, public utility commissions, and public service companies), and businesses that sell motor vehicles through the websites of the Department of Transportation and the Department of Energy, social media, and other methods—

(A) to provide the resource guide under paragraph (1) to interested stakeholders, including relevant consumer groups and transportation-related organizations;

(B) to promote the use of electric vehicles in both government and industry fleets; and

(C) to educate individuals involved in the sale of motor vehicles about the benefits of electric vehicles.

(5) **SUBSEQUENT RESOURCE GUIDES.**—Not less frequently than every 2 years for the duration of the working group, the working group shall publish an update to the resource guide under paragraph (1), as appropriate based on technological innovation and subsequent information.

(6) **ACCESSIBILITY.**—The Secretaries shall each maintain the resource guide under paragraph (1) on a designated website, which may be an existing website, of each Secretary relating to electric vehicles.

(d) **COORDINATION.**—To the maximum extent practicable, the Secretaries and the working group shall carry out this section using all available existing resources, websites, and databases of Federal agencies, such as the Alternative Fuels Data Center, the Energy Efficient Mobility Systems program, and the Clean Cities Coalition Network.

(e) **FUNDING.**—The Secretaries shall carry out this section using existing funds made available to the Secretaries and not otherwise obligated, of which—

(1) 50 percent shall be from funds made available to the Secretary of Transportation; and

(2) 50 percent shall be from funds made available to the Secretary of Energy.

(f) **TERMINATION.**—The working group shall terminate on the date on which the third report under subsection (b) is submitted.

**SA 1426.** Mr. CASEY submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

In section 2212(a), strike paragraph (1) and insert the following:

(1) **HYBRID MICRO-GRID SYSTEM.**—The term “hybrid micro-grid system” means a micro-grid system that—

(A) comprises generation from both conventional and renewable energy resources; and

(B) may use grid-scale energy storage.

In section 2212(a), strike paragraph (3) and insert the following:

(3) **MICRO-GRID SYSTEM.**—The term “micro-grid system” means a localized grid that operates autonomously, regardless of whether the grid can operate in connection with another grid.

In section 2212, add at the end the following:

(e) **MUNICIPAL MICRO-GRID SYSTEMS.**—

(1) **REPORT.**—Not later than 270 days after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on the benefits of, and barriers to, implementing resilient micro-grid systems that are—

(A)(i) owned or operated by isolated communities or municipal governments; or

(ii) operated on behalf of municipal governments; and

(B) designed to maximize the use of—

(i) energy-generation facilities owned or operated by isolated communities; or

(ii) municipal energy-generation facilities.

(2) **GRANTS TO OVERCOME BARRIERS.**—The Secretary shall award grants of not more than \$500,000 to not fewer than 10 municipal governments or isolated communities each year to assist those municipal governments and isolated communities in overcoming the barriers identified in the report under paragraph (1).

**SA 1427.** Mr. THUNE submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in subtitle H of title I, insert the following:

**SEC. 180 . SENSE OF SENATE REGARDING FEDERAL POWER MARKETING ADMINISTRATIONS.**

It is the sense of the Senate that—

(1) Federal electric transmission assets under the authority of the Southeastern Power Administration, the Southwestern Power Administration, the Western Area Power Administration, and the Bonneville Power Administration (referred to in this section as the “Federal power marketing administrations”) should not be sold;

(2) the sale of Federal power marketing administration assets would result in utility rate increases for consumers;

(3) unobligated balances managed by the Federal power marketing administrations are a necessary financial resource that enable the Federal power marketing administrations to meet operation and maintenance needs and applicable purchase power and wheeling requirements;

(4) funds appropriated to the Federal power marketing administrations are repaid by customers of the Federal power marketing administrations; and

(5) the Congressional Budget Office should not score purchase power and wheeling activities carried out by the Federal power marketing administrations.

**SA 1428.** Mr. GRASSLEY (for himself and Mr. MARKEY) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of part I of subtitle B of title II, add the following:

**SEC. 220 . WHISTLEBLOWER PROTECTION FOR EMPLOYEES RESPONSIBLE FOR ENSURING THE RELIABILITY, RESILIENCE, AND SECURITY OF THE ELECTRIC GRID.**

Section 215A of the Federal Power Act (16 U.S.C. 824o–1) is amended by adding at the end the following:

“(g) **WHISTLEBLOWER PROTECTION.**—

“(1) **DEFINITIONS.**—In this subsection:

“(A) **ELECTRIC RELIABILITY ORGANIZATION; REGIONAL ENTITY; RELIABILITY STANDARD.**—The terms ‘Electric Reliability Organization’, ‘regional entity’, and ‘reliability standard’ have the meanings given the terms in section 215(a).

“(B) **ELECTRIC GRID.**—The term ‘electric grid’ means—

“(i) all aspects of the generation, transmission, and distribution of electricity, whether interstate or intrastate; and

“(ii) the supply chain of equipment and software used in the generation, transmission, and distribution of electricity.

“(C) **EMPLOYEE.**—The term ‘employee’ means an individual who is an employee, former employee, contractor, subcontractor, grantee, or agent of an employer.

“(D) **EMPLOYER.**—

“(i) **IN GENERAL.**—The term ‘employer’ means an individual or entity in the public or private sector, including any Federal, State, or local government agency, that employs or retains the services of an individual who has access to—

“(I) critical electric infrastructure information or other information relating to critical electric infrastructure; or

“(II) other information relating to the reliability, resilience, or security of the electric grid.

“(ii) **INCLUSIONS.**—The term ‘employer’ includes an officer, employee, contractor, subcontractor, grantee, or agent of an individual or entity described in clause (i).

“(2) **WHISTLEBLOWER PROTECTION FOR EMPLOYEES.**—No employer may discharge, demote, suspend, threaten, blacklist, breach confidentiality, harass, or in any other manner discriminate against an employee with regard to the compensation, terms, conditions, or privileges of employment (including through an act in the ordinary course of the duties of the employee) because the employee or an individual associated with, or acting pursuant to a request of, the employee—

“(A) provided or caused to be provided information that the employee or individual associated with, or acting pursuant to the request of, the employee reasonably believed to evidence a violation of any provision of Federal or State law (including regulations) relating to fire safety or the protection or security of electric infrastructure (including critical electric infrastructure), critical electric infrastructure information, or other information relating to the reliability, resilience, or security of the electric grid, including a reliability standard, such as a Critical Infrastructure Protection standard, if that information is provided to—

“(i) the Commission;

“(ii) the Electric Reliability Organization;

“(iii) a regional entity;

“(iv) a Regional Transmission Organization;

“(v) an Independent System Operator;

“(vi) the Secretary;

“(vii) the Secretary of Homeland Security;

“(viii) the Attorney General;

“(ix) Congress;

“(x) a State regulatory authority or State inspector general;

“(xi) an individual with supervisory authority over the employee, including in communications that are part of the job duties of the employee; or

“(xii) any other individual working for the employer who the employee or associated or requested individual reasonably believes has the authority—

“(I) to investigate, discover, or terminate the misconduct; or

“(II) to take any other action to address the misconduct;

“(B) assisted in an investigation regarding the violation of any provision of Federal or State law described in subparagraph (A) if that assistance is provided to an individual or entity described in clauses (i) through (xii) of that subparagraph;

“(C) has filed or caused to be filed, or plans imminently (with the knowledge of the employer) to file or cause to be filed, a proceeding relating to any violation or alleged

violation of any provision of Federal or State law (including regulations) described in subparagraph (A); or

“(D) testified, participated, or otherwise assisted in an administrative or judicial action taken by the Commission, an Electric Reliability Organization, a regional entity, a State regulatory authority, or a State inspector general relating to an alleged violation of any provision of Federal or State law (including rules and regulations) relating to the protection, security, reliability, or resilience of electric infrastructure (including critical electric infrastructure), critical electric infrastructure information, or other information relating to the reliability, resilience, or security of the electric grid, including a reliability standard, such as a Critical Infrastructure Protection standard.

“(3) ENFORCEMENT ACTIONS.—

“(A) IN GENERAL.—An individual who alleges discharge or another violation of paragraph (2) by any person may seek relief by filing a complaint with the Secretary of Labor by not later than 180 days after the date on which the alleged violation occurs.

“(B) PROCEDURES.—An action under subparagraph (A) shall be governed under the rules and procedures described in section 42121(b) of title 49, United States Code, except that—

“(i) the notification required under paragraph (1) of that section shall be made to the person named in the complaint and to the employer; and

“(ii) with respect to the legal burdens of proof described in that section—

“(I) each reference to ‘behavior described in paragraphs (1) through (4) of subsection (a)’ contained in paragraph (2)(B) of that section shall be considered to be a reference to behavior described in subparagraphs (A) through (D) of paragraph (2) of this subsection; and

“(II) any reference to a ‘violation of subsection (a)’ contained in that section shall be considered to be a reference to a violation of paragraph (2) of this section.

“(C) ACTION BY SECRETARY.—

“(i) DEADLINE.—The Secretary of Labor shall act on a complaint filed under subparagraph (A) by the date that is 180 days after the date on which the complaint is filed.

“(ii) FAILURE TO ACT.—If the Secretary of Labor fails to act on a complaint filed by an individual who alleges discharge or another violation of paragraph (2), absent a sufficient demonstration that the failure to act is due to the bad faith of the individual, the individual who alleged the violation may file an action at law or equity for de novo review in a Federal district court of competent jurisdiction, in accordance with subparagraph (D).

“(D) ACTIONS FOR DE NOVO REVIEW.—

“(i) JURISDICTION.—The jurisdiction of a Federal district court over an action filed under subparagraph (C)(ii) shall be determined without regard to the amount in controversy.

“(ii) PROCEDURE.—

“(I) IN GENERAL.—An action under this subparagraph shall be governed under the rules and procedures described in section 42121(b) of title 49, United States Code, except that the notification required under paragraph (1) of that section shall be made to—

“(aa) the person named in the complaint; and

“(bb) the employer.

“(II) BURDENS OF PROOF.—An action under this subparagraph shall be governed by the legal burdens of proof described in section 42121(b) of title 49, United States Code, except that—

“(aa) each reference to ‘behavior described in paragraphs (1) through (4) of subsection (a)’ contained in paragraph (2)(B) of that sec-

tion shall be considered to be a reference to behavior described in subparagraphs (A) through (D) of paragraph (2) of this subsection; and

“(bb) any reference to a ‘violation of subsection (a)’ contained in that section shall be considered to be a reference to a violation of paragraph (2) of this section.

“(iii) STATUTE OF LIMITATIONS.—An action under this subparagraph shall be commenced by not later than 180 days after the date on which—

“(I) the alleged violation occurs; or

“(II) the applicable employee became aware of the violation.

“(iv) JURY TRIAL.—A party to an action under this subparagraph shall be entitled to trial by jury.

“(4) NONENFORCEABILITY OF CERTAIN PROVISIONS WAIVING RIGHTS AND REMEDIES OR REQUIRING ARBITRATION OF DISPUTES.—

“(A) WAIVER OF RIGHTS AND REMEDIES.—The rights and remedies provided under this subsection may not be waived by any agreement, policy, form, or condition of employment, including by a predispute arbitration agreement.

“(B) PREDISPUTE ARBITRATION AGREEMENTS.—No predispute arbitration agreement shall be valid or enforceable if the agreement requires arbitration of a dispute arising under this subsection.”.

**SA 1429.** Mr. HEINRICH (for himself and Mr. GARDNER) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

**TITLE IV—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986**

**SEC. 4001. ENERGY CREDIT FOR ENERGY STORAGE TECHNOLOGIES.**

(a) IN GENERAL.—Subclause (II) of section 48(a)(2)(A)(i) of the Internal Revenue Code of 1986 is amended by striking “paragraph (3)(A)(i)” and inserting “clause (i) or (viii) of paragraph (3)(A)”.

(b) ENERGY STORAGE TECHNOLOGIES.—Subparagraph (A) of section 48(a)(3) of the Internal Revenue Code of 1986 is amended by striking “or” at the end of clause (vi), by adding “or” at the end of clause (vii), and by adding at the end the following new clause:

“(viii) equipment which receives, stores, and delivers energy using batteries, compressed air, pumped hydropower, hydrogen storage (including hydrolysis), thermal energy storage, regenerative fuel cells, flywheels, capacitors, superconducting magnets, or other technologies identified by the Secretary in consultation with the Secretary of Energy, and which has a capacity of not less than 5 kilowatt hours.”.

(c) PHASEOUT OF CREDIT.—Paragraph (6) of section 48(a) of the Internal Revenue Code of 1986 is amended—

(1) by striking “ENERGY” in the heading and inserting “AND ENERGY STORAGE”; and

(2) by striking “paragraph (3)(A)(i)” both places it appears and inserting “clause (i) or (viii) of paragraph (3)(A)”.

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2019.

**SEC. 4002. RESIDENTIAL ENERGY EFFICIENT PROPERTY CREDIT FOR BATTERY STORAGE TECHNOLOGY.**

(a) IN GENERAL.—Subsection (a) of section 25D of the Internal Revenue Code of 1986 is amended by striking “and” at the end of

paragraph (4), by inserting “and” after the comma at the end of paragraph (5), and by adding at the end the following new paragraph:

“(6) the qualified battery storage technology expenditures.”.

(b) QUALIFIED BATTERY STORAGE TECHNOLOGY EXPENDITURE.—Subsection (d) of section 25D of the Internal Revenue Code of 1986 is amended by adding at the end the following new paragraph:

“(6) QUALIFIED BATTERY STORAGE TECHNOLOGY EXPENDITURE.—The term ‘qualified battery storage technology expenditure’ means an expenditure for battery storage technology which—

“(A) is installed on or in connection with a dwelling unit located in the United States and used as a residence by the taxpayer, and

“(B) has a capacity of not less than 3 kilowatt hours.”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to expenditures paid or incurred in taxable years beginning after December 31, 2019.

**SA 1430.** Ms. CANTWELL submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle H of title I, add the following:

**SEC. 18 . METHANE LEAK DETECTION AND MITIGATION.**

(a) IN GENERAL.—Subtitle F of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16291 et seq.) (as amended by section 1405(a)) is amended by adding at the end the following:

**“SEC. 969B. METHANE LEAK DETECTION AND MITIGATION.**

“(a) IN GENERAL.—The Secretary, in consultation with the Administrator of the Environmental Protection Agency and the heads of other appropriate Federal agencies, shall carry out a program of methane leak detection and mitigation research, development, demonstration, and commercial application for technologies and methods that significantly reduce methane emissions (referred to in this section as the ‘program’).

“(b) REQUIREMENTS.—In carrying out the program, the Secretary shall—

“(1) develop cooperative agreements with State or local governments or private entities to provide technical assistance—

“(A) to prevent or respond to methane leaks, including detection, mitigation, and identification of methane leaks throughout the natural gas infrastructure (including natural gas storage, pipelines, and natural gas production sites); and

“(B) to protect public health in the event of a major methane leak;

“(2) promote demonstration and adoption of effective methane emissions reduction technologies in the private sector;

“(3) in coordination with representatives from private industry, State and local governments, and institutions of higher education, create a publicly accessible resource for best practices in the design, construction, maintenance, performance, monitoring, and incident response for—

“(A) pipeline systems;

“(B) wells;

“(C) compressor stations;

“(D) storage facilities; and

“(E) other vulnerable infrastructure;

“(4) identify high-risk characteristics of pipelines, wells, and materials, geologic risk factors, or other key factors that increase the likelihood of methane leaks; and

“(5) in collaboration with private entities and institutions of higher education, quantify and map significant geologic methane seeps across the United States.

“(c) CONSIDERATIONS.—In carrying out the program, the Secretary shall consider—

“(1) historical data relating to methane leaks;

“(2) public health consequences;

“(3) public safety;

“(4) novel materials and designs for pipelines, compressor stations, components, and wells (including casing, cement, and wellheads);

“(5) regional geologic traits; and

“(6) induced and natural seismicity.

“(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

“(1) \$22,000,000 for fiscal year 2021;

“(2) \$24,000,000 for fiscal year 2022;

“(3) \$26,000,000 for fiscal year 2023;

“(4) \$28,000,000 for fiscal year 2024; and

“(5) \$30,000,000 for fiscal year 2025.”

(b) TECHNICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600) (as amended by section 1405(b)) is amended by adding at the end of the items relating to subtitle F of title IX the following:

“Sec. 969B. Methane leak detection and mitigation.”

**SA 1431.** Ms. CANTWELL submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 409, line 25, strike “and”.

On page 410, line 3, strike “and”; and” and insert “and”.

On page 410, between lines 3 and 4, insert the following:

“(v) provide transformative solutions to improve the management, clean-up, and disposal of radioactive waste and spent nuclear fuel; and”; and

**SA 1432.** Ms. CANTWELL submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

#### **SEC. \_\_\_\_\_. COUNCIL ON ENVIRONMENTAL QUALITY.**

Notwithstanding any other provision of law, before January 1, 2023, the Council on Environmental Quality shall not promulgate any amendment to regulations in effect on the date of enactment of this Act that reduces—

(1) opportunities for public participation; or

(2) public notice requirements.

**SA 1433.** Mr. MENENDEZ submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### **TITLE IV—MISCELLANEOUS**

##### **SEC. 4001. PROHIBITION OF OIL AND GAS LEASING IN CERTAIN AREAS OF THE OUTER CONTINENTAL SHELF.**

Section 8 of the Outer Continental Shelf Lands Act (43 U.S.C. 1337) is amended by adding at the end the following:

“(q) PROHIBITION OF OIL AND GAS LEASING IN CERTAIN AREAS OF THE OUTER CONTINENTAL SHELF.—Notwithstanding any other provision of this section or any other law, the Secretary of the Interior shall not issue a lease or any other authorization for the exploration, development, or production of oil, natural gas, or any other mineral in—

“(1) the Mid-Atlantic planning area;

“(2) the South Atlantic planning area;

“(3) the North Atlantic planning area; or

“(4) the Straits of Florida planning area.”

**SA 1434.** Mr. MENENDEZ submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### **TITLE IV—MISCELLANEOUS**

##### **SEC. 4001. REMOVAL OF LIMITS ON LIABILITY FOR OFFSHORE FACILITIES.**

Section 1004(a)(3) of the Oil Pollution Act of 1990 (33 U.S.C. 2704(a)(3)) is amended by striking “plus \$75,000,000” and inserting “and the liability of the responsible party under section 1002”.

**SA 1435.** Mr. MENENDEZ submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### **TITLE IV—OIL SPILL LIABILITY**

##### **SEC. 4001. OIL SPILL LIABILITY TRUST FUND.**

(a) LIMITATIONS ON EXPENDITURES AND AUTHORITY TO BORROW.—Section 9509 of the Internal Revenue Code of 1986 is amended—

(1) in subsection (c)—

(A) by striking paragraph (2);

(B) by striking “EXPENDITURES” and all that follows through “Amounts in” and inserting “EXPENDITURES.—Amounts in”; and

(C) by redesignating subparagraphs (A) through (F) as paragraphs (1) through (6), respectively, and indenting appropriately;

(2) in subsection (d)—

(A) by striking paragraph (2);

(B) by redesignating paragraph (3) as paragraph (2); and

(C) in paragraph (2), as so redesignated—

(i) by striking subparagraph (B); and

(ii) by redesignating subparagraph (C) as subparagraph (B); and

(3) in subsection (e)(3)—

(A) by striking “(or is unable by reason of subsection (c)(2))”; and

(B) by striking “and such subsection”.

##### **SEC. 4002. ADVANCE PAYMENTS.**

Section 1012 of the Oil Pollution Act of 1990 (33 U.S.C. 2712) is amended by adding at the end the following:

“(m) ADVANCE PAYMENTS.—The President shall promulgate regulations that allow advance payments to be made from the Fund to States and political subdivisions of States

for actions taken to prepare for and mitigate substantial threats from the discharge of oil.”

**SA 1436.** Mr. MENENDEZ submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

#### **TITLE —CLOSING BIG OIL TAX LOOPHOLES**

##### **SEC. .01. SHORT TITLE.**

This title may be cited as the “Close Big Oil Tax Loopholes Act”.

##### **Subtitle A—Close Big Oil Tax Loopholes**

##### **SEC. .11. MODIFICATIONS OF FOREIGN TAX CREDIT RULES APPLICABLE TO MAJOR INTEGRATED OIL COMPANIES WHICH ARE DUAL CAPACITY TAXPAYERS.**

(a) IN GENERAL.—Section 901 of the Internal Revenue Code of 1986 is amended by redesignating subsection (n) as subsection (o) and by inserting after subsection (m) the following new subsection:

“(n) SPECIAL RULES RELATING TO MAJOR INTEGRATED OIL COMPANIES WHICH ARE DUAL CAPACITY TAXPAYERS.—

“(1) GENERAL RULE.—Notwithstanding any other provision of this chapter, any amount paid or accrued by a dual capacity taxpayer which is a major integrated oil company (within the meaning of section 167(h)(5)) to a foreign country or possession of the United States for any period shall not be considered a tax—

“(A) if, for such period, the foreign country or possession does not impose a generally applicable income tax, or

“(B) to the extent such amount exceeds the amount (determined in accordance with regulations) which—

“(i) is paid by such dual capacity taxpayer pursuant to the generally applicable income tax imposed by the country or possession, or

“(ii) would be paid if the generally applicable income tax imposed by the country or possession were applicable to such dual capacity taxpayer.

Nothing in this paragraph shall be construed to imply the proper treatment of any such amount not in excess of the amount determined under subparagraph (B).

“(2) DUAL CAPACITY TAXPAYER.—For purposes of this subsection, the term ‘dual capacity taxpayer’ means, with respect to any foreign country or possession of the United States, a person who—

“(A) is subject to a levy of such country or possession, and

“(B) receives (or will receive) directly or indirectly a specific economic benefit (as determined in accordance with regulations) from such country or possession.

“(3) GENERALLY APPLICABLE INCOME TAX.—For purposes of this subsection—

“(A) IN GENERAL.—The term ‘generally applicable income tax’ means an income tax (or a series of income taxes) which is generally imposed under the laws of a foreign country or possession on income derived from the conduct of a trade or business within such country or possession.

“(B) EXCEPTIONS.—Such term shall not include a tax unless it has substantial application, by its terms and in practice, to—

“(i) persons who are not dual capacity taxpayers, and

“(ii) persons who are citizens or residents of the foreign country or possession.”

## (b) EFFECTIVE DATE.—

(1) IN GENERAL.—The amendments made by this section shall apply to taxes paid or accrued in taxable years beginning after the date of the enactment of this Act.

(2) CONTRARY TREATY OBLIGATIONS UPHOLD.—The amendments made by this section shall not apply to the extent contrary to any treaty obligation of the United States.

**SEC. 12. LIMITATION ON DEDUCTION FOR INTANGIBLE DRILLING AND DEVELOPMENT COSTS; AMORTIZATION OF DISALLOWED AMOUNTS.**

(a) IN GENERAL.—Section 263(c) of the Internal Revenue Code of 1986 is amended to read as follows:

“(c) INTANGIBLE DRILLING AND DEVELOPMENT COSTS IN THE CASE OF OIL AND GAS WELLS AND GEOTHERMAL WELLS.—

“(1) IN GENERAL.—Notwithstanding subsection (a), and except as provided in subsection (i), regulations shall be prescribed by the Secretary under this subtitle corresponding to the regulations which granted the option to deduct as expenses intangible drilling and development costs in the case of oil and gas wells and which were recognized and approved by the Congress in House Concurrent Resolution 50, Seventy-ninth Congress. Such regulations shall also grant the option to deduct as expenses intangible drilling and development costs in the case of wells drilled for any geothermal deposit (as defined in section 613(e)(2)) to the same extent and in the same manner as such expenses are deductible in the case of oil and gas wells. This subsection shall not apply with respect to any costs to which any deduction is allowed under section 59(e) or 291.

“(2) EXCLUSION.—

“(A) IN GENERAL.—This subsection shall not apply to amounts paid or incurred by a taxpayer in any taxable year in which such taxpayer is a major integrated oil company (within the meaning of section 167(h)(5)).

“(B) AMORTIZATION OF AMOUNTS NOT ALLOWABLE AS DEDUCTIONS UNDER SUBPARAGRAPH (A).—The amount not allowable as a deduction for any taxable year by reason of subparagraph (A) shall be allowable as a deduction ratably over the 60-month period beginning with the month in which the costs are paid or incurred. For purposes of section 1254, any deduction under this subparagraph shall be treated as a deduction under this subsection.”.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to amounts paid or incurred in taxable years beginning after December 31, 2020.

**SEC. 13. LIMITATION ON PERCENTAGE DEPLETION ALLOWANCE FOR OIL AND GAS WELLS.**

(a) IN GENERAL.—Section 613A of the Internal Revenue Code of 1986 is amended by adding at the end the following new subsection:

“(f) APPLICATION WITH RESPECT TO MAJOR INTEGRATED OIL COMPANIES.—In the case of any taxable year in which the taxpayer is a major integrated oil company (within the meaning of section 167(h)(5)), the allowance for percentage depletion shall be zero.”.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to taxable years beginning after December 31, 2020.

**SEC. 15. LIMITATION ON DEDUCTION FOR TERTIARY INJECTANTS.**

(a) IN GENERAL.—Section 193 of the Internal Revenue Code of 1986 is amended by adding at the end the following new subsection:

“(d) APPLICATION WITH RESPECT TO MAJOR INTEGRATED OIL COMPANIES.—

“(1) IN GENERAL.—This section shall not apply to amounts paid or incurred by a taxpayer in any taxable year in which such taxpayer is a major integrated oil company (within the meaning of section 167(h)(5)).

“(2) AMORTIZATION OF AMOUNTS NOT ALLOWABLE AS DEDUCTIONS UNDER PARAGRAPH (1).—The amount not allowable as a deduction for any taxable year by reason of paragraph (1) shall be allowable as a deduction ratably over the 60-month period beginning with the month in which the costs are paid or incurred.”.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to amounts paid or incurred in taxable years beginning after December 31, 2020.

**SEC. 16. MODIFICATION OF DEFINITION OF MAJOR INTEGRATED OIL COMPANY.**

(a) IN GENERAL.—Paragraph (5) of section 167(h) of the Internal Revenue Code of 1986 is amended by adding at the end the following new subparagraph:

“(C) CERTAIN SUCCESSORS IN INTEREST.—For purposes of this paragraph, the term ‘major integrated oil company’ includes any successor in interest of a company that was described in subparagraph (B) in any taxable year, if such successor controls more than 50 percent of the crude oil production or natural gas production of such company.”.

(b) CONFORMING AMENDMENTS.—

(1) IN GENERAL.—Subparagraph (B) of section 167(h)(5) of the Internal Revenue Code of 1986 is amended by inserting “except as provided in subparagraph (C),” after “For purposes of this paragraph.”.

(2) TAXABLE YEARS TESTED.—Clause (iii) of section 167(h)(5)(B) of such Code is amended—

(A) by striking “does not apply by reason of paragraph (4) of section 613A(d)” and inserting “did not apply by reason of paragraph (4) of section 613A(d) for any taxable year after 2004”, and

(B) by striking “does not apply” in subclause (II) and inserting “did not apply for the taxable year”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after December 31, 2020.

**Subtitle B—Outer Continental Shelf Oil and Natural Gas**

**SEC. 21. REPEAL OF OUTER CONTINENTAL SHELF DEEP WATER AND DEEP GAS ROYALTY RELIEF.**

(a) IN GENERAL.—Sections 344 and 345 of the Energy Policy Act of 2005 (42 U.S.C. 15904, 15905) are repealed.

(b) ADMINISTRATION.—The Secretary of the Interior shall not be required to provide for royalty relief in the lease sale terms beginning with the first lease sale held on or after the date of enactment of this Act for which a final notice of sale has not been published.

**Subtitle C—Miscellaneous**

**SEC. 31. DEFICIT REDUCTION.**

The net amount of any savings realized as a result of the enactment of this title and the amendments made by this title (after any expenditures authorized by this title and the amendments made by this title) shall be deposited in the Treasury and used for Federal budget deficit reduction or, if there is no Federal budget deficit, for reducing the Federal debt in such manner as the Secretary of the Treasury considers appropriate.

**SEC. 32. BUDGETARY EFFECTS.**

The budgetary effects of this title, for the purpose of complying with the Statutory Pay-As-You-Go Act of 2010, shall be determined by reference to the latest statement titled “Budgetary Effects of PAYGO Legislation” for this title, submitted for printing in the Congressional Record by the Chairman of the Senate Budget Committee, provided that such statement has been submitted prior to the vote on passage.

**SA 1437.** Mr. BOOKER (for himself, Mr. WHITEHOUSE, Mr. CASEY, and Mr.

VAN HOLLEN) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title II, add the following:

**Subtitle D—Federal Energy Regulatory Commission**

**SEC. 24. RATES.**

Section 205 of the Federal Power Act (16 U.S.C. 824d) is amended by adding at the end the following:

“(h) STATE ENVIRONMENTAL POLICIES.—

“(1) DEFINITION OF COVERED STATE PUBLIC POLICY RESOURCE.—In this subsection, the term ‘covered State public policy resource’ means a resource that is procured through, or supported by, State environmental policies.

“(2) RATE APPROVAL AND DETERMINATIONS.—The Commission shall not approve a rate under this part or otherwise determine that a rate is just and reasonable or is not unduly discriminatory or preferential if, through the adoption of a minimum offer price rule or other market mechanism requiring a covered State public policy resource to bid into a market or auction at an amount above the actual going forward costs of the resource, the rate prevents a covered State public policy resource from being able to clear in a capacity auction or an energy market auction.”.

**SA 1438.** Mrs. GILLIBRAND (for herself and Mr. SCHUMER) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle E of title I, add the following:

**SEC. 15. NUCLEAR LICENSE TRANSFERS.**

Section 103 of the Atomic Energy Act of 1954 (42 U.S.C. 2133) is amended—

(1) in subsection d., in the second sentence, by striking “any any” and inserting “any”;

(2) by redesignating subsection f. as subsection e.; and

(3) by adding at the end the following:

“f. PUBLIC HEARING ON LICENSE TRANSFERS.—

“(1) DEFINITIONS.—In this subsection, the term ‘applicable license’ includes—

“(A) a provisional operating license;

“(B) a facility operating license;

“(C) a general license for independent spent fuel storage installation; and

“(D) any other license covering—

“(i) the operation or decommissioning of a commercially-owned nuclear power plant; or

“(ii) the storage of waste at an operating or decommissioned commercially-owned nuclear power plant.

“(2) PUBLIC HEARING REQUIRED.—If a request for a hearing or a petition for leave to intervene is timely filed by a State, a political subdivision of a State, or any other party with an interest that may be affected by a proposed transfer of an applicable license (including an applicable license issued under this section, section 104 b., or any other applicable law), the Commission shall not take any action to approve the transfer of the applicable license or the transfer of any authority to conduct licensed activities

before holding a public hearing on the proposed transfer.”.

**SA 1439.** Mr. SCOTT of South Carolina (for himself and Mr. MENENDEZ) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ CARBON MONOXIDE ALARMS OR DETECTORS IN FEDERALLY ASSISTED HOUSING.**

(a) FINDINGS.—Congress finds that—

(1) carbon monoxide alarms are not required by federally assisted housing programs, when not required by State or local codes;

(2) numerous federally assisted housing residents have lost their lives due to carbon monoxide poisoning;

(3) the effects of carbon monoxide poisoning occur immediately and can result in death in a matter of minutes;

(4) carbon monoxide exposure can cause permanent brain damage, life-threatening cardiac complications, fetal death or miscarriage, and death, among other harmful health conditions;

(5) carbon monoxide poisoning is especially dangerous for unborn babies, children, elderly individuals, and individuals with cardiovascular disease, among others with chronic health conditions;

(6) the majority of the 4,600,000 families receiving Federal housing assistance are families with young children, elderly individuals, or individuals with disabilities, making them especially vulnerable to carbon monoxide poisoning;

(7) more than 400 people die and 50,000 additional people visit the emergency room annually as a result of carbon monoxide poisoning;

(8) carbon monoxide poisoning is entirely preventable and early detection is possible with the use of carbon monoxide alarms;

(9) the Centers for Disease Control and Prevention warns that carbon monoxide poisoning is entirely preventable and recommends the installation of carbon monoxide alarms;

(10) the Office of Lead Hazard Control and Healthy Homes of the Department of Housing and Urban Development recommends the installation of carbon monoxide alarms as a best practice to keep families and individuals safe and to protect health; and

(11) in order to safeguard the health and well-being of tenants in federally assisted housing, the Federal Government should consider best practices for primary prevention of carbon monoxide-related incidents.

(b) PUBLIC HOUSING AND TENANT- AND PROJECT-BASED ASSISTANCE.—The United States Housing Act of 1937 (42 U.S.C. 1437 et seq.) is amended—

(1) in section 3(a) (42 U.S.C. 1437a(a)), by adding at the end the following:

“(8) CARBON MONOXIDE ALARMS.—Each public housing agency shall ensure that carbon monoxide alarms or detectors are installed in each dwelling unit in public housing owned or operated by the public housing agency in a manner that meets or exceeds—

“(A) the standards described in chapters 9 and 11 of the 2018 publication of the International Fire Code, as published by the International Code Council; or

“(B) any other standards as may be adopted by the Secretary, including any relevant

updates to the International Fire Code, through a notice published in the Federal Register.”; and

(2) in section 8 (42 U.S.C. 1437f)—

(A) by inserting after subsection (i) the following:

“(j) CARBON MONOXIDE ALARMS.—Each owner of a dwelling unit receiving project-based assistance under this section shall ensure that carbon monoxide alarms or detectors are installed in the dwelling unit in a manner that meets or exceeds—

“(1) the standards described in chapters 9 and 11 of the 2018 publication of the International Fire Code, as published by the International Code Council; or

“(2) any other standards as may be adopted by the Secretary, including any relevant updates to the International Fire Code, through a notice published in the Federal Register.”; and

(B) in subsection (o), by adding at the end the following:

“(21) CARBON MONOXIDE ALARMS.—Each dwelling unit receiving tenant-based assistance or project-based assistance under this subsection shall have carbon monoxide alarms or detectors installed in the dwelling unit in a manner that meets or exceeds—

“(A) the standards described in chapters 9 and 11 of the 2018 publication of the International Fire Code, as published by the International Code Council; or

“(B) any other standards as may be adopted by the Secretary, including any relevant updates to the International Fire Code, through a notice published in the Federal Register.”.

(c) SUPPORTIVE HOUSING FOR THE ELDERLY.—Section 202(j) of the Housing Act of 1959 (12 U.S.C. 1701q(j)) is amended by adding at the end the following:

“(9) CARBON MONOXIDE ALARMS.—Each owner of a dwelling unit assisted under this section shall ensure that carbon monoxide alarms or detectors are installed in the dwelling unit in a manner that meets or exceeds—

“(A) the standards described in chapters 9 and 11 of the 2018 publication of the International Fire Code, as published by the International Code Council; or

“(B) any other standards as may be adopted by the Secretary, including any relevant updates to the International Fire Code, through a notice published in the Federal Register.”.

(d) SUPPORTIVE HOUSING FOR PERSONS WITH DISABILITIES.—Section 811(j) of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 8013(j)) is amended by adding at the end the following:

“(7) CARBON MONOXIDE ALARMS.—Each dwelling unit assisted under this section shall contain installed carbon monoxide alarms or detectors that meet or exceed—

“(A) the standards described in chapters 9 and 11 of the 2018 publication of the International Fire Code, as published by the International Code Council; or

“(B) any other standards as may be adopted by the Secretary, including any relevant updates to the International Fire Code, through a notice published in the Federal Register.”.

(e) HOUSING OPPORTUNITIES FOR PERSONS WITH AIDS.—Section 856 of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 12905) is amended by adding at the end the following new subsection:

“(i) CARBON MONOXIDE ALARMS.—Each dwelling unit assisted under this subtitle shall contain installed carbon monoxide alarms or detectors that meet or exceed—

“(1) the standards described in chapters 9 and 11 of the 2018 publication of the International Fire Code, as published by the International Code Council; or

“(2) any other standards as may be adopted by the Secretary, including any relevant updates to the International Fire Code, through a notice published in the Federal Register.”.

(f) RURAL HOUSING.—Title V of the Housing Act of 1949 (42 U.S.C. 1471 et seq.) is amended—

(1) in section 514 (42 U.S.C. 1484), by adding at the end the following:

“(j) Housing and related facilities constructed with loans under this section shall contain installed carbon monoxide alarms or detectors that meet or exceed—

“(1) the standards described in chapters 9 and 11 of the 2018 publication of the International Fire Code, as published by the International Code Council; or

“(2) any other standards as may be adopted by the Secretary, in collaboration with the Secretary of Housing and Urban Development, including any relevant updates to the International Fire Code, through a notice published in the Federal Register.”; and

(2) in section 515 (42 U.S.C. 1485)—

(A) in subsection (m), by inserting “(1)” before “The Secretary shall establish”; and

(B) by adding at the end the following:

“(2) Housing and related facilities rehabilitated or repaired with amounts received under a loan made or insured under this section shall contain installed carbon monoxide alarms or detectors that meet or exceed—

“(A) the standards described in chapters 9 and 11 of the 2018 publication of the International Fire Code, as published by the International Code Council; or

“(B) any other standards as may be adopted by the Secretary, in collaboration with the Secretary of Housing and Urban Development, including any relevant updates to the International Fire Code, through a notice published in the Federal Register.”.

(g) GUIDANCE.—The Secretary of Housing and Urban Development shall provide guidance to public housing agencies (as defined in section 3(b)(6) of the United States Housing Act of 1937 (42 U.S.C. 1437a(b)(6))) on how to educate tenants on health hazards in the home, including to carbon monoxide poisoning, lead poisoning, asthma induced by housing-related allergens, and other housing-related preventable outcomes, to help advance primary prevention and prevent future deaths and other harms.

(h) EFFECTIVE DATE.—The amendments made by this section shall take effect on the date that is 2 years after the date of enactment of this Act.

(i) NO PREEMPTION.—Nothing in the amendments made by this section shall be construed to preempt or limit the applicability of any State or local law relating to the installation and maintenance of carbon monoxide alarms or detectors in housing that requires standards that are more stringent than the standards described in the amendments made by this section.

(j) STUDY.—The Secretary of Housing and Urban Development, in consultation with the Consumer Product Safety Commission, shall conduct a study and issue a publicly available report on requiring carbon monoxide alarms or detectors in federally assisted housing that is not covered in the amendments made by this section.

(k) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated such sums as may be necessary to carry out this Act and the amendments made by this Act.

**SA 1440.** Mr. ENZI submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other

purposes; which was ordered to lie on the table; as follows:

At the end of subtitle A of title II, add the following:

**SEC. 21. REPORT TO ASSESS THE DEPENDENCE OF THE UNITED STATES ON RARE EARTH ELEMENTS PRODUCED IN FOREIGN COUNTRIES.**

Not later than 270 days after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Defense and the Secretary of the Interior, shall submit to Congress a report that—

(1) assesses the threat presented by the dependence of the United States on rare earth elements produced in foreign countries; and

(2) examines ways in which to revive and sustain the United States industrial base with respect to rare earth elements, specifically with respect to—

(A) traditional mining of rare earth elements;

(B) nontraditional corrosive extraction of rare earth elements from ore and coal; and

(C) nontraditional noncorrosive extraction of rare earth elements from ore and coal.

**SA 1441.** Mr. ENZI submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 449, line 11, insert “and coal mine refuse and tailings” after “mines”.

**SA 1442.** Mr. RUBIO (for himself and Mr. SCOTT of Florida) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. MORATORIUM ON OIL AND GAS LEASING IN CERTAIN AREAS OF GULF OF MEXICO.**

Section 104(a) of the Gulf of Mexico Energy Security Act of 2006 (43 U.S.C. 1331 note; Public Law 109-432) is amended in the matter preceding paragraph (1) by striking “June 30, 2022” and inserting “June 30, 2032”.

**SA 1443.** Mr. RUBIO submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. RARE EARTH REFINERY COOPERATIVE AND INDUSTRIAL PRODUCTS CORPORATION.**

(a) FINDINGS; STATEMENT OF POLICY.—

(1) FINDINGS.—Congress finds the following:

(A) Rare earth elements are critical for advanced energy technologies, national defense, and other commercial and industrial applications.

(B) The People's Republic of China (referred to in this paragraph as “China”) has leveraged its monopoly control over the rare

earth value chain to force corporations from the United States, Europe, Japan, and South Korea to transfer manufacturing facilities, technology, and jobs to China in exchange for secure supply contracts.

(C) The increasingly aggressive mercantile behavior of China has led to involuntary transfers of technology, manufacturing, and jobs, which has resulted in onerous trade imbalances with the United States and trading partners of the United States.

(D) The Comptroller General of the United States has confirmed that the monopoly control of China over the rare earth value chain has resulted in vulnerabilities in the procurement of multiple United States weapons systems.

(E) Direct links exist between rare earth mineralogy and thorium.

(F) Thorium is a radioactive element commonly associated with the lanthanide elements in most rare earth deposits located in the United States and elsewhere.

(G) Regulations regarding thorium represent a barrier to the development of a rare earth industry that is based in the United States.

(H) Meeting the strategic national interest objectives of the United States and economic and environmental goals are best achieved through the creation of a rare earth cooperative.

(I) A rare earth cooperative could—

(i) greatly increase the production of rare earth elements;

(ii) ensure environmental safety; and

(iii) lower the cost of the production and financial risks faced by rare earth producers in the United States.

(J) Historically, agricultural and electric cooperatives have stood as one of the greatest success stories of the United States.

(2) STATEMENT OF POLICY.—It is the policy of the United States to advance domestic refining of rare earth elements and the safe storage of thorium in anticipation of the potential future industrial uses of thorium, including energy, because—

(A) thorium has a mineralogical association with valuable rare earth elements;

(B) there is a great need to develop domestic refining capacity to process domestic rare earth element deposits; and

(C) the economy of the United States would benefit from the rapid development and control of intellectual property relating to the commercial development of technology utilizing thorium.

(b) DEFINITIONS.—In this section:

(1) ACTINIDE.—The term “actinide” means a natural element associated with any of the series of 15 metallic elements between actinium, with atomic number 89, and lawrencium, with atomic number 103, on the periodic table.

(2) COOPERATIVE.—The term “Cooperative” means the Thorium-Bearing Rare Earth Refinery Cooperative established under subsection (c)(1).

(3) CORPORATION.—The term “Corporation” means the Thorium Storage, Energy, and Industrial Products Corporation established under subsection (d)(1).

(4) NATIONAL LABORATORY.—The term “National Laboratory” has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

(5) RARE EARTH ELEMENT.—The term “rare earth element” means a natural element associated with—

(A) the metallic element scandium, with atomic number 21, or yttrium, with atomic number 39;

(B) any of the series of 15 metallic elements between lanthanum, with atomic number 57, and lutetium, with atomic number 71, on the periodic table; or

(C) any of the series of 15 metallic elements between actinium, with atomic number 89, and lawrencium, with atomic number 103, on the periodic table.

(c) RARE EARTH REFINERY COOPERATIVE.—

(1) ESTABLISHMENT.—Not later than 60 days after the date of enactment of this Act, the Secretary of Commerce shall coordinate with any relevant Federal agencies to procure the issuance of a Federal charter for a privately funded, privately operated, and privately managed cooperative with respect to rare earth elements, which—

(A) shall—

(i) be known as the Thorium-Bearing Rare Earth Refinery Cooperative;

(ii) coordinate the establishment of a fully integrated United States value chain with respect to rare earth elements to serve the national security needs of the United States and the needs of industry in the United States; and

(iii) produce products that use rare earth elements, including metal powders (such as rare earth oxides and rare earth salts, including chlorides and nitrates), metals containing rare earth elements, alloys, magnets, and other value-added products using rare earth elements, as required by—

(I) the owners of, and investors in, the Cooperative; and

(II) the defense industry of the United States; and

(B) may—

(i) accept domestic and international investment from—

(I) commercial or industrial users of products containing rare earth elements, including trade groups or associations formed to act on behalf of the defense industry or other end-users of those products; or

(II) any of the resource suppliers of the Cooperative;

(ii) accept investment or funding from foreign governments, State agencies, or State-sponsored entities, including universities or research institutions, subject to the approval of the Committee on Foreign Investment in the United States established under section 721(k) of the Defense Production Act of 1950 (50 U.S.C. 4565(k));

(iii) distribute finished goods and profits in proportion to investment;

(iv) on behalf of the owners of the Cooperative, sell surplus finished goods on the open market; and

(v) accept and process rare earth resources, or other critical minerals, with elevated levels of thorium or uranium that are—

(I) mined in the United States;

(II) from any domestic waste product, coproduct, or byproduct of some other mined commodity; or

(III) produced by any foreign supplier that has invested in the Cooperative.

(2) SECURING RARE EARTHS.—The following materials shall be considered to be an unrefined and unprocessed ore, as defined in section 40.4 of title 10, Code of Federal Regulations, or any successor regulation:

(A) Any material accepted by the Cooperative under paragraph (1)(B)(v).

(B) A thorium bearing rare earth ore that is—

(i) a byproduct or coproduct of another mined commodity; and

(ii) sold and shipped under a supply agreement with the Cooperative.

(3) PRODUCERS OF RARE EARTHS.—A producer that acts under a supply contract with the Cooperative may, under the rules for unrefined and unprocessed ore under part 40 of title 10, Code of Federal Regulations, process, manage, and transport any material with respect to which the contract applies.

(4) LIABILITY.—Notwithstanding any other provision of law or regulation—



(A) the Federal Government shall not be liable for any activities of the Cooperative under this subsection; and

(B) the Cooperative shall establish and secure sufficient financial surety bonding and other insurance, consistent with private industry standards.

(d) THORIUM STORAGE, ENERGY, AND INDUSTRIAL PRODUCTS CORPORATION.—

(1) ESTABLISHMENT.—Not later than 60 days after the date of enactment of this Act, the Secretary shall coordinate with relevant Federal agencies to procure the issuance of a Federal charter for a privately funded and privately operated corporation, which—

(A) shall be known as the Thorium Storage, Energy, and Industrial Products Corporation; and

(B) in accordance with all applicable laws, regulations, and rules, shall—

(i) on a preprocessing basis, assume liability for and ownership of all thorium and mineralogically associated or related actinides and decay products contained within the rare earth element ores utilized by the Cooperative; and

(ii) take physical possession and safely store all thorium-containing actinide by-products, with the costs of the storage to be paid by the Cooperative; and

(iii) manage the sale of all valuable actinide and decay products, utilizing the proceeds for the development of commercial uses and market for thorium, including energy.

(2) THORIUM STORAGE.—The Corporation shall establish not less than 1 facility, each of which shall—

(A) be known as a “Thorium Bank”; and

(B) provide safe and long-term storage for all thorium produced as a byproduct in the production of rare earth elements for the Cooperative; and

(C) hold and maintain financial surety bonding and insurance consistent with private industry standards.

(3) INDUSTRIAL PRODUCTS.—The Corporation may establish not less than 1 division, each of which shall be known as an “Industrial Products Corporation”, for the certification, licensing, insuring, and commercial development of all nonenergy uses for thorium (including thorium isotopes and thorium daughter elements), including alloys, catalysts, medical isotopes, and other products.

(4) ENERGY APPLICATIONS.—The Corporation may establish not less than 1 energy products, energy systems, or energy applications division for the certification, licensing, insuring, commercial development, deployment, lease, and licensing of such products and services, including—

(A) developing intellectual property; and

(B) acquiring technology; and

(C) developing, manufacturing, operating, or leasing commercial thorium energy systems; and

(D) developing, manufacturing, operating, or leasing related thermal processing systems.

(5) INTERNATIONAL PARTNERSHIPS.—

(A) IN GENERAL.—The Corporation may sell or distribute equity and establish partnerships with the United States.

(B) FOREIGN INVESTORS.—Any foreign investor in the Corporation shall make a voluntary filing with the Committee on Foreign Investment in the United States established under section 721(k) of the Defense Production Act of 1950 (50 U.S.C. 4565(k)).

(6) LIABILITY.—Notwithstanding any other provision of law or regulation—

(A) the Federal Government shall not be liable for any activities of the Corporation under this subsection; and

(B) the Corporation shall establish and secure sufficient financial surety bonding and other insurance, consistent with private in-

dustry standards, for the management and storage of radioactive materials and other waste and hazards.

(e) FEDERAL SUPPORT.—

(1) MEETINGS WITH RELEVANT PARTIES.—The Secretary of Commerce and the Secretary of Defense shall provide initial assistance to the Cooperative, and the Secretary and the Secretary of Defense shall provide initial assistance to the Corporation, by establishing peer-to-peer meetings with allies of the United States in the North Atlantic Treaty Organization, other allied foreign governments, Federal and State agencies, science and technology research institutions, and commercial users and consumers of rare earth elements and energy.

(2) ELIGIBILITY FOR CERTAIN SUPPORT.—

(A) GRANT AND LOAN PROGRAMS.—The Cooperative and the Corporation may apply for funding assistance provided by any relevant grant or loan program carried out by the Department, the Department of Defense, or the Department of Commerce, including, with respect to the Corporation—

(i) the Small Modular Reactor Licensing Technical Support Program of the Department; and

(ii) any program of the Office of Advanced Reactor Technologies of the Department.

(B) TECHNICAL AND DATA SUPPORT TO THE CORPORATION.—The National Laboratories shall provide technical and data support to the Corporation on parity with transfers made before the date of enactment of this Act by the National Laboratories to the Chinese Academy of Sciences and any other foreign agent or entity.

(3) DEPARTMENT OF ENERGY POLICY.—The Secretary shall adopt and execute a policy that promotes the United States, acting in conjunction with the Corporation, as a global leader in thorium energy systems.

(f) APPOINTMENT OF INITIAL OFFICERS.—

(1) IN GENERAL.—The Secretary of Commerce and the Secretary shall jointly appoint 2 citizens of the United States—

(A) neither of whom may be an employee of, consultant to, advisor to, or affiliate of the United States Government; and

(B) who shall act as the initial officers and Board of Directors of both the Cooperative and the Corporation.

(2) QUALIFICATIONS.—The 2 individuals appointed under paragraph (1) shall each have expertise in, and a history of promoting—

(A) the development of a platform—

(i) that is based in the United States; and

(ii) that is funded using multinational sources; and

(iii) the purpose of which is the development of a fully integrated rare earth value chain; and

(B) the commercial development of uses and markets for thorium, including energy.

(3) RESPONSIBILITIES.—The individuals appointed under paragraph (1) shall work with the Secretary of Commerce to develop corporate bylaws and terms of governance for the Cooperative, and with the Secretary to develop those bylaws and terms for the Corporation, which shall be set forth in a Memorandum of Understanding for each such entity that outlines specific obligations, commitments, limitations on sources of international investment, and goals that are specific to the national interests of the United States.

(4) DURATION OF SERVICE.—The individuals appointed under paragraph (1) shall continue to serve in those roles for as long as provided under the terms of governance developed under paragraph (3).

(g) OTHER PROVISIONS.—

(1) ANNUAL AUDITS.—The Cooperative and the Corporation shall, on the date that is 180 days after the date on which each such entity is established, and annually thereafter,

submit to the Secretary of Commerce, the Secretary, and the Secretary of Defense an audited report, which shall—

(A) be conducted by an outside auditing firm; and

(B) for the period covered by the report, evaluate the progress and success of the Cooperative and the Corporation in meeting all targets and objectives established by the Secretary, in consultation with the heads of other relevant Federal agencies.

(2) AUTHORITY OF THE SECRETARY OF DEFENSE.—The Secretary of Defense may monitor the output of the Cooperative and the Corporation with respect to the national security objectives set forth in the Memorandum of Understanding required for each entity under subsection (f)(3).

**SA 1444.** Mr. RUBIO submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

#### **SEC. \_\_\_\_ . INNOVATION AND SUPPLY CHAIN RESILIENCY LOANS.**

(a) IN GENERAL.—

(1) DEFINITIONS.—In this subsection—

(A) the term “manufacturing small business concern” means an eligible small business concern that—

(i) is assigned a code described in paragraph (7); and

(ii) is not more than 300 percent larger than the applicable size standard established for categorizing a business concern as a small business concern under section 3(a) of the Small Business Act (15 U.S.C. 632(a));

(B) the term “capital deepening” means the purchase, lease, or improvement or renovation of tangible long-term fixed assets, which shall not include furniture or automobiles;

(C) the term “code” means a North American Industry Classification System code;

(D) the term “historical average revenue” means, with respect to an manufacturing small business concern, the average annual amount of revenue of the manufacturing small business concern, as reported on the return or in the return information of the manufacturing small business concern, over the 3-year period preceding the date on which the manufacturing small business concern receives the first disbursement of an innovation and supply chain resiliency loan;

(E) the term “HUBZone” has the meaning given the term in section 31(b) of the Small Business Act (15 U.S.C. 657a(b));

(F) the term “innovation and supply chain resiliency loan” means a loan guaranteed under the authority under paragraph (2);

(G) the term “Loan Loss Reserve Fund” means the Loan Loss Reserve Fund established under paragraph (6); and

(H) the terms “return” and “return information” have the meanings given those terms in section 6103(b) of the Internal Revenue Code of 1986.

(2) AUTHORITY.—On and after the date that is 1 year after the date of enactment of this Act, the Administrator may guarantee the timely payment of a loan secured by property made to and a revolving line of credit provided to an manufacturing small business concern in accordance with this subsection.

(3) LEVEL OF PARTICIPATION.—

(A) MAXIMUM AMOUNT.—The maximum amount of an innovation and supply chain resiliency loan shall be \$50,000,000.

(B) PERCENTAGE.—The Administrator may guarantee not more than 80 percent of an innovation and supply chain resiliency loan.

## (C) USE OF FUNDS.—

(i) IN GENERAL.—A manufacturing small business concern shall use not less than 50 percent of the amounts received under an innovation and supply chain resiliency loan for capital deepening.

(ii) LIMITATION.—A tangible long-term fixed asset acquired with amounts received under an innovation and supply chain resiliency loan and used for capital deepening under clause (i) shall be located in the United States.

## (D) BENCHMARKS.—

(i) IN GENERAL.—A manufacturing small business concern that receives an innovation and supply chain resiliency loan shall, over the 3-year period beginning 2 years after the date on which the manufacturing small business concern receives the first disbursement of the loan, increase the revenue of the manufacturing small business concern by an average annual amount equal to not less than 15 percent of the loan principal above the historical average revenue of the manufacturing small business concern.

(ii) COUNTING OF EXPORT SALES.—For purposes of clause (i), the amount of revenue of a manufacturing small business concern that is attributable to exports shall be counted as being 1.5 times the amount of such revenue.

## (iii) COMPLIANCE WITH BENCHMARKS.—

## (I) FEE.—

(aa) IN GENERAL.—Except as provided in item (bb), at the end of the period described in clause (i), each manufacturing small business concern receiving an innovation and supply chain resiliency loan shall be assessed a performance incentive fee in an amount equal to 1 percent of the total amount to be disbursed to the manufacturing small business concern under the innovation and supply chain resiliency loan, which shall be added to the outstanding principal loan balance.

(bb) WAIVER.—A lender shall waive the performance incentive fee under item (aa) with respect to a manufacturing small business concern if the manufacturing small business concern increases the revenue of the manufacturing small business concern in accordance with clause (i).

(II) SUBSEQUENT DISBURSEMENTS.—A lender may not make the second disbursement, or any subsequent disbursements, of an innovation and supply chain resiliency loan to a manufacturing small business concern until after the date on which the revenues of the manufacturing small business concern over the most recent 3-year period have increased by an average annual amount equal to not less than 15 percent of the loan principal above the historical average revenue of the manufacturing small business concern.

(iv) CREDITING OF ADDITIONAL FEES.—A lender shall submit to the Administrator, for deposit in the Loan Loss Reserve Fund, any fee received under clause (iii)(I), less a reasonable cost-of-collection percentage retained by lender to cover costs, as determined by the Administrator.

(v) EXTENSIONS.—Not later than 180 days after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a process under which a manufacturing small business concern may apply for an extension of the timeframe established under clause (i).

## (4) PROVISION OF FUNDS.—

(A) IN GENERAL.—An innovation and supply chain resiliency loan shall be provided to the manufacturing small business concern in 2 or more disbursements, as determined by the lender.

(B) MAXIMUM FIRST DISBURSEMENT.—The first disbursement of a loan under this paragraph provided to the manufacturing small business concern shall be in an amount equal

to not more than 60 percent of the total amount of the loan.

(C) MINIMUM PERIOD FOR SECOND DISBURSEMENT.—The second disbursement of a loan under this paragraph—

(i) may not be provided to a manufacturing small business concern until after the date that is 5 years after the date on which the manufacturing small business concern receives the first disbursement; and

(ii) may only be provided to a manufacturing small business concern in accordance with paragraph (3)(D)(iii)(II).

(5) GROWTH INCENTIVE.—During the 4-year period beginning on the date on which a manufacturing small business concern that is a small business concern under the size standards under section 3(a) of the Small Business Act (15 U.S.C. 632(a)) receiving an innovation and supply chain resiliency loan ceases to comply with the size standards established under section 3(a)(2) of that Act (15 U.S.C. 632(a)(2)), the manufacturing small business concern shall be deemed to be a small business concern for purposes of any contracting program, preference, or set aside under the Small Business Act (15 U.S.C. 631 et seq.) or any other Act.

(6) INNOVATION AND SUPPLY CHAIN RESILIENCY LOAN LOSS RESERVE FUND.—

(A) ESTABLISHMENT.—There is established in the Treasury a fund, to be known as the Loan Loss Reserve Fund, into which shall be deposited—

(i) performance incentive fees collected under paragraph (3)(D)(iii)(I); and

(ii) any other fees collected under this subsection—

(I) in the manner and amount that the Administrator determines to be in accord with sound actuarial and accounting practice; and

(II) to ensure that the Loan Loss Reserve Fund complies with the requirement under subparagraph (C).

(B) DISTRIBUTION OF FUNDS.—Amounts in the Loan Loss Reserve Fund shall be available to satisfy unmet debt obligations for guarantees made under this subsection.

(C) CAPITAL RATIO.—

(i) DEFINITION.—In this subparagraph, the term “capital ratio” means, with respect to a date, the quotient obtained by dividing the amounts in the Loan Loss Reserve Fund, as of that date, by the outstanding guarantees under this subsection, as of that date.

(ii) REQUIREMENT.—Beginning in fiscal year 2022, the Administrator shall ensure that the Loan Loss Reserve Fund maintains a capital ratio that is not less than .005 and not greater than 0.01.

(7) INVOLVEMENT IN MANUFACTURING INDUSTRY.—

(A) IN GENERAL.—A business concern shall be considered to be involved in a manufacturing industry if the business concern is in the manufacturing sector and, subject to subparagraph (B), is, in 2020 (or, as of the date on which the lender makes a loan or provides a revolving line of credit to a manufacturing small business concern) assigned to any of the following codes or any 6-digit code associated with any of the following codes:

(i) 2111 (oil and gas extraction).

(ii) 2121 (coal mining).

(iii) 2211 (electric power generation, transmission and distribution).

(iv) 2212 (natural gas distribution).

(v) 3241 (petroleum and coal products manufacturing).

(vi) 3251 (basic chemical manufacturing).

(vii) 3315 (foundries).

(viii) 3332 (industrial machinery manufacturing).

(ix) 3336 (engine, turbine, and power transmission equipment manufacturing).

(x) 3346 (manufacturing and reproducing magnetic and optical media).

(xi) 3351 (electric lighting equipment manufacturing).

(xii) 3353 (electrical equipment manufacturing).

(xiii) 3359 (other electrical equipment and component manufacturing).

(xiv) 3252 (resin, synthetic rubber, and artificial and synthetic fibers and filaments manufacturing).

(xv) 3253 (pesticide, fertilizer, and other agricultural chemical manufacturing).

(xvi) 3254 (pharmaceutical and medicine manufacturing).

(xvii) 3259 (other chemical product and preparation manufacturing).

(xviii) 3271 (clay product and preparation manufacturing).

(xix) 3279 (other nonmetallic mineral product manufacturing).

(xx) 3311 (iron and steel mills and ferroalloy manufacturing).

(xxi) 3313 (alumina and aluminum production and processing).

(xxii) 3331 (agriculture, construction, and mining machinery manufacturing).

(xxiii) 3333 (commercial and service industry machinery manufacturing).

(xxiv) 3339 (other general purpose machinery manufacturing).

(xxv) 3341 (computer and peripheral equipment manufacturing).

(xxvi) 3342 (communications equipment manufacturing).

(xxvii) 3343 (audio and video equipment manufacturing).

(xxviii) 3345 (navigational, measuring, electromedical, and control instruments manufacturing).

(xxix) 3352 (household appliance manufacturing).

(xxx) 3361 (motor vehicle manufacturing).

(xxxi) 3362 (motor vehicle body and trailer manufacturing).

(xxxii) 3363 (motor vehicle parts manufacturing).

(xxxiii) 3364 (aerospace product and parts manufacturing).

(xxxiv) 3365 (railroad rolling stock manufacturing).

(xxxv) 3366 (ship and boat building).

(xxxvi) 3369 (other transportation equipment manufacturing).

(xxxvii) 3391 (medical equipment and supplies manufacturing).

(xxxviii) 3399 (other miscellaneous manufacturing).

(B) CERTAIN ENTITIES.—

(i) IN GENERAL.—The following entities shall be deemed to be assigned to a code described in clauses (i) through (xxxviii) of subparagraph (A) or a 6-digit code associated with such a code:

(I) A small business concern that has received an award under the Small Business Innovation Research Program or the Small Business Technology Transfer Program under section 9 of the Small Business Act (15 U.S.C. 638).

(II) A small business concern that has significant engagement with a Manufacturing USA institute, as defined in section 34(d) of the National Institute of Standards and Technology Act (15 U.S.C. 278s(d)).

(III) Any other small business concern if—

(aa) a foreign person sought to merge with, acquire, take over, or otherwise obtain control of the small business concern through a covered transaction (as defined in section 721(a) of the Defense Production Act of 1950 (50 U.S.C. 4565(a))); and

(bb) the Committee on Foreign Investment in the United States reviewed the covered transaction under section 721 of the Defense Production Act of 1950 (50 U.S.C. 4565) and recommended to the President that the President suspend or prohibit the covered transaction.

(ii) SIGNIFICANT ENGAGEMENT.—The Administrator and the Secretary of Commerce shall, by rule, determine what constitutes significant engagement for the purposes of clause (i)(II).

(8) MAINTENANCE OF LIST OF MANUFACTURING INDUSTRIES.—

(A) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, and every 3 years thereafter, the Administrator shall update the codes described in paragraph (7)(A) to ensure that the codes reflect manufacturing industries.

(B) CRITERIA FOR CONSIDERATION.—In updating a code under subparagraph (A) to ensure that the code reflects a manufacturing industry, the Administrator shall consider—

(i) whether the amount of spending on research and development per worker in the industry covered by the code is in not lower than the 75th percentile of such spending, as compared with all industries in the United States;

(ii) whether the percentage of workers in the industry covered by the code, the duties of whom require a high degree of training in the fields of science, technology, engineering, and mathematics, is above the national average, as compared with all industries in the United States; and

(iii) the role of the industry covered by the code in—

(I) the manufacturing sector of the economy of the United States; and

(II) the United States supply chain.

(9) NO SECONDARY MARKET SALES.—Notwithstanding section 5(f) of the Small Business Act (15 U.S.C. 634(f)), the guaranteed portion of an innovation and supply chain resiliency loan may not be sold by the lender.

(10) PERIOD OF MATURITY.—An innovation and supply chain resiliency loan shall have a period of maturity of not more than 25 years, which may be established by the lender to reflect the primary purpose of the loan.

(11) RATE OF INTEREST.—An innovation and supply chain resiliency loan shall have a rate of interest that is not more than the applicable maximum percentage rate of interest for a loan guaranteed under section 7(a) of the Small Business Act (15 U.S.C. 636(a)).

(12) GUARANTEE AND YEARLY FEES.—

(A) IN GENERAL.—Notwithstanding paragraphs (18) and (23) of section 7(a) of the Small Business Act (15 U.S.C. 636(a)), the Administrator may establish the guarantee and yearly fees assessed for an innovation and supply chain resiliency loan at a percentage of the loan that the Administrator determines necessary to reduce to zero the cost (as defined in section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a)) to the Administration of making guarantees under this subsection.

(B) PUBLICATION OF PROJECTED FEES.—When the Administrator changes fees under this paragraph, the Administrator shall publish—

(i) the projected annual fee rate for each year for the ensuing 10-year period; and

(ii) a description of the assumptions used by the Administrator in projecting fees under clause (i).

(C) WAIVER.—The Administrator shall waive 25 percent of the otherwise applicable guarantee and annual fees under subparagraph (A) if an manufacturing small business concern—

(i) uses the innovation and supply chain resiliency loan for activities substantially located within a HUBZone; and

(ii) is primarily located within a HUBZone.

(D) REGULATIONS.—Not later than 90 days after the date of enactment of this Act, the Administrator shall promulgate regulations establishing what constitutes—

(i) activities substantially located within a HUBZone; and

(ii) being primarily located within a HUBZone.

(13) CREDITWORTHINESS.—For purposes of an innovation and supply chain resiliency loan, a lender shall determine creditworthiness in the same manner as is required under the Export Working Capital Program established under section 7(a)(14)(A) of the Small Business Act (15 U.S.C. 636(a)(14)(A)) to the maximum extent practicable.

(14) PROVISION OF RETURNS AND RETURN INFORMATION.—As a condition of a loan guarantee under this subsection, a manufacturing small business concern shall agree to disclose, upon request of the Administrator, any return or return information the Administrator determines necessary to determine the historical average revenue of the manufacturing small business concern.

(15) OUTREACH PROGRAM.—The Administrator shall develop and implement an outreach program to inform and recruit manufacturing small business concerns to apply for innovation and supply chain resiliency loans, under which the Administrator shall make a sustained and substantial effort to engage—

(A) resource partners of the Administration;

(B) the Minority Business Development Agency;

(C) the National Network for Manufacturing Innovation;

(D) national and regional chambers of commerce, particularly those that work with small business concerns in underserved markets;

(E) national and regional business councils, particularly those that work with small business concerns in underserved markets;

(F) other public entities that work with small business concerns in underserved markets;

(G) the offices of Federal agencies responsible for the Small Business Innovation Research Program and Small Business Technology Transfer Program of the Federal agencies; and

(H) institutions of higher education, research institutions, and other academic institutions that are engaged in the study or promotion of manufacturing in the United States.

(16) THE NATIONAL SMALL BUSINESS INNOVATION WORKING GROUP.—

(A) ESTABLISHMENT.—There is established an advisory committee to be known as the National Small Business Innovation Working Group (referred to in this paragraph as the “advisory committee”).

(B) DUTIES.—

(i) IN GENERAL.—The advisory committee shall advise the Administrator with respect to activities proposed or undertaken to carry out the mission of the advisory committee under this paragraph.

(ii) CERTAIN RECOMMENDATIONS.—Activities of the advisory committee under clause (i) shall include making recommendations to the Administrator regarding—

(I) effective and efficient implementation of the innovation and supply chain resiliency loan product line established under this subsection;

(II) the overall performance and structure of the innovation and supply chain resiliency loan program established under this subsection, and measures that may improve the effectiveness and efficiency of the program; and

(III) applications for extensions made under the process established under paragraph (3)(D)(v).

(iii) CONSIDERATIONS.—In evaluating applications under paragraph (3)(D)(v), the advisory committee shall consider—

(I) the applicant’s prospects for future ability to meet the growth benchmarks estab-

lished under paragraph (3)(D)(i) if granted an extension;

(II) the technological and scientific promise of the uses to which the proceeds of the innovation and supply chain resiliency loan have been and will be directed;

(III) the local and regional economic development implications of the uses to which the proceeds of the innovation and supply chain resiliency loan have been and will be directed;

(IV) the importance to the national innovation ecosystem of the uses to which the proceeds of the innovation and supply chain resiliency loan have been and will be directed; and

(V) the importance to national or economic security of the uses to which the proceeds of the innovation and supply chain resiliency loan have been and will be directed.

(C) MEMBERSHIP.—

(i) IN GENERAL.—The advisory committee shall be composed of appointed members and ex officio members. All members of the advisory committee other than ex officio members shall be voting members.

(ii) APPOINTED MEMBERS.—

(I) IN GENERAL.—The Administrator shall appoint to the advisory committee 17 appropriately qualified individuals.

(II) NON-FEDERAL MEMBERS.—Not fewer than 12 members of the advisory committee shall be individuals who are not officers or employees of the United States.

(iii) REPRESENTATIVE MEMBERSHIP.—The Administrator shall ensure that the appointed members of the Committee, as a group, are representative of professions and entities concerned with, or affected by, activities under this paragraph, of which—

(I) 4 shall be individuals distinguished in the private sector in manufacturing industries;

(II) 4 shall be individuals distinguished in the academic study of manufacturing;

(III) 4 shall be representatives of the commercial lending community;

(IV) 4 shall be individuals distinguished in the field of innovation policy; and

(V) 1 shall be such individual as the Administrator may consider appropriate.

(iv) EX OFFICIO MEMBERS.—The ex officio members of the advisory committee shall be the following:

(I) The Director of the Advanced Research Projects Agency–Energy.

(II) The Director of the Defense Advanced Research Projects Agency.

(III) The Co-Chairs of the President’s Council of Advisors on Science and Technology.

(IV) The Director of the Advanced Manufacturing National Program Office.

(V) The Director of the Manufacturing Extension Partnership at the National Institute of Standards and Technology.

(VI) Not more than 3 other Federal officers, as the Administrator may consider appropriate.

(D) TERMS.—

(i) IN GENERAL.—Subject to clause (ii), members of the advisory committee appointed under subparagraph (C)(ii)(I) shall serve for a term of 3 years.

(ii) STAGGERED TERMS.—The Administrator shall appoint the initial members of the advisory committee under subparagraph (C)(ii)(I) for terms of 1, 2, or 3 years to ensure the staggered rotation of  $\frac{1}{3}$  of the members of the advisory committee each year.

(iii) SERVICE BEYOND TERM.—A member of the Committee appointed under subparagraph (C)(ii)(I) may continue to serve after the expiration of the term of the members until a successor is appointed.

(E) VACANCIES.—If a member of the advisory committee appointed under subparagraph (C)(ii)(I) does not serve the full term

applicable under subparagraph (D), the individual appointed to fill the resulting vacancy shall be appointed for the remainder of the term of the predecessor of the individual.

(F) CHAIRPERSON.—At the first meeting of the advisory committee, the voting members of the advisory committee shall, from among the members of the advisory committee appointed under subparagraph (C)(ii)(I), designate an individual to serve as the chairperson of the advisory committee. In the event that the advisory committee is unable to select a chairperson during its first meeting, the Administrator shall designate a chairperson from among the members of the advisory committee appointed under subparagraph (C)(ii)(I).

(G) MEETINGS.—The advisory committee shall meet not less than twice per year, not fewer than 5 months apart, and shall otherwise meet at the call of the Administrator or the chairperson.

(H) COMPENSATION AND REIMBURSEMENT OF EXPENSES.—

(i) APPOINTED MEMBERS.—Members of the advisory committee appointed under subparagraph (C)(ii)(I) shall receive compensation for each day (including travel time) engaged in carrying out the duties of the advisory committee in an amount not to exceed the daily equivalent of the annual rate of basic pay prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code, unless declined by the member.

(ii) EX OFFICIO MEMBERS.—Ex officio members of the advisory committee may not receive compensation for service on the advisory committee in addition to the compensation otherwise received for duties carried out as officers of the United States.

(I) STAFF.—The Administrator shall provide to the advisory committee such staff, information, and other assistance as may be necessary to carry out the duties of the advisory committee.

(J) DURATION.—Notwithstanding section 14(a) of the Federal Advisory Committee Act (5 U.S.C. App.), the advisory committee shall continue in existence until otherwise provided by law.

(K) EXEMPTIONS.—The advisory committee shall be exempt from the requirements of sections 10(a), 10(b), and 11 of the Federal Advisory Committee Act (5 U.S.C. App.).

(L) REPORT.—Not later than 1 year after the date of enactment of this Act, and not less than annually thereafter, the advisory committee shall submit to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business of the House of Representatives, the Administrator, and the President a report that describes the recommendations and evaluations required under subparagraph (B).

(17) ELIGIBILITY CRITERIA FOR LENDERS.—The Administrator shall establish eligibility criteria for lenders to participate in the loan guarantee program under this subsection, which shall include streamlined criteria for a lender that is participating in the Preferred Lenders Program, as defined in section 7(a)(2)(C)(iii) of the Small Business Act (15 U.S.C. 636(a)(2)(C)(iii)).

(18) APPLICABILITY.—Except as otherwise provided, the rules issued under, and any applicable terms with respect to, the program carried out under section 7(a) of the Small Business Act (15 U.S.C. 636(a)) shall apply with respect to the loan guarantee program under this subsection.

(19) CALCULATION OF SUBSIDY RATE.—All fees, interest, and profits received and retained by the Administration under this section shall be included in the calculations made by the Director of the Office of Management and Budget to offset the cost (as that term is defined in section 502 of the Fed-

eral Credit Reform Act of 1990 (2 U.S.C. 661a)) to the Administration of purchasing and guaranteeing loans under this subsection.

(20) APPLICABILITY.—Except as otherwise provided, the rules issued under, and any applicable terms with respect to, the program carried out under section 7(a) of the Small Business Act (15 U.S.C. 636(a)) shall apply with respect to the loan guarantee program under this subsection.

(b) AUTHORIZATION.—The Administrator may not make, with respect to guarantees under subsection (a), in the aggregate—

- (1) in fiscal year 2021, more than \$3,000,000,000 in guarantees;
- (2) in fiscal year 2022, more than \$5,000,000,000 in guarantees;
- (3) in fiscal year 2023, more than \$10,000,000,000 in guarantees;
- (4) in fiscal year 2024, more than \$15,000,000,000 in guarantees; and
- (5) in fiscal year 2025, more than \$15,000,000,000 in guarantees.

**SA 1445.** Mr. RUBIO submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

#### **SEC. \_\_\_\_ . SMALL BUSINESS INVESTMENT COMPANIES.**

(a) FEES; INNOVATION AND SUPPLY CHAIN RESILIENCY DEBENTURES; RESERVE FUND.—Part A of title III of the Small Business Investment Act of 1958 (15 U.S.C. 681 et seq.) is amended—

(1) in section 303 (15 U.S.C. 683)—

(A) in subsection (b), in the matter preceding paragraph (1), in the fifth sentence, by striking “established annually by the Administration, as necessary to reduce to zero the cost (as defined in section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a)) to the Administration of purchasing and guaranteeing debentures under this Act, which amount may not exceed 1.38 percent per year, and which shall be paid to and retained by the Administration” and inserting the following: “that the Administrator, by rule, shall establish, as necessary to reduce to zero the cost (as defined in section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a)) to the Administration of purchasing and guaranteeing debentures under this Act, and which shall be paid to and retained by the Administration. The Administrator may adjust the charge established under the preceding sentence only through notice and comment rule making conducted under section 553 of title 5, United States Code.”; and

(B) by adding at the end the following:

“(1) INNOVATION AND SUPPLY CHAIN RESILIENCY DEBENTURES.—

“(1) DEFINITIONS.—In this subsection:

“(A) CODE.—The term ‘code’ means a North American Industry Classification System code.

“(B) COVERED COMPANY.—

“(i) IN GENERAL.—The term ‘covered company’ means a small business investment company that—

“(I) is in compliance with the requirements of this title with respect to the issuance of debentures; and

“(II) invests solely in covered small business concerns involved in manufacturing industries, as determined under paragraph (2).

“(ii) RULE OF CONSTRUCTION.—A small business investment company shall not be precluded from being considered a covered company for the purposes of this subsection sole-

ly because of the status of the company as a subsidiary of another small business investment company.

“(iii) REGULATIONS.—The Administrator may issue regulations to provide further guidance regarding the rule of construction under clause (ii).

“(C) COVERED SMALL BUSINESS CONCERN.—The term ‘covered small business concern’—

“(i) means a small business concern; and

“(ii) includes an entity that is not more than 300 percent larger than the size standards established for categorizing a business concern as a small business concern under section 3(a) of the Small Business Act (15 U.S.C. 632(a)).

“(2) DETERMINATION.—

“(A) IN GENERAL.—For the purposes of paragraph (1)(B)(i)(II), a covered small business concern shall be considered to be involved in a manufacturing industry if the covered small business concern is in the manufacturing sector and, subject to paragraph (3), is, in 2020 (or, as of the date on which a covered company invests in the covered small business concern) assigned to any of the following codes or any 6-digit code associated with any of the following codes:

“(i) 2111 (oil and gas extraction).

“(ii) 2121 (coal mining).

“(iii) 2211 (electric power generation, transmission and distribution).

“(iv) 2212 (natural gas distribution).

“(v) 3241 (petroleum and coal products manufacturing).

“(vi) 3251 (basic chemical manufacturing).

“(vii) 3315 (foundries).

“(viii) 3332 (industrial machinery manufacturing).

“(ix) 3336 (engine, turbine, and power transmission equipment manufacturing).

“(x) 3346 (manufacturing and reproducing magnetic and optical media).

“(xi) 3351 (electric lighting equipment manufacturing).

“(xii) 3353 (electrical equipment manufacturing).

“(xiii) 3359 (other electrical equipment and component manufacturing).

“(xiv) 3252 (resin, synthetic rubber, and artificial and synthetic fibers and filaments manufacturing).

“(xv) 3253 (pesticide, fertilizer, and other agricultural chemical manufacturing).

“(xvi) 3254 (pharmaceutical and medicine manufacturing).

“(xvii) 3259 (other chemical product and preparation manufacturing).

“(xviii) 3271 (clay product and preparation manufacturing).

“(xix) 3279 (other nonmetallic mineral product manufacturing).

“(xx) 3311 (iron and steel mills and ferroalloy manufacturing).

“(xxi) 3313 (alumina and aluminum production and processing).

“(xxii) 3331 (agriculture, construction, and mining machinery manufacturing).

“(xxiii) 3333 (commercial and service industry machinery manufacturing).

“(xxiv) 3339 (other general purpose machinery manufacturing).

“(xxv) 3341 (computer and peripheral equipment manufacturing).

“(xxvi) 3342 (communications equipment manufacturing).

“(xxvii) 3343 (audio and video equipment manufacturing).

“(xxviii) 3345 (navigational, measuring, electromedical, and control instruments manufacturing).

“(xxix) 3352 (household appliance manufacturing).

“(xxx) 3361 (motor vehicle manufacturing).

“(xxxi) 3362 (motor vehicle body and trailer manufacturing).

“(xxxii) 3363 (motor vehicle parts manufacturing).

“(xxxiii) 3364 (aerospace product and parts manufacturing).

“(xxxiv) 3365 (railroad rolling stock manufacturing).

“(xxxv) 3366 (ship and boat building).

“(xxxvi) 3369 (other transportation equipment manufacturing).

“(xxxvii) 3391 (medical equipment and supplies manufacturing).

“(xxxviii) 3399 (other miscellaneous manufacturing).

“(B) RULE OF CONSTRUCTION.—Any of the following entities shall be deemed to satisfy subparagraph (A):

“(i) A small business concern that has received an award under the Small Business Innovation Research Program or the Small Business Technology Transfer Program of the Administration.

“(ii)(I) A small business concern that has significant engagement with a Manufacturing USA institute, as defined in section 34(d) of the National Institute of Standards and Technology Act (15 U.S.C. 278s(d)).

“(II) The Administrator and the Secretary of Commerce shall, by rule, determine what constitutes significant engagement for the purposes of subclause (I).

“(iii) A small business concern if—

“(I) a foreign person sought to merge with, acquire, take over, or otherwise obtain control of the small business concern through a covered transaction (as defined in section 721(a) of the Defense Production Act of 1950 (50 U.S.C. 4565(a))); and

“(II) the Committee on Foreign Investment in the United States reviewed the covered transaction under section 721 of the Defense Production Act of 1950 (50 U.S.C. 4565) and recommended to the President that the President suspend or prohibit the covered transaction.

“(3) MAINTENANCE OF LIST OF MANUFACTURING INDUSTRIES.—

“(A) IN GENERAL.—The Administrator shall, once every 3 years, update the codes described in clauses (i) through (xxviii) of paragraph (2)(A) to ensure that those codes reflect manufacturing industries.

“(B) CRITERIA FOR CONSIDERATION.—In updating a code under subparagraph (A) to ensure that the code reflects a manufacturing industry, the Administrator shall consider—

“(i) whether the amount of spending on research and development per worker in the industry covered by the code is in not lower than the 75th percentile of such spending, as compared with all industries in the United States;

“(ii) whether the percentage of workers in the industry covered by the code, the duties of whom require a high degree of training in the fields of science, technology, engineering, and mathematics, is above the national average, as compared with all industries in the United States; and

“(iii) the role of the industry covered by the code in—

“(I) the manufacturing sector of the economy of the United States; and

“(II) the United States supply chain.

“(4) DEBENTURES.—

“(A) IN GENERAL.—A licensed covered company may issue Innovation and Supply Chain Resiliency debentures.

“(B) AMOUNT.—Notwithstanding any other provision of this title, the amount of an Innovation and Supply Chain Resiliency debenture purchased or guaranteed by the Administration with respect to a covered company shall be not more than 400 percent of the private capital of the company.

“(C) REPAYMENT.—

“(i) IN GENERAL.—

“(I) DIVIDEND.—Except as provided in clause (ii), and subject to clause (iii), a covered company shall repay a debenture described in subparagraph (B) by requiring

each covered small business concern in which the covered company invests to pay to the covered company 1 percent of the annual revenue of the covered small business concern (referred to in this subsection as the ‘Small Business Innovation and Resiliency Dividend’), which the covered company shall collect and transfer to the Administration until the date on which the Administration has recovered 150 percent of the amount of the initial investment of the Administration with respect to the covered company.

“(II) NO INTEREST.—There shall be no interest payment required with respect to an Innovation and Supply Chain Resiliency debenture.

“(ii) EXCEPTIONS.—

“(I) TERMINATION.—If a covered company is dissolved, or otherwise terminates operations, before the date on which the covered company is able to collect the Small Business Innovation and Resiliency Dividend required under clause (i) from a covered small business concern described in that clause, the covered small business concern shall be responsible for paying the Small Business Innovation and Resiliency Dividend directly to the Administration.

“(II) INITIAL PUBLIC OFFERING.—If a covered small business concern in which a covered company invests is the subject of an initial public offering before the date on which the covered company satisfies clause (i), the covered company shall continue carrying out that clause with respect to the covered small business concern until the date on which the Administration has recovered 300 percent of the amount of the initial investment of the Administration with respect to the covered company.

“(iii) PRINCIPAL PAYMENTS.—If, as of the date that is 30 years after the date on which a covered company makes an investment in a covered small business concern, the covered small business concern has repaid less than 50 percent of the original principal with respect to that investment, the covered small business concern shall be required to pay to the covered company an amount that is equal to 50 percent of that original principal amount, which the covered company shall transfer to the Administration.

“(iv) PUNITIVE DAMAGES.—

“(I) IN GENERAL.—Except as provided in subclause (III), a covered small business concern in which a covered company has invested shall be required to pay the covered company punitive damages in an amount that is 600 percent of the amount of that investment if—

“(aa) the covered small business concern is purchased by another entity and, after that purchase, the operations of the small business concern are moved outside of the United States; or

“(bb) the production of goods produced by the covered small business concern (or produced by another entity on behalf of the covered small business concern), the headquarters of the small business concern, or substantial operations of the small business concern are established or moved outside of the United States.

“(II) PAYMENTS.—Punitive damages that a covered small business concern are required to pay to a covered company under subclause (I) shall be—

“(aa) paid to the covered company on the date on which the action that triggers the payment of damages under that subclause occurs; and

“(bb) upon collection by the covered company, transferred to the Administrator, who shall deposit the amounts in the SBIC Reserve Fund established under section 321(a).

“(III) TERMINATION.—If a covered company is dissolved, or otherwise terminates operations, before the date on which the covered

company is able to collect punitive damages required under subclause (I) from a covered small business concern described in that subclause, the covered small business concern shall be responsible for paying the punitive damages directly to the Administration.

“(5) APPLICABILITY OF RULES REGARDING DEFAULT AND INSOLVENCY.—The rules of the Administration under this title regarding the default or insolvency of a small business investment company shall apply to a covered company under this subsection.

“(6) CALCULATION OF SUBSIDY RATE.—All fees, interest, and profits received and retained by the Administration under this subsection shall be included in the calculations made by the Director of the Office of Management and Budget to offset the cost (as that term is defined in section 502 of the Congressional Budget Act of 1974 (2 U.S.C. 661a)) to the Administration of purchasing and guaranteeing debentures and participating securities under this Act.

“(7) ISSUANCE AND GUARANTEE OF TRUST CERTIFICATES.—The Administration is authorized to issue trust certificates representing ownership of all or a fractional part of debentures issued by covered companies and guaranteed by the Administration under this subsection in the same manner, and subject to the same requirements, as provided in section 319.

“(8) ACCOUNTING.—Any payment made to the Administration under this subsection, including the payment of a Small Business Innovation and Resiliency Dividend, shall be remitted to the account associated with the program carried out under this title.”; and

(2) by adding at the end the following:

**“SEC. 321. RESERVE FUND.**

“(a) IN GENERAL.—There is established in the Treasury an SBIC Reserve Fund (referred to in this section as the ‘fund’), which shall be an account separate from any other accounts or funds available to the Administrator and shall be credited with the amounts described in subsection (b).

“(b) CREDITS.—The fund shall be credited with the fees described in section 303(b)—

“(1) in the manner and amount that the Administrator determines to be in accord with sound actuarial and accounting practice; and

“(2) to ensure that the fund complies with the requirement under subsection (d).

“(c) DISTRIBUTION OF FUNDS.—Amounts in the fund shall be available to satisfy unmet debt obligations for purchasing and guaranteeing debentures under this title.

“(d) CAPITAL RATIO.—

“(1) DEFINITION.—In this subsection, the term ‘capital ratio’ means, with respect to a date, the quotient obtained by dividing the amounts in the fund, as of that date, by the outstanding guarantees under this title, as of that date.

“(2) REQUIREMENT.—Beginning in fiscal year 2022, the Administrator shall ensure that the fund maintains a capital ratio that is not less than 0.005 and not greater than 0.03.”.

(b) LIMITATIONS.—Commitments to guarantee loans for debentures under section 303 of the Small Business Investment Act of 1958 (15 U.S.C. 683) shall not exceed the following amounts:

(1) In each of fiscal years 2021 and 2022—

(A) \$7,000,000,000 for such commitments under subsection (b) of such section 303 (referred to in this subsection as “section 303(b) commitments”); and

(B) \$4,000,000,000 for commitments under the program established under subsection (1) of such section 303, as added by subsection (a)(1) of this section (referred to in this subsection as “innovation and supply chain resiliency debenture commitments”).

(2) In each of fiscal years 2023, 2024, and 2025—

(A) \$4,500,000,000 for section 303(b) commitments; and

(B) \$2,000,000,000 for innovation and supply chain resiliency debenture commitments.

**SA 1446.** Mr. CARPER (for himself, Ms. COLLINS, Mr. MENENDEZ, Mr. WHITEHOUSE, Mr. REED, Ms. WARREN, Mr. HEINRICH, Mr. MARKEY, Mr. CARDIN, and Mr. BROWN) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

**TITLE IV—AMENDMENTS TO THE  
INTERNAL REVENUE CODE OF 1986**

**SEC. 4001. EXTENSION OF ENERGY CREDIT FOR  
OFFSHORE WIND FACILITIES.**

(a) IN GENERAL.—Section 48(a)(5) of the Internal Revenue Code of 1986 is amended by adding at the end the following:

“(F) QUALIFIED OFFSHORE WIND FACILITIES.—

“(i) IN GENERAL.—In the case of any qualified offshore wind facility—

“(I) subparagraph (C)(ii) shall be applied by substituting ‘January 1 of the applicable year (as determined under subparagraph (F)(ii))’ for ‘January 1, 2021’.

“(II) subparagraph (E) shall not apply, and

“(III) for purposes of this paragraph, section 45(d)(1) shall be applied by substituting ‘January 1 of the applicable year (as determined under section 48(a)(5)(F)(ii))’ for ‘January 1, 2021’.

“(ii) APPLICABLE YEAR.—

“(I) IN GENERAL.—For purposes of this subparagraph, the term ‘applicable year’ means the later of—

“(aa) calendar year 2027, or

“(bb) the calendar year subsequent to the first calendar year in which the Secretary, in consultation with the Secretary of Energy, determines that the United States has increased its offshore wind capacity by not less than 3,000 megawatts as compared to such capacity on January 1, 2021.

“(II) EXCLUSION OF CERTAIN FACILITIES.—For purposes of subclause (I)(bb), the Secretary shall not include any increase in offshore wind capacity which is attributable to any facility the construction of which began before January 1, 2021.

“(iii) QUALIFIED OFFSHORE WIND FACILITY.—For purposes of this subparagraph, the term ‘qualified offshore wind facility’ means a qualified facility described in paragraph (1) of section 45(d) which is located in the inland navigable waters of the United States, including the Great Lakes, or in the coastal waters of the United States, including the territorial seas of the United States, the exclusive economic zone of the United States, and the outer Continental Shelf of the United States.

“(iv) REPORT ON OFFSHORE WIND CAPACITY.—On January 15, 2026, and annually thereafter until the calendar year described in clause (ii)(I)(bb), the Secretary, in consultation with the Secretary of Energy, shall issue a report to be made available to the public which discloses the increase in the offshore wind capacity of the United States, as measured in total megawatts, since January 1, 2021.”.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to periods after December 31, 2016, under rules similar

to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).

**SA 1447.** Mr. SCHUMER (for himself, Mrs. GILLIBRAND, Mr. CARDIN, Mr. VAN HOLLEN, and Mr. CASEY) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title II, add the following:

**Subtitle D—Federal Energy Regulatory  
Commission**

**SEC. 24 . . . FERC CONSIDERATION OF STATE FINANCIAL INCENTIVES IN WHOLESALE MARKETS.**

Section 201(b)(1) of the Federal Power Act (16 U.S.C. 824(b)(1)) is amended, in the second sentence, by striking the period at the end and inserting “, or over State regulations, including financial incentives or fees, promoting the development of facilities for the generation of electric energy, unless the regulation directly targets a wholesale rate or charge subject to the jurisdiction of the Commission.”.

**SA 1448.** Mr. SCHUMER (for himself, Mrs. GILLIBRAND, Mr. CARDIN, and Mr. VAN HOLLEN) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title II, add the following:

**Subtitle D—Federal Energy Regulatory  
Commission**

**SEC. 24 . . . JUDICIAL REVIEW OF FERC DECISIONS.**

(a) NATURAL GAS ACT.—Section 19(a) of the Natural Gas Act (15 U.S.C. 717r(a)) is amended—

(1) in the sixth sentence, by striking “Until the record” and inserting the following:

“(5) POWERS OF THE COMMISSION.—Until the record”;

(2) in the fifth sentence, by striking “No proceeding” and inserting the following:

“(4) APPLICATION REQUIRED FOR JUDICIAL REVIEW.—No proceeding”;

(3) by striking the fourth sentence and inserting the following:

“(B) TIMING.—

“(i) IN GENERAL.—The Commission shall issue an order on an application for rehearing filed under this subsection not later than 30 days after the date on which the application is filed with the Commission.

“(ii) TOLLING ORDERS.—If an order issued under clause (i) does not rule on the merits of the application for rehearing, the Commission shall issue an order ruling on the merits of the application for rehearing not later than 30 days after the date on which the order under clause (i) is issued.

“(iii) EFFECT OF FAILURE TO ISSUE ORDER OR RULE ON THE MERITS.—

“(I) EFFECT OF FAILURE TO ISSUE ORDER.—If the Commission has neither granted nor denied an application for rehearing by the date described in clause (i), the application shall be deemed denied on that date.

“(II) EFFECT OF FAILURE TO RULE ON THE MERITS.—If the Commission has not ruled on

the merits of an application for rehearing by the date described in clause (ii), the application shall be deemed denied on that date.

“(III) JUDICIAL REVIEW.—An application that is deemed denied under subclause (I) or (II) may be reviewed by a court of appeals of the United States in accordance with subsection (b).”;

(4) in the third sentence, by striking “Upon such application” and inserting the following:

“(3) DECISION ON APPLICATION.—

“(A) IN GENERAL.—On an application for rehearing under this subsection,”;

(5) in the second sentence, by striking “The application” and inserting the following:

“(2) CONTENTS.—An application”;

(6) by striking the subsection designation and all that follows through “Any person” in the first sentence and inserting the following:

“(a) APPLICATION FOR REHEARING.—

“(1) IN GENERAL.—Any person”.

(b) FEDERAL POWER ACT.—Section 313(a) of the Federal Power Act (16 U.S.C. 825l(a)) is amended—

(1) in the sixth sentence, by striking “Until the record” and inserting the following:

“(5) POWERS OF THE COMMISSION.—Until the record”;

(2) in the fifth sentence, by striking “No proceeding” and inserting the following:

“(4) APPLICATION REQUIRED FOR JUDICIAL REVIEW.—No proceeding”;

(3) by striking the fourth sentence and inserting the following:

“(B) TIMING.—

“(i) IN GENERAL.—The Commission shall issue an order on an application for rehearing filed under this subsection not later than 30 days after the date on which the application is filed with the Commission.

“(ii) TOLLING ORDERS.—If an order issued under clause (i) does not rule on the merits of the application for rehearing, the Commission shall issue an order ruling on the merits of the application for rehearing not later than 30 days after the date on which the order under clause (i) is issued.

“(iii) EFFECT OF FAILURE TO ISSUE ORDER OR RULE ON THE MERITS.—

“(I) EFFECT OF FAILURE TO ISSUE ORDER.—If the Commission has neither granted nor denied an application for rehearing by the date described in clause (i), the application shall be deemed denied on that date.

“(II) EFFECT OF FAILURE TO RULE ON THE MERITS.—If the Commission has not ruled on the merits of an application for rehearing by the date described in clause (ii), the application shall be deemed denied on that date.

“(III) JUDICIAL REVIEW.—An application that is deemed denied under subclause (I) or (II) may be reviewed by a court of appeals of the United States in accordance with subsection (b).”.

(4) in the third sentence, by striking “Upon such application” and inserting the following:

“(3) DECISION ON APPLICATION.—

“(A) IN GENERAL.—On an application for rehearing under this subsection,”;

(5) in the second sentence, by striking “The application” and inserting the following:

“(2) CONTENTS.—An application”;

(6) by striking the subsection designation and all that follows through “Any person” in the first sentence and inserting the following:

“(a) APPLICATION FOR REHEARING.—

“(1) IN GENERAL.—Any person”.

**SA 1449.** Mr. SCHUMER submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms.



MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title II, add the following:

**Subtitle D—Federal Energy Regulatory Commission**

**SEC. 24 . FERC QUORUM REQUIREMENTS.**

Section 401(b) of the Department of Energy Organization Act (42 U.S.C. 7171(b)) is amended, in the fourth sentence, by striking the period at the end and inserting “, and the majority political party on the Commission shall not at any time have more than a 1-member voting advantage over the minority party or parties on the Commission.”.

**SA 1450.** Mr. TOOMEY (for himself and Mr. JONES) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

**TITLE IV—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986**

**SEC. 4001. TECHNICAL AMENDMENTS REGARDING QUALIFIED IMPROVEMENT PROPERTY.**

(a) IN GENERAL.—Section 168 of the Internal Revenue Code of 1986 is amended—

(1) in subsection (e)—

(A) in paragraph (3)(E), by striking “and” at the end of clause (v), by striking the period at the end of clause (vi) and inserting “, and”, and by adding at the end the following new clause:

“(vii) any qualified improvement property.”, and

(B) in paragraph (6)(A), by inserting “made by the taxpayer” after “any improvement”, and

(2) in the table contained in subsection (g)(3)(B)—

(A) by striking the item relating to subparagraph (D)(v), and

(B) by inserting after the item relating to subparagraph (E)(vi) the following new item:

“(E)(vii) ..... 20”.

(b) EFFECTIVE DATE.—The amendments made by this section shall take effect as if included in section 13204 of Public Law 115-97.

**SA 1451.** Mr. RISCH (for himself and Mr. CRAPO) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 325, line 19, strike “delivery”.

On page 325, line 25, strike “and”.

On page 326, line 4, insert “and” after the semicolon.

On page 326, between lines 4 and 5, insert the following:

(v) the generation of heat used, directly or through an energy storage system, in a variety of processes that may include electricity, hydrogen, or other industrial applications;

**SA 1452.** Mr. RISCH (for himself and Mr. KAINE) submitted an amendment

intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle C of title II, add the following:

**SEC. 23 . EXPERIENCED WORKER PROGRAM.**

(a) IN GENERAL.—The Secretary shall establish an experienced worker program, to be known as the “Department of Energy Experienced Worker Program”, for the purpose of awarding grants and entering into cooperative agreements under subsection (b) for the purpose of using the talents of individuals in the United States who are age 55 or older and are not employees of the Department to provide technical, professional, and administrative services to support the mission of the Department.

(b) GRANTS AND COOPERATIVE AGREEMENTS.—

(1) IN GENERAL.—Notwithstanding any other provision of law relating to Federal grants and cooperative agreements, the Secretary may make grants to, or enter into cooperative agreements with, private national nonprofit organizations eligible to receive grants under title V of the Older Americans Act of 1965 (42 U.S.C. 3056 et seq.) to use the talents of individuals in the United States who are age 55 or older in programs authorized by other provisions of law administered by the Secretary, consistent with those provisions of law.

(2) REQUIREMENTS.—Prior to awarding a grant or entering into a cooperative agreement under paragraph (1), the Secretary shall ensure that the grant or cooperative agreement would not—

(A) result in the displacement of individuals currently employed by the Department, including partial displacement through reduction of non-overtime hours, wages, or employment benefits;

(B) result in the use of an individual under the Department of Energy Experienced Worker Program for a job or function in a case in which a Federal employee is in a lay-off status from the same or substantially equivalent job within the Department; or

(C) affect existing contracts for services.

**SA 1453.** Mr. MENENDEZ submitted an amendment intended to be proposed by him to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

**SEC. . ENERGY DIPLOMACY AND SECURITY WITHIN THE DEPARTMENT OF STATE.**

(a) IN GENERAL.—Section 1(c) of the State Department Basic Authorities Act of 1956 (22 U.S.C. 2651a(c)) is amended—

(1) by redesignating paragraph (4) as paragraph (5); and

(2) by inserting after paragraph (3) the following new paragraph:

“(4) ENERGY RESOURCES.—

“(A) AUTHORIZATION FOR ASSISTANT SECRETARY.—Subject to the numerical limitation specified in paragraph (1), there is authorized to be established in the Department of State an Assistant Secretary of State for Energy Resources.

“(B) ESTABLISHMENT.—The Assistant Secretary established by this section shall be responsible for the execution of diplomatic activities related to, and support for the advancement of foreign policy dedicated to, en-

ergy matters within the Department of State for—

“(i) formulating and implementing international policies, in coordination with the Secretary of Energy, as appropriate, aimed at protecting and advancing United States energy security interests and promoting responsible development of global energy resources by effectively managing United States bilateral and multilateral relations;

“(ii) ensuring that the Department of State’s analyses and decision making processes related to matters involving global energy development account for the effects the developments have on—

“(I) United States national security;

“(II) quality of life and public health of people, households, and communities, particularly vulnerable and underserved populations affected by, or proximate to, energy development, transmission, and distribution projects;

“(III) United States economic interests;

“(IV) emissions of greenhouse gases that contribute to global climate change; and

“(V) local and regional land use, air and water quality, and risks to public health of communities described under subclause (II);

“(iii) incorporating energy security and climate security into the activities of the Department of State;

“(iv) coordinating energy activities within the Department of State and with relevant Federal agencies;

“(v) working internationally to—

“(I) support socially and environmentally responsible development of energy resources that mitigate carbon emissions, and the distribution of such resources for the benefit of the United States and United States allies and trading partners for their energy security, climate security, and economic development needs;

“(II) promote availability of clean energy technologies, including carbon capture and storage, and a well-functioning global market for energy resources, technologies, and expertise for the benefit of the United States and United States allies and trading partners;

“(III) resolve international disputes regarding the exploration, development, production, or distribution of energy resources;

“(IV) support the economic, security, and commercial interests of United States persons operating in the energy markets of foreign countries; and

“(V) support and coordinate international efforts to—

“(aa) alleviate energy poverty;

“(bb) protect vulnerable, exploited, and underserved populations that are affected or displaced by energy development projects;

“(cc) account for and mitigate greenhouse gas emission from energy development projects; and

“(dd) increase access to energy for vulnerable and underserved communities;

“(vi) leading the United States commitment to the Extractive Industries Transparency Initiative;

“(vii) coordinating within the Department of State and with relevant Federal departments and agencies on developing and implementing international energy-related sanctions; and

“(viii) coordinating energy security and climate security and other relevant functions within the Department of State currently undertaken by—

“(I) the Bureau of Economic and Business Affairs of the Department of State;

“(II) the Bureau of Oceans and International Environmental and Scientific Affairs of the Department of State; and

“(III) other offices within the Department of State.”.

(b) CONFORMING AMENDMENT.—Section 931 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17371) is amended—

- (1) by striking subsections (a) and (b); and
- (2) by redesignating subsections (c) and (d) as subsections (a) and (b), respectively.

**SA 1454.** Ms. ROSEN (for herself and Mrs. CAPITO) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

In section 2304(a)(6), strike “and socioeconomically disadvantaged individuals” and insert “socioeconomically disadvantaged individuals, and individuals in rural areas”.

In section 2304(b)(3)(F), strike “and socioeconomically disadvantaged individuals,” and insert “socioeconomically disadvantaged individuals, and individuals in rural areas,”.

In section 2304(c)(1)(C), strike clauses (iii) and (iv) and insert the following:

(iii) increase outreach to displaced and unemployed energy sector workers;

(iv) make resources available to provide training to displaced and unemployed energy sector workers to reenter the energy workforce; and

(v) increase outreach and make resources available to rural communities; and

In section 2304(f)(1), strike “and displaced and unemployed energy workers” and insert “displaced and unemployed energy workers, and individuals in rural areas”.

In section 2304(f)(2), strike subparagraphs (B) and (C) and insert the following:

(B) institutions that serve veterans, with the objective of increasing the number veterans in the energy industry by ensuring that veterans have the credentials and training necessary to secure careers in the energy industry;

(C) institutions that serve displaced and unemployed energy workers to increase the number of individuals trained for jobs in the energy industry; and

(D) rural-serving institutions of higher education;

In section 2304(f)(3), strike “and displaced and unemployed energy workers” and insert “displaced and unemployed energy workers, and individuals in rural areas”.

In section 2304(f)(4), strike “and displaced and unemployed energy workers” and insert “displaced and unemployed energy workers, and individuals in rural areas”.

**SA 1455.** Ms. ROSEN submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of part I of subtitle B of title II, add the following:

#### **SEC. 220. CYBER SENSE PROGRAM.**

(a) IN GENERAL.—The Secretary shall establish a voluntary Cyber Sense program (referred to in the section as the “program”) to test the cybersecurity of products and technologies intended for use in the bulk-power system (as defined in section 215(a) of the Federal Power Act (16 U.S.C. 824o(a))).

(b) PROGRAM REQUIREMENTS.—In carrying out subsection (a), the Secretary shall—

(1) establish a testing process under the program to test the cybersecurity of products and technologies intended for use in the bulk-power system, including products relating to industrial control systems and operational technologies, such as supervisory control and data acquisition systems;

(2) for products and technologies tested under the program, establish and maintain cybersecurity vulnerability reporting processes and a related database;

(3) provide technical assistance to electric utilities, product manufacturers, and other electricity sector stakeholders to develop solutions to mitigate identified cybersecurity vulnerabilities in products and technologies tested under the program;

(4) biennially review products and technologies tested under the program for cybersecurity vulnerabilities and provide analysis with respect to how those products and technologies respond to and mitigate cyber threats;

(5) develop guidance that is informed by analysis and testing results under the program for electric utilities for the procurement of products and technologies;

(6) provide reasonable notice to, and solicit comments from, the public prior to establishing or revising the testing process under the program;

(7) oversee testing of products and technologies under the program; and

(8) consider incentives to encourage the use of analysis and results of testing under the program in the design of products and technologies for use in the bulk-power system.

(c) DISCLOSURE OF INFORMATION.—Any cybersecurity vulnerability reported pursuant to a process established under subsection (b)(2), the disclosure of which the Secretary reasonably foresees would cause harm to critical electric infrastructure (as defined in section 215A(a) of the Federal Power Act (16 U.S.C. 824o-1(a))), shall be considered to be critical electric infrastructure information for purposes of section 215A(d) of the Federal Power Act (16 U.S.C. 824o-1(d)).

(d) FEDERAL GOVERNMENT LIABILITY.—Nothing in this section authorizes the commencement of an action against the United States with respect to the testing of a product or technology under the program.

**SA 1456.** Mr. MERKLEY submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of chapter 1 of subpart A of part I of subtitle A of title I, add the following:

#### **SEC. 1. COMMUNITY ENERGY SAVINGS PROGRAM.**

(a) IN GENERAL.—The Energy Policy and Conservation Act is amended by inserting after section 362 (42 U.S.C. 6322) the following:

#### **“SEC. 362A. COMMUNITY ENERGY SAVINGS PROGRAM.**

“(a) PURPOSE.—The purpose of this section is to help households and small businesses achieve cost savings by providing loans to implement cost-effective energy efficiency measures.

“(b) DEFINITIONS.—In this section:

“(1) COMMUNITY DEVELOPMENT FINANCIAL INSTITUTION.—The term ‘community development financial institution’ means a financial institution certified by the Community Development Financial Institutions Fund administered by the Secretary of the Treasury.

“(2) ELIGIBLE ENTITY.—The term ‘eligible entity’ means—

“(A) a public power group;

“(B) a community development financial institution; and

“(C) an eligible unit of local government.

“(3) ELIGIBLE UNIT OF LOCAL GOVERNMENT.—The term ‘eligible unit of local government’ means any agency or political subdivision of a State.

“(4) ENERGY EFFICIENCY MEASURES.—The term ‘energy efficiency measures’ means, with respect to a property served by or in the service area or jurisdiction, as applicable, of an eligible entity, structural improvements and investments in cost-effective commercial technologies to increase energy efficiency (including cost-effective on- or off-grid renewable energy, energy storage, or demand response systems).

“(5) HOUSEHOLD WITH A HIGH ENERGY BURDEN.—

“(A) IN GENERAL.—The term ‘household with a high energy burden’ means a low-income household the residential energy burden of which exceeds the median energy burden for all low-income households in the State in which the low-income household is located.

“(B) CALCULATION.—The residential energy burden referred to in subparagraph (A) is the quotient obtained by dividing residential energy expenditures by the annual income of the low-income household.

“(6) INDIAN TRIBE.—The term ‘Indian tribe’ has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

“(7) MANUFACTURED HOME.—The term ‘manufactured home’—

“(A) has the meaning given the term in section 603 of the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. 5402); and

“(B) includes a home described in subparagraph (A) without regard to whether the home was built before, on, or after the date on which the construction and safety standards established under section 604 of that Act (42 U.S.C. 5403) became effective.

“(8) PROGRAM.—The term ‘program’ means the program established under subsection (c).

“(9) PUBLIC POWER GROUP.—The term ‘public power group’ means—

“(A) a public utility;

“(B) an electric or energy cooperative;

“(C) a public power district; and

“(D) a group of 1 or more public utilities or electric or energy cooperatives (commonly referred to as a ‘joint action agency’, ‘generation and transmission cooperative’, ‘municipal power association’, or ‘State cooperative association’).

“(10) QUALIFIED CONSUMER.—The term ‘qualified consumer’ means a consumer served by or in the service area or jurisdiction, as applicable, of an eligible entity that has the ability to repay a loan made under subsection (f), as determined by the eligible entity.

“(11) SECRETARY.—The term ‘Secretary’ means the Secretary of Energy.

“(12) STATE.—The term ‘State’ means—

“(A) a State;

“(B) the District of Columbia;

“(C) the Commonwealth of Puerto Rico; and

“(D) any other territory or possession of the United States.

“(c) ESTABLISHMENT.—Not later than 120 days after the date of enactment of this section, the Secretary shall establish a program under which the Secretary shall provide grants to States and Indian tribes to provide loans to eligible entities in accordance with this section.

“(d) GRANT FUND ALLOCATION.—

“(1) IN GENERAL.—Of the amount appropriated under subsection (k) for each fiscal year, the Secretary shall allocate as grant funds—

“(A) 98 percent to be provided to States in accordance with paragraph (2); and

“(B) 2 percent to be provided to Indian tribes in accordance with paragraph (3).

“(2) ALLOCATION TO STATES.—Of the amount allocated for all States under paragraph (1)(A), the Secretary shall—

“(A) allocate not less than 1 percent to each State described in subparagraphs (A) through (C) of subsection (b)(12);

“(B) allocate not less than 0.5 percent to each State described in subparagraph (D) of that subsection; and

“(C) of the amount remaining after the allocations under subparagraphs (A) and (B), allocate funds to States based on the population of each State as determined in the latest available decennial census conducted under section 141(a) of title 13, United States Code.

“(3) ALLOCATION TO INDIAN TRIBES.—Of the amount allocated for Indian tribes under paragraph (1)(B), the Secretary shall allocate funds to each Indian tribe participating in the program during that fiscal year based on a formula established by the Secretary that takes into account any factor that the Secretary determines to be appropriate.

“(4) PUBLICATION OF ALLOCATION FORMULAS.—Not later than 90 days before the beginning of each fiscal year for which grants are provided to States and Indian tribes under this section, the Secretary shall publish in the Federal Register the formulas for allocation established under this subsection.

“(5) ADMINISTRATIVE COSTS.—Of the amount allocated to a State or Indian tribe under this subsection, not more than 15 percent shall be used by the State or Indian tribe for the administrative costs of administering loans.

“(e) LOANS BY STATES AND INDIAN TRIBES TO ELIGIBLE ENTITIES.—

“(1) IN GENERAL.—Under the program, a State or Indian tribe shall make loans to eligible entities to make loans to qualified consumers—

“(A) to implement cost-effective energy efficiency measures; and

“(B) in accordance with subsection (f).

“(2) STATE ENERGY OFFICES.—A State shall carry out paragraph (1) through the State energy office that is responsible for developing a State energy conservation plan under section 362.

“(3) PRIORITY.—In making loans under paragraph (1), a State or Indian tribe shall give priority to public power groups.

“(4) REQUIREMENTS.—

“(A) IN GENERAL.—Subject to subparagraph (C), as a condition of receiving a loan under this subsection, an eligible entity shall—

“(i) establish a list of energy efficiency measures that are expected to decrease the energy use or costs of qualified consumers;

“(ii) prepare an implementation plan for use of the loan funds, including the use of any interest to be received under subsection (f)(4);

“(iii) establish an appropriate measurement and verification system to ensure—

“(I) the effectiveness of the energy efficiency loans made by the eligible entity; and

“(II) that there is no conflict of interest in any loan provided by the eligible entity;

“(iv) demonstrate expertise in the effective implementation of energy efficiency measures;

“(v) ensure that a portion of the loan funds, which may be determined by the State or Indian tribe, are used to provide loans to qualified consumers that are households with a high energy burden; and

“(vi) give priority to providing loans to qualified consumers that own homes or other real property that pose health risks to the occupants of the property that may be mitigated by energy efficiency measures, as determined by the State or Indian tribe.

“(B) REVISION OF LIST OF ENERGY EFFICIENCY MEASURES.—Subject to the approval of the State or Indian tribe, as applicable, an eligible entity may update the list required under subparagraph (A)(i) to account for newly available efficiency technologies.

“(C) EXISTING ENERGY EFFICIENCY PROGRAMS.—An eligible entity that has established an energy efficiency program for qualified consumers before the date of enactment of this section may use an existing list of energy efficiency measures, implementation plan, and measurement and verification system for that program to satisfy the applicable requirements under subparagraph (A), if the State or Indian tribe, as applicable, determines that the list, plan, or system, as applicable, is consistent with the purposes of this section.

“(5) NO INTEREST.—A loan under this subsection shall bear no interest.

“(6) TERM.—The term of a loan provided to an eligible entity under paragraph (1) shall not exceed 20 years after the date on which the loan is issued.

“(7) ADVANCE.—

“(A) IN GENERAL.—In providing a loan to an eligible entity under paragraph (1), a State or Indian tribe may provide an advance of loan funds on request of the eligible entity.

“(B) AMOUNT LIMITATION.—Any advance provided to an eligible entity under subparagraph (A) in any single year shall not exceed 50 percent of the approved loan amount.

“(C) REPAYMENT.—The repayment of an advance under subparagraph (A) shall be amortized for a period of not more than 10 years.

“(8) SPECIAL ADVANCE FOR START-UP ACTIVITIES.—

“(A) IN GENERAL.—In providing a loan to an eligible entity under paragraph (1), a State or Indian tribe may provide a special advance on request of the eligible entity for assistance in defraying the start-up costs of the eligible entity, as determined by the State or Indian tribe, as applicable, of providing loans to qualified consumers under subsection (f).

“(B) LIMITATION.—A special advance shall be provided to an eligible entity under subparagraph (A) only during the 10-year period beginning on the date on which the loan is issued to that eligible entity.

“(C) AMOUNT.—The amount of a special advance provided under subparagraph (A) shall not be greater than 5 percent of the approved loan amount.

“(D) REPAYMENT.—Repayment of a special advance provided under subparagraph (A)—

“(i) shall be required during the 10-year period beginning on the date on which the special advance is made; and

“(ii) may be deferred to the end of the 10-year period described in clause (i) at the election of the eligible entity.

“(9) REVOLVING LOAN FUND.—

“(A) IN GENERAL.—As a condition of participating in the program, a State or Indian tribe shall use the funds repaid to the State or Indian tribe under loans offered under this subsection to issue new loans under this subsection.

“(B) ADMINISTRATIVE COSTS.—Not more than 10 percent of the repaid funds described in subparagraph (A) may be used for the administrative cost of issuing new loans from those repaid funds under this subsection.

“(f) LOANS BY ELIGIBLE ENTITIES TO QUALIFIED CONSUMERS.—

“(1) USE OF LOAN.—

“(A) IN GENERAL.—A loan made by an eligible entity to a qualified consumer using loan funds provided by a State or Indian tribe under subsection (e)—

“(i) shall be used to finance energy efficiency measures for the purpose of decreasing the energy use or costs of the qualified consumer by an amount that ensures, to the maximum extent practicable, that the applicable loan term described in subparagraph (B) shall not be an undue financial burden on the qualified consumer, as determined by the eligible entity;

“(ii) shall not be used to fund purchases of, or modifications to, personal property unless the personal property is or becomes attached to real property as a fixture;

“(iii) may be used to upgrade a manufactured home, regardless of the classification of the home as real or personal property; and

“(iv) may be used to finance the replacement of a manufactured home—

“(I) if the cost of upgrading the manufactured home is excessive, as determined by the eligible entity; and

“(II) with priority given to a manufactured home that was constructed before June 15, 1976.

“(B) LOAN TERM DESCRIBED.—The loan term referred to in subparagraph (A)(i) is—

“(i) in the case of a manufactured home replacement, not more than 20 years; and

“(ii) in the case of any other energy efficiency measure, not more than 15 years.

“(2) REPAYMENT.—

“(A) IN GENERAL.—Subject to subparagraph (B), a loan described in paragraph (1)(A) shall be repaid by the qualified consumer through charges added to an existing or new electric or recurring service bill for the property of the qualified consumer for, or at which, energy efficiency measures are being implemented.

“(B) ALTERNATIVE REPAYMENT.—Repayment under subparagraph (A) shall not preclude—

“(i) the voluntary prepayment of the loan by the qualified consumer; or

“(ii) the use of any additional repayment mechanism, including a tariffed on-bill mechanism, that—

“(I) has appropriate risk mitigation features, as determined by the eligible entity; or

“(II) is required due to the qualified consumer no longer being a customer of the eligible entity.

“(3) ENERGY ASSESSMENT.—

“(A) IN GENERAL.—Prior to the installation of energy efficiency measures at the property of a qualified consumer that receives a loan from an eligible entity under this section, and to assist in the selection of the energy efficiency measures to be installed, the eligible entity shall conduct an energy assessment or audit to determine the impact of proposed energy efficiency measures on—

“(i) the energy costs and consumption of the qualified consumer; and

“(ii) the health and safety of the occupants of the property on which the energy efficiency measures are to be installed.

“(B) FIELD OR ONLINE ASSESSMENT.—An energy assessment or audit under subparagraph (A) may be conducted in the field or online, as determined by the State or Indian tribe that has issued a loan to the eligible entity under subsection (e).

“(4) INTEREST.—A loan described in paragraph (1)(A) may bear interest, not to exceed 5 percent, which may be used—

“(A) to establish a loan loss reserve for the eligible entity;

“(B) to offset the personnel and program costs of the eligible entity in providing the loan; and

“(C) for any other related purpose, as determined by the eligible entity, in consultation with the State or Indian tribe that has issued a loan to the eligible entity under subsection (e).

“(5) OUTSIDE CONTRACTS.—An eligible entity may enter into 1 or more contracts with 1 or more qualified entities, as determined by the State or Indian tribe that has issued a loan to the eligible entity under subsection (e)—

“(A) to assist the eligible entity in administering the loans described in paragraph (1)(A); and

“(B) to carry out any of the requirements of the eligible entity described in subsection (e)(4)(A).

“(g) DIRECT LOANS FROM STATES AND INDIAN TRIBES.—A State or Indian tribe may act as an eligible entity under subsection (f) to provide loans directly to qualified consumers—

“(1) in accordance with that subsection; and

“(2) if the State or Indian tribe satisfies the requirements under subsection (e)(4), as determined by the Secretary.

“(h) PROGRAM ADMINISTRATION.—

“(1) PLAN.—Not later than 120 days after the date of enactment of this section, the Secretary shall establish and begin carrying out a plan—

“(A) to measure and verify the success of the program in implementing energy efficiency measures;

“(B) provide training to the employees of eligible entities relating to carrying out the requirements of eligible entities under this section; and

“(C) provide technical assistance to States, Indian tribes, and eligible entities relating to carrying out the requirements of this section.

“(2) PUBLIC AWARENESS.—Not later than 120 days after the date of enactment of this section, the Secretary shall establish and begin carrying out a plan to make eligible entities and the general public aware of the program, including by developing a marketing program to raise awareness of the program.

“(3) OUTSIDE CONTRACTS.—

“(A) IN GENERAL.—The Secretary may enter into 1 or more contracts with 1 or more qualified entities, as determined by the Secretary, to carry out paragraphs (1) and (2).

“(B) USE OF SUBCONTRACTORS AUTHORIZED.—A qualified entity that enters into a contract with the Secretary under subparagraph (A) may use 1 or more subcontractors to assist the qualified entity in carrying out the contract.

“(4) ACCOUNTING.—The Secretary, and each State and Indian tribe participating in the program, shall take appropriate steps to streamline the accounting requirements for eligible entities under the program while maintaining adequate assurances of the repayment of the loans made to those eligible entities under the program.

“(i) EFFECT ON AUTHORITY.—Nothing in this section shall impede, impair, or modify the authority of the Secretary to offer loans or grants under any other law.

“(j) REPORT.—

“(1) IN GENERAL.—Not later than 15 months after the date on which the program is established, and 90 days after the end of each fiscal year for each fiscal year thereafter, the Secretary shall submit to the appropriate committees of Congress and make publicly available a report that describes, with respect to the program—

“(A) the number of applications received by each State and Indian tribe from eligible entities for that fiscal year;

“(B) the number of loans made by each State and Indian tribe for that fiscal year—

“(i) to eligible entities; and

“(ii) directly to qualified consumers;

“(C) the eligible entities that are the recipients of the loans described in subparagraph (B)(i); and

“(D) the manner in which the program was advertised to eligible entities and the general public.

“(2) CONSULTATION.—The Secretary shall consult with and obtain information from States and Indian tribes in preparing the report submitted under paragraph (1).

“(k) AUTHORIZATION OF APPROPRIATIONS.—

“(1) IN GENERAL.—There is authorized to be appropriated to the Secretary to carry out this section \$150,000,000 for each of fiscal years 2021 through 2026.

“(2) SUPPLEMENT NOT SUPPLANT.—The funding provided to a State or Indian tribe under subsection (d) for each fiscal year shall be used to supplement, not supplant, any Federal, State, or other funds otherwise made available to that State or Indian tribe under—

“(A) a State energy conservation plan established under part D of title III of the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.); or

“(B) the Weatherization Assistance Program for Low-Income Persons established under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.).”

(b) STATE ENERGY CONSERVATION PLANS.—Section 362(d)(5) of the Energy Policy and Conservation Act (42 U.S.C. 6322(d)(5)) is amended—

(1) in subparagraph (A), by striking “or” at the end;

(2) in subparagraph (B), by inserting “or” after the semicolon; and

(3) by adding at the end the following:

“(C) which may include the community energy savings program under section 362A.”

(c) TECHNICAL AMENDMENT.—The table of contents for the Energy Policy and Conservation Act (Public Law 94-163; 89 Stat. 872) is amended by inserting after the item relating to section 362 the following:

“Sec. 362A. Community energy savings program.”

**SA 1457.** Mr. CARPER (for himself and Mr. CARDIN) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### **TITLE IV—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986**

##### **SEC. 4001. INVESTMENT CREDIT FOR WASTE HEAT TO POWER PROPERTY.**

(a) IN GENERAL.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986 is amended—

(1) at the end of clause (vi), by striking “or”;

(2) at the end of clause (vii), by inserting “or” after the comma; and

(3) by adding at the end the following:

“(viii) waste heat to power property.”

(b) DEFINITIONS AND LIMITATIONS.—Section 48(c) of the Internal Revenue Code of 1986 is amended by adding at the end the following:

“(5) WASTE HEAT TO POWER PROPERTY.—

“(A) IN GENERAL.—The term ‘waste heat to power property’ means property—

“(i) comprising a system which generates electricity through the recovery of a qualified waste heat resource, and

“(ii) the construction of which begins before January 1, 2027.

“(B) QUALIFIED WASTE HEAT RESOURCE.—The term ‘qualified waste heat resource’ means—

“(i) exhaust heat or flared gas from an industrial process that does not have, as its primary purpose, the production of electricity, and

“(ii) a pressure drop in any gas for an industrial or commercial process.

“(C) LIMITATIONS.—

“(i) IN GENERAL.—For purposes of subsection (a)(1), the basis of any waste heat to power property taken into account under this section shall not exceed the excess of—

“(I) the basis of such property, over

“(II) the fair market value of comparable property which does not have the capacity to capture and convert a (qualified waste heat resource to electricity.

“(ii) CAPACITY LIMITATION.—The term ‘waste heat to power property’ shall not include any property comprising a system if such system has a capacity in excess of 50 megawatts.”

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to periods after the date of enactment of this Act, in taxable years ending after such date, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).

**SA 1458.** Mr. TOOMEY submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

#### **TITLE IV—MISCELLANEOUS**

##### **SEC. 4001. SENSE OF THE SENATE REGARDING STATE PRIMACY WITH RESPECT TO THE REGULATION OF HYDRAULIC FRACTURING ON STATE LAND AND PRIVATE LAND.**

It is the sense of the Senate that—

(1) States maintain primacy for the regulation of hydraulic fracturing for oil and natural gas production on State land and private land;

(2) the President has no authority to declare a moratorium on the use of hydraulic fracturing on State land and private land; and

(3) the President should not attempt to declare a moratorium on the use of hydraulic fracturing on Federal land (including the outer Continental Shelf) or land held in trust for an Indian Tribe, unless the moratorium is authorized by an Act of Congress.

**SA 1459.** Ms. MURKOWSKI (for Mr. PETERS (for himself and Mr. PORTMAN)) proposed an amendment to the bill S. 1869, to require the disclosure of ownership of high-security space leased to accommodate a Federal agency, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

#### **SECTION 1. SHORT TITLE; FINDINGS.**

(a) SHORT TITLE.—This Act may be cited as the “Secure Federal Leases from Espionage And Suspicious Entanglements Act” or the “Secure Federal LEASES Act”.

(b) FINDINGS.—Congress finds that—

(1) the Government Accountability Office has reported that the Federal Government often leases high-security space from private sector landlords;

(2) the General Services Administration collects highest-level and immediate ownership information through the System for

Award Management, but it is not currently required to collect beneficial ownership information and lacks an adequate system for doing so;

(3) the General Services Administration and Federal agencies with leasing authority may not know if foreign owners have a stake in the buildings leased by the agencies, either through foreign-incorporated legal entities or through ownership in United States-incorporated legal entities, even when the leased space is used for classified operations or to store sensitive data; and

(4) according to a report of the Government Accountability Office, dated January 2017, that examined the risks of foreign ownership of Government-leased real estate, “leasing space in foreign-owned buildings could present security risks such as espionage and unauthorized cyber and physical access”.

## SEC. 2. DEFINITIONS.

In this Act:

(1) **BENEFICIAL OWNER.**—

(A) **IN GENERAL.**—Except as provided in subparagraph (B), the term “beneficial owner” means, with respect to a covered entity, each natural person who, directly or indirectly, through any contract, arrangement, understanding, relationship, or otherwise—

(i) exercises control over the covered entity; or

(ii) has a substantial interest in or receives substantial economic benefits from the assets of the covered entity.

(B) **EXCEPTIONS.**—The term “beneficial owner” does not include, with respect to a covered entity—

(i) a minor child;

(ii) a person acting as a nominee, intermediary, custodian, or agent on behalf of another person;

(iii) a person acting solely as an employee of the covered entity and whose control over or economic benefits from the covered entity derives solely from the employment status of the person;

(iv) a person whose only interest in the covered entity is through a right of inheritance, unless the person also meets the requirements of subparagraph (A); or

(v) a creditor of the covered entity, unless the creditor also meets the requirements of subparagraph (A).

(C) **ANTI-ABUSE RULE.**—The exceptions under subparagraph (B) shall not apply if used for the purpose of evading, circumventing, or abusing the requirements of this Act.

(2) **CONTROL.**—The term “control” means, with respect to a covered entity—

(A) having the authority or ability to determine how a covered entity is utilized; or

(B) having some decision-making power for the use of a covered entity.

(3) **COVERED ENTITY.**—The term “covered entity” means—

(A) a person, corporation, company, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group; or

(B) any governmental entity or instrumentality of a government.

(4) **EXECUTIVE AGENCY.**—The term “Executive agency” has the meaning given the term in section 105 of title 5, United States Code.

(5) **FEDERAL AGENCY.**—The term “Federal agency” means any Executive agency or any establishment in the legislative or judicial branch of the Government.

(6) **FEDERAL LESSEE.**—The term “Federal lessee” —

(A) means the Administrator of General Services, the Architect of the Capitol, or the head of any Federal agency, other than the Department of Defense, that has independent statutory leasing authority; and

(B) does not include the head of an element of the intelligence community.

(7) **FEDERAL TENANT.**—The term “Federal tenant” —

(A) means a Federal agency that is occupying or will occupy a high-security leased space for which a lease agreement has been secured on behalf of the Federal agency; and

(B) does not include an element of the intelligence community.

(8) **FOREIGN ENTITY.**—The term “foreign entity” means a covered entity that is headquartered or incorporated in a country that is not the United States.

(9) **FOREIGN PERSON.**—The term “foreign person” means an individual who is not a United States person.

(10) **HIGH-SECURITY LEASED SPACE.**—The term “high-security leased space” means a space leased by a Federal lessee that—

(A) will be occupied by Federal employees for nonmilitary activities; and

(B) has a facility security level of III, IV, or V, as determined by the Federal tenant in consultation with the Interagency Security Committee, the Department of Homeland Security, and the General Services Administration.

(11) **HIGHEST-LEVEL OWNER.**—The term “highest-level owner” means the entity that owns or controls an immediate owner of the offeror of a lease, or that owns or controls 1 or more entities that control an immediate owner of the offeror.

(12) **IMMEDIATE OWNER.**—The term “immediate owner” means an entity, other than the offeror of a lease, that has direct control of the offeror, including ownership or interlocking management, identity of interests among family members, shared facilities and equipment, and the common use of employees.

(13) **INTELLIGENCE COMMUNITY.**—The term “intelligence community” has the meaning given the term in section 3 of the National Security Act of 1947 (50 U.S.C. 3003).

(14) **SUBSTANTIAL ECONOMIC BENEFITS.**—The term “substantial economic benefits” means, with respect to a natural person described in paragraph (1)(A)(ii), having an entitlement to the funds or assets of a covered entity that, as a practical matter, enables the person, directly or indirectly, to control, manage, or direct the covered entity.

(15) **UNITED STATES PERSON.**—The term “United States person” means an individual who—

(A) is a citizen of the United States; or

(B) is an alien lawfully admitted for permanent residence in the United States.

(16) **WIDELY HELD.**—The term “widely held” means a fund that has not less than 100 natural persons as direct or indirect investors.

## SEC. 3. DISCLOSURE OF OWNERSHIP OF HIGH-SECURITY SPACE LEASED FOR FEDERAL AGENCIES.

(a) **REQUIRED DISCLOSURES.**—Before entering into a lease agreement with a covered entity or approving a novation agreement with a covered entity involving a change of ownership under a lease that will be used for high-security leased space, a Federal lessee shall require the covered entity to identify and disclose whether the immediate or highest-level owner of the leased space, including an entity involved in the financing thereof, is a foreign person or a foreign entity, including the country associated with the ownership entity.

(b) **NOTIFICATION.**—If a disclosure is made under subsection (a), the Federal lessee shall notify the Federal tenant of the building or other improvement that will be used for high-security space in writing, and consult with the Federal tenant, regarding security concerns and necessary mitigation measures, if any, prior to award of the lease or approval of the novation agreement.

(c) **TIMING.**—

(1) **IN GENERAL.**—A Federal lessee shall require a covered entity to provide the information described in subsection (a) when first submitting a proposal in response to a solicitation for offers issued by the Federal lessee.

(2) **UPDATES.**—A Federal lessee shall require a covered entity to submit an update of the information described in subsection (a) annually, beginning on the date that is 1 year after the date on which the Federal tenant began occupancy, with information including—

(A) the list of immediate or highest-level owners of the covered entity during the preceding 1-year period of Federal occupancy; or

(B) the information required to be provided relating to each such immediate or highest-level owner.

## SEC. 4. IMMEDIATE, HIGHEST-LEVEL, AND BENEFICIAL OWNERS.

(a) **PLAN.**—The General Services Administration shall develop a Government-wide plan for identifying all immediate, highest-level, or beneficial owners of high-security leased spaces before entering into a lease agreement with a covered entity for the accommodation of a Federal tenant in a high-security leased space.

(b) **REQUIREMENTS.**—

(1) **CONTENTS.**—The plan described in subsection (a) shall include a process for collecting and utilizing the following information on each immediate, highest-level, or beneficial owner of a high-security leased space:

(A) Name.

(B) Current residential or business street address.

(C) An identifying number or document that verifies identity as a United States person, foreign person, or foreign entity.

(2) **DISCLOSURES AND NOTIFICATIONS.**—The plan described in subsection (a) shall—

(A) require the disclosure of any immediate, highest-level, or beneficial owner that is a foreign person;

(B) require that, if the Federal lessee is assigning the building or other improvement that will be used for high-security space to a Federal tenant, the Federal tenant shall be notified of the disclosure described in subparagraph (A); and

(C) exclude collecting ownership information on widely held pooled-investment vehicles, mutual funds, trusts, or other pooled-investment vehicles.

(c) **REPORT AND IMPLEMENTATION.**—The General Services Administration shall—

(1) not later than 1 year after the date of enactment of this Act, submit the plan described in subsection (a) to the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Oversight and Reform of the House of Representatives;

(2) not later than 2 years after the date of enactment of this Act, implement the plan described in subsection (a); and

(3) not later than 1 year after the implementation of the plan described in subsection (a), and each year thereafter for 9 years, submit a report to the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Oversight and Reform of the House of Representatives on the status of the implementation of the plan, including the number of disclosures made under subsection (b)(2).

## SEC. 5. OTHER SECURITY AGREEMENTS FOR LEASED SPACE.

A lease agreement between a Federal lessee and a covered entity for the accommodation of a Federal agency in a building or other improvement that will be used for high-security leased space shall include language that provides that—

(1) the covered entity and any member of the property management company who may be responsible for oversight or maintenance of the high-security leased space shall not—  
(A) maintain access to the high-security leased space; or

(B) have access to the high-security leased space without prior approval from the Federal tenant;

(2) access to the high-security leased space or any property or information located within that space will only be granted by the Federal tenant if the Federal tenant determines that the access is clearly consistent with the mission and responsibilities of the Federal tenant; and

(3) the Federal lessee shall have written procedures in place, signed by the Federal lessee and the covered entity, governing access to the high-security leased space in case of emergencies that may damage the leased property.

#### SEC. 6. APPLICABILITY.

Except where otherwise provided, this Act shall apply with respect to any lease or novation agreement entered into on or after the date of the enactment of this Act.

**SA 1460.** Ms. MURKOWSKI (for Mr. COTTON (for himself, Mr. MENENDEZ, Mr. MARKEY, Mr. GARDNER, Mr. BARASSO, and Ms. WARREN)) proposed an amendment to the resolution S. Res. 497, commemorating the life of Dr. Li Wenliang and calling for transparency and cooperation from the Government of the People's Republic of China and the Communist Party of China; as follows:

In the second whereas clause of the preamble, strike “on December 1, 2019” and insert “in early December 2019”.

Strike the ninth whereas clause of the preamble and insert the following:

Whereas the people of China expressed their grief and anger on social media after the death of Dr. Li with the phrase “I want freedom of speech,” which was swiftly censored by the Government of the People's Republic of China;

**SA 1461.** Ms. MURKOWSKI (for Ms. COLLINS (for herself, Mr. CASEY, Mr. ALEXANDER, Mrs. MURRAY, Ms. MCSALLY, Mr. JONES, Mrs. CAPITO, Ms. SMITH, Mr. GARDNER, Mr. PETERS, Mr. DAINES, Mr. REED, Mr. ROBERTS, Ms. HASSAN, Mr. KAINE, Mr. TILLIS, Ms. MURKOWSKI, Mrs. GILLIBRAND, Mr. GRASSLEY, Mr. SULLIVAN, Ms. SINEMA, Ms. ROSEN, Mr. SCOTT of Florida, and Mrs. SHAHEEN)) proposed an amendment to the bill H.R. 4334, to amend the Older Americans Act of 1965 to authorize appropriations for fiscal years 2020 through 2024, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

#### SECTION 1. SHORT TITLE.

This Act may be cited as the “Supporting Older Americans Act of 2020”.

#### SEC. 2. TABLE OF CONTENTS.

The table of contents of this Act is as follows:

- Sec. 1. Short title.
- Sec. 2. Table of contents.
- Sec. 3. References.
- Sec. 4. Definitions.

#### TITLE I—MODERNIZING DEFINITIONS AND PROGRAMS UNDER THE ADMINISTRATION ON AGING

Sec. 101. Reauthorization.

Sec. 102. Person-centered, trauma-informed services.

Sec. 103. Aging and Disability Resource Centers.

Sec. 104. Assistive technology.

Sec. 105. Vaccination.

Sec. 106. Malnutrition.

Sec. 107. Sexually transmitted diseases.

Sec. 108. Addressing chronic pain management.

Sec. 109. Screening for suicide risk.

Sec. 110. Screening for fall-related traumatic brain injury; addressing public health emergencies and emerging health threats; negative health effects associated with social isolation.

Sec. 111. Clarification regarding board and care facilities.

Sec. 112. Person-centered, trauma-informed services definition.

Sec. 113. Traumatic brain injury.

Sec. 114. Modernizing the review of applications and providing technical assistance for disasters.

Sec. 115. Increased focus of Assistant Secretary on negative health effects associated with social isolation.

Sec. 116. Notification of availability of or updates to policies, practices, and procedures through a uniform e-format.

Sec. 117. Evidence-based program adaptation.

Sec. 118. Business acumen provisions and clarification regarding outside funding for area agencies on aging.

Sec. 119. Demonstration on direct care workers.

Sec. 120. National resource center for older individuals experiencing the long-term and adverse consequences of trauma.

Sec. 121. National Resource Center for Women and Retirement.

Sec. 122. Family caregivers.

Sec. 123. Interagency coordination.

Sec. 124. Modernizing the Interagency Coordinating Committee on Healthy Aging and Age-Friendly Communities.

Sec. 125. Professional standards for a nutrition official under the Assistant Secretary.

Sec. 126. Report on social isolation.

Sec. 127. Research and evaluation.

#### TITLE II—IMPROVING GRANTS FOR STATE AND COMMUNITY PROGRAMS ON AGING

Sec. 201. Social determinants of health.

Sec. 202. Younger onset Alzheimer's disease.

Sec. 203. Reauthorization.

Sec. 204. Hold harmless formula.

Sec. 205. Outreach efforts.

Sec. 206. State Long-Term Care Ombudsman program minimum funding and maintenance of effort.

Sec. 207. Coordination with resource centers.

Sec. 208. Senior legal hotlines.

Sec. 209. Increase in limit on use of allotted funds for State administrative costs.

Sec. 210. Improvements to nutrition programs.

Sec. 211. Review of reports.

Sec. 212. Other practices.

Sec. 213. Screening for negative health effects associated with social isolation and traumatic brain injury.

Sec. 214. Supportive services and senior centers.

Sec. 215. Culturally appropriate, medically tailored meals.

Sec. 216. Nutrition services study.

Sec. 217. National Family Caregiver Support program.

Sec. 218. National Family Caregiver Support program cap.

#### TITLE III—MODERNIZING ACTIVITIES FOR HEALTH, INDEPENDENCE, AND LONGEVITY

Sec. 301. Reauthorization.

Sec. 302. Public awareness of traumatic brain injury.

Sec. 303. Falls prevention and chronic disease self-management education.

Sec. 304. Demonstration to address negative health impacts associated with social isolation.

Sec. 305. Technical assistance and innovation to improve transportation for older individuals.

Sec. 306. Grant program for multigenerational collaboration.

#### TITLE IV—SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM

Sec. 401. Priority for the senior community service employment program.

Sec. 402. Authorization of appropriations.

#### TITLE V—ENHANCING GRANTS FOR NATIVE AMERICANS

Sec. 501. Reauthorization.

#### TITLE VI—MODERNIZING ALLOTMENTS FOR VULNERABLE ELDER RIGHTS PROTECTION ACTIVITIES AND OTHER PROGRAMS

Sec. 601. Reauthorization; vulnerable elder rights protection activities.

Sec. 602. Volunteer State long-term care ombudsman representatives.

Sec. 603. Prevention of elder abuse, neglect, and exploitation.

Sec. 604. Principles for person-directed services and supports during serious illness.

Sec. 605. Extension of the Supporting Grandparents Raising Grandchildren Act.

Sec. 606. Best practices for home and community-based ombudsmen.

Sec. 607. Senior home modification assistance initiative.

#### TITLE VII—MISCELLANEOUS

Sec. 701. Technical corrections.

#### SEC. 3. REFERENCES.

Except as otherwise expressly provided in this Act, wherever in this Act an amendment or repeal is expressed in terms of an amendment to, or a repeal of, a section or other provision, the reference shall be considered to be made to that section or other provision of the Older Americans Act of 1965 (42 U.S.C. 3001 et seq.).

#### SEC. 4. DEFINITIONS.

In this Act, the terms “area agency on aging”, “Assistant Secretary”, “greatest social need”, “older individual”, and “Secretary” have the meanings given such terms in section 102 of the Older Americans Act of 1965 (42 U.S.C. 3002).

#### TITLE I—MODERNIZING DEFINITIONS AND PROGRAMS UNDER THE ADMINISTRATION ON AGING

##### SEC. 101. REAUTHORIZATION.

Section 216 (42 U.S.C. 3020f) is amended to read as follows:

##### “SEC. 216. AUTHORIZATION OF APPROPRIATIONS.

“(a) IN GENERAL.—For purposes of carrying out this Act, there are authorized to be appropriated for administration, salaries, and expenses of the Administration \$43,937,410 for fiscal year 2020, \$46,573,655 for fiscal year 2021, \$49,368,074 for fiscal year 2022, \$52,330,158 for fiscal year 2023, and \$55,469,968 for fiscal year 2024.

“(b) ADDITIONAL AUTHORIZATIONS.—There are authorized to be appropriated—



“(1) to carry out section 202(a)(21) (relating to the National Eldercare Locator Service), \$2,180,660 for fiscal year 2020, \$2,311,500 for fiscal year 2021, \$2,450,190 for fiscal year 2022, \$2,597,201 for fiscal year 2023, and \$2,753,033 for fiscal year 2024;

“(2) to carry out section 215, \$1,988,060 for fiscal year 2020, \$2,107,344 for fiscal year 2021, \$2,233,784 for fiscal year 2022, \$2,367,811 for fiscal year 2023, and \$2,509,880 for fiscal year 2024;

“(3) to carry out section 202 (relating to Elder Rights Support Activities under this title), \$1,371,740 for fiscal year 2020, \$1,454,044 for fiscal year 2021, \$1,541,287 for fiscal year 2022, \$1,633,764 for fiscal year 2023, and \$1,731,790 for fiscal year 2024; and

“(4) to carry out section 202(b) (relating to the Aging and Disability Resource Centers), \$8,687,330 for fiscal year 2020, \$9,208,570 for fiscal year 2021, \$9,761,084 for fiscal year 2022, \$10,346,749 for fiscal year 2023, and \$10,967,554 for fiscal year 2024.”.

#### SEC. 102. PERSON-CENTERED, TRAUMA-INFORMED SERVICES.

Section 101(2) (42 U.S.C. 3001(2)) is amended by inserting “(including access to person-centered, trauma-informed services as appropriate)” after “health”.

#### SEC. 103. AGING AND DISABILITY RESOURCE CENTERS.

Section 102(4) (42 U.S.C. 3002(4)) is amended—

(1) in the matter preceding subparagraph (A), by inserting “, in collaboration with (as appropriate) area agencies on aging, centers for independent living (as described in part C of chapter 1 of title VII of the Rehabilitation Act of 1973 (29 U.S.C. 796f et seq.)), and other aging or disability entities” after “provides”;

(2) in subparagraph (B)—

(A) by inserting “services, supports, and” after “plan for long-term”; and

(B) by inserting “and choices” after “desires”; and

(3) in subparagraph (D), by striking “part C of title VII of the Rehabilitation Act of 1973 (29 U.S.C. 796f et seq.), and other community-based entities,” and inserting “part C of chapter 1 of title VII of the Rehabilitation Act of 1973, and other community-based entities, including other aging or disability entities.”.

#### SEC. 104. ASSISTIVE TECHNOLOGY.

The Older Americans Act of 1965 (42 U.S.C. 3001 et seq.) is amended—

(1) in section 102(8) (42 U.S.C. 3002(8)), by adding at the end the following:

“(C) The term ‘State assistive technology entity’ means the agency, office, or other entity designated under subsection (c)(1) of section 4 of the Assistive Technology Act of 1998 (29 U.S.C. 3003) to carry out State activities under such section.”;

(2) in section 306 (42 U.S.C. 3026)—

(A) in subsection (a)(6)—

(i) in subparagraph (G), by striking “; and” and inserting a semicolon;

(ii) in subparagraph (H), by striking “appropriate;” and inserting “appropriate; and”;

(iii) by adding at the end the following:

“(I) to the extent feasible, coordinate with the State agency to disseminate information about the State assistive technology entity and access to assistive technology options for serving older individuals.”; and

(B) in subsection (b)(3)—

(i) in subparagraph (K)—

(I) by aligning the margins of the subparagraph with the margins of subparagraph (J); and

(II) by striking “; and” and inserting a semicolon;

(ii) by redesignating subparagraph (L) as subparagraph (M); and

(iii) by inserting after subparagraph (K) the following:

“(L) assistive technology devices and services; and”; and

(3) in section 411(a) (42 U.S.C. 3032(a))—

(A) in paragraph (2), by inserting “, aligned with evidence-based practice,” after “‘applied social research’”; and

(B) in paragraph (10), by inserting “consistent with section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d)” after “‘other technologies’”.

#### SEC. 105. VACCINATION.

Section 102(14) (42 U.S.C. 3002(14)) is amended—

(1) in subparagraph (B), by inserting “immunization status,” after “oral health.”; and

(2) in subparagraph (D), by inserting “infectious disease, and vaccine-preventable disease, as well as” after “cardiovascular disease.”.

#### SEC. 106. MALNUTRITION.

The Older Americans Act of 1965 (42 U.S.C. 3001 et seq.) is amended—

(1) in section 102(14)(B), as amended by section 105(1), by inserting “(including screening for malnutrition)” after “nutrition screening”; and

(2) in section 330(1), by striking “and food insecurity” and inserting “, food insecurity, and malnutrition”.

#### SEC. 107. SEXUALLY TRANSMITTED DISEASES.

Section 102(14)(D) (42 U.S.C. 3002(14)(D)), as amended by section 105(2), is further amended by inserting “prevention of sexually transmitted diseases,” after “vaccine-preventable disease.”.

#### SEC. 108. ADDRESSING CHRONIC PAIN MANAGEMENT.

Section 102(14)(D) (42 U.S.C. 3002(14)(D)), as amended by section 107, is further amended by inserting “chronic pain management,” after “substance abuse reduction.”.

#### SEC. 109. SCREENING FOR SUICIDE RISK.

Section 102(14)(G) (42 U.S.C. 3002(14)(G)) is amended by inserting “and screening for suicide risk” after “depression”.

#### SEC. 110. SCREENING FOR FALL-RELATED TRAUMATIC BRAIN INJURY; ADDRESSING PUBLIC HEALTH EMERGENCIES AND EMERGING HEALTH THREATS; NEGATIVE HEALTH EFFECTS ASSOCIATED WITH SOCIAL ISOLATION.

Section 102(14) (42 U.S.C. 3002(14)) is amended—

(1) by redesignating subparagraphs (H) through (J), and subparagraphs (K) and (L), as subparagraphs (I) through (K), and subparagraphs (M) and (O), respectively;

(2) by inserting after subparagraph (G) the following:

“(H) screening for fall-related traumatic brain injury and other fall-related injuries, coordination of treatment, rehabilitation and related services, and referral services related to such injury or injuries;”; and

(3) by inserting after subparagraph (K), as redesignated by paragraph (1), the following:

“(L) services that are a part of responses to a public health emergency or emerging health threat.”; and

(4) in subparagraph (M), as redesignated by paragraph (1), by striking “; and” and inserting a semicolon;

(5) by inserting after subparagraph (M), as redesignated by paragraph (1), the following:

“(N) screening for the prevention of negative health effects associated with social isolation and coordination of supportive services and health care to address negative health effects associated with social isolation; and”; and

(6) in subparagraph (O), as redesignated, by striking “(A) through (K)” and inserting “(A) through (N)”.

#### SEC. 111. CLARIFICATION REGARDING BOARD AND CARE FACILITIES.

Section 102(35)(C) (42 U.S.C. 3002(35)(C)) is amended by striking “for purposes of sections 307(a)(12) and 712.”.

#### SEC. 112. PERSON-CENTERED, TRAUMA-INFORMED SERVICES DEFINITION.

Section 102 (42 U.S.C. 3002) is amended—

(1) by redesignating paragraphs (41) through (54) as paragraphs (42) through (55), respectively; and

(2) by inserting after paragraph (40) the following:

“(41) The term ‘person-centered, trauma-informed’, with respect to services, means services provided through an aging program that—

“(A) use a holistic approach to providing services or care;

“(B) promote the dignity, strength, and empowerment of victims of trauma; and

“(C) incorporate evidence-based practices based on knowledge about the role of trauma in trauma victims’ lives.”.

#### SEC. 113. TRAUMATIC BRAIN INJURY.

Section 102 (42 U.S.C. 3002), as amended by section 112, is further amended—

(1) by redesignating paragraph (55) as paragraph (56); and

(2) by inserting after paragraph (54) the following:

“(55) The term ‘traumatic brain injury’ has the meaning given such term in section 393B(d) of the Public Health Service Act (42 U.S.C. 280b-1c(d)).”.

#### SEC. 114. MODERNIZING THE REVIEW OF APPLICATIONS AND PROVIDING TECHNICAL ASSISTANCE FOR DISASTERS.

(a) REVIEW OF APPLICATIONS.—Section 202 (42 U.S.C. 3012) is amended—

(1) by amending subsection (a)(4) to read as follows:

“(4) administer the grants provided by this Act, but not approve an application submitted by an applicant for a grant for an activity under a provision of this Act for which such applicant previously received a grant under such provision unless the Assistant Secretary determines—

“(A) the activity for which such application was submitted is being operated, or was operated, effectively to achieve its stated purpose; and

“(B) such applicant has complied with the assurances provided to the Assistant Secretary with the application for such previous grant.”; and

(2) by adding at the end the following:

“(h) The Assistant Secretary shall publish, on an annual basis, a list of centers and demonstration projects funded under each title of this Act. The Assistant Secretary shall ensure that this information is also directly provided to State agencies and area agencies on aging.”.

(b) ADDRESSING THE NEEDS OF OLDER INDIVIDUALS IN DISASTERS.—Section 202(a) (42 U.S.C. 3012(a)) is amended—

(1) in paragraph (30), by striking “; and” and inserting a semicolon;

(2) in paragraph (31), by striking the period at the end and inserting a semicolon; and

(3) by adding at the end the following:

“(32) provide technical assistance to, and share best practices with, State agencies and area agencies on aging on how to collaborate and coordinate activities and develop long-range emergency preparedness plans with local and State emergency response agencies, relief organizations, local and State governments, Federal agencies as appropriate, and any other institutions that have responsibility for disaster relief service delivery.”.

**SEC. 115. INCREASED FOCUS OF ASSISTANT SECRETARY ON NEGATIVE HEALTH EFFECTS ASSOCIATED WITH SOCIAL ISOLATION.**

Section 202(a) (42 U.S.C. 3012(a)), as amended by section 114(b), is further amended by adding at the end the following:

“(33) with input from aging network stakeholders, including caregivers, develop objectives, priorities, and a long-term plan for supporting State and local efforts involving education about prevention of, detection of, and response to negative health effects associated with social isolation among older individuals, and submit a report to Congress on this effort by January 2021; and”.

**SEC. 116. NOTIFICATION OF AVAILABILITY OF OR UPDATES TO POLICIES, PRACTICES, AND PROCEDURES THROUGH A UNIFORM E-FORMAT.**

Section 202(a) (42 U.S.C. 3012(a)), as amended by sections 114(b) and 115, is further amended by adding at the end the following:

“(34) provide (to the extent practicable) a standardized notification to State agencies, area agencies on aging, providers of services under this Act, and grantees or contract awardees under this Act, through an electronic format (e-mail or other electronic notification), of the availability of, or updates to, policies, practices, and procedures under this Act.”.

**SEC. 117. EVIDENCE-BASED PROGRAM ADAPTATION.**

(a) **FUNCTIONS OF THE ASSISTANT SECRETARY.**—Section 202 (42 U.S.C. 3012) is amended—

(1) in subsection (a)(28), by inserting before the semicolon “, including information and technical assistance on delivery of such services in different settings”; and

(2) in subsection (b)(9)(B), by inserting before the semicolon “, including delivery of such services in different settings”.

(b) **EVIDENCE-BASED DISEASE PREVENTION AND HEALTH PROMOTION SERVICES.**—Section 361(a) (42 U.S.C. 3030m(a)) is amended in the second sentence by inserting “provide technical assistance on the delivery of evidence-based disease prevention and health promotion services in different settings and for different populations, and” before “consult”.

**SEC. 118. BUSINESS ACUMEN PROVISIONS AND CLARIFICATION REGARDING OUTSIDE FUNDING FOR AREA AGENCIES ON AGING.**

(a) **ASSISTANCE RELATING TO GROWING AND SUSTAINING CAPACITY.**—Section 202(b)(9) (42 U.S.C. 3012(b)(9)) is amended—

(1) in subparagraph (A), by striking “and” after the semicolon at the end;

(2) in subparagraph (B), as amended by section 117(a)(2), by inserting “and” after the semicolon at the end; and

(3) by adding at the end the following:

“(C) activities for increasing business acumen, capacity building, organizational development, innovation, and other methods of growing and sustaining the capacity of the aging network to serve older individuals and caregivers most effectively;”.

(b) **CLARIFYING PARTNERSHIPS FOR AREA AGENCIES ON AGING.**—Section 306 (42 U.S.C. 3026) is amended by adding at the end the following:

“(g) Nothing in this Act shall restrict an area agency on aging from providing services not provided or authorized by this Act, including through—

“(1) contracts with health care payers;

“(2) consumer private pay programs; or

“(3) other arrangements with entities or individuals that increase the availability of home- and community-based services and supports.”.

(c) **CONFORMING AMENDMENT.**—Section 307(a) (42 U.S.C. 3027(a)) is amended—

(1) by striking paragraph (26); and

(2) by redesignating paragraphs (27) through (30) as paragraphs (26) through (29).

**SEC. 119. DEMONSTRATION ON DIRECT CARE WORKERS.**

Section 411(a) (42 U.S.C. 3032(a)) is amended—

(1) by redesignating paragraphs (13) and (14) as paragraphs (14) and (15), respectively; and

(2) by inserting after paragraph (12) the following:

“(13) in coordination with the Secretary of Labor, the demonstration of new strategies for the recruitment, retention, or advancement of direct care workers, and the soliciting, development, and implementation of strategies—

“(A) to reduce barriers to entry for a diverse and high-quality direct care workforce, including providing wages, benefits, and advancement opportunities needed to attract or retain direct care workers; and

“(B) to provide education and workforce development programs for direct care workers that include supportive services and career planning;”.

**SEC. 120. NATIONAL RESOURCE CENTER FOR OLDER INDIVIDUALS EXPERIENCING THE LONG-TERM AND ADVERSE CONSEQUENCES OF TRAUMA.**

Section 411(a) (42 U.S.C. 3032(a)), as amended by section 119, is further amended—

(1) by redesignating paragraphs (14) and (15) as paragraphs (15) and (16), respectively; and

(2) by inserting after paragraph (13) the following:

“(14) the establishment and operation of a national resource center that shall—

“(A) provide training and technical assistance to agencies in the aging network delivering services to older individuals experiencing the long-term and adverse consequences of trauma;

“(B) share best practices with the aging network; and

“(C) make subgrants to the agencies best positioned to advance and improve the delivery of person-centered, trauma-informed services for older individuals experiencing the long-term and adverse consequences of trauma;”.

**SEC. 121. NATIONAL RESOURCE CENTER FOR WOMEN AND RETIREMENT.**

Section 215 (42 U.S.C. 3020e-1) is amended by adding at the end the following:

“(k)(1) The Assistant Secretary shall, directly or by grant or contract, operate the National Resource Center for Women and Retirement (in this subsection referred to as the ‘Center’).

“(2) The Center shall—

“(A) provide tools, such as basic financial management, retirement planning, and other tools that promote financial literacy and help to identify and prevent exploitation (including fraud), and integrate these with information on health and long-term care;

“(B) annually disseminate a summary of outreach activities provided, including work to provide user-friendly consumer information and public education materials;

“(C) develop targeted outreach strategies;

“(D) provide technical assistance to State agencies and to other public and nonprofit private agencies and organizations; and

“(E) develop partnerships and collaborations to address program objectives.”.

**SEC. 122. FAMILY CAREGIVERS.**

(a) **ADMINISTRATION.**—Section 202 (42 U.S.C. 3012), as amended by section 114, is further amended by adding at the end the following:

“(i) The Assistant Secretary shall carry out the RAISE Family Caregivers Act (42 U.S.C. 3030s note).”.

(b) **SUNSET.**—Section 6 of the RAISE Family Caregivers Act (42 U.S.C. 3030s note) is

amended by striking “3 years” and inserting “4 years”.

(c) **CONFORMING AMENDMENT.**—Section 2(3) of the RAISE Family Caregivers Act (42 U.S.C. 3030s note) is amended by inserting “, acting through the Assistant Secretary for Aging” before the period at the end.

**SEC. 123. INTERAGENCY COORDINATION.**

(a) **IN GENERAL.**—The Assistant Secretary shall, in performing the functions of the Administration on Aging under section 202(a)(5) of the Older Americans Act of 1965 (42 U.S.C. 3012(a)(5)) related to health (including mental and behavioral health) services, coordinate with the Assistant Secretary for Mental Health and Substance Use and the Director of the Centers for Disease Control and Prevention—

(1) in the planning, development, implementation, and evaluation of evidence-based policies, programs, practices, and other activities pertaining to the prevention of suicide among older individuals, including the implementation of evidence-based suicide prevention programs and strategies identified by the National Center for Injury Prevention and Control at the Centers for Disease Control and Prevention and other entities, as applicable; and

(2) in providing and incorporating technical assistance for the prevention of suicide among older individuals, including technical assistance related to the Suicide Prevention Technical Assistance Center established under section 520C of the Public Health Service Act (42 U.S.C. 290bb-34).

(b) **PROGRAM DESIGN.**—Section 202(a)(5) (42 U.S.C. 3012(a)(5)) is amended by inserting “cultural experiences, activities, and services, including in the arts,” after “education”).”.

**SEC. 124. MODERNIZING THE INTERAGENCY COORDINATING COMMITTEE ON HEALTHY AGING AND AGE-FRIENDLY COMMUNITIES.**

(a) **FEDERAL AGENCY CONSULTATION.**—Section 203(b) (42 U.S.C. 3013(b)) is amended—

(1) in paragraph (18), by striking “and” at the end;

(2) in paragraph (19), by striking the period at the end and inserting “, and”; and

(3) by adding at the end the following:

“(20) section 393D of the Public Health Service Act (42 U.S.C. 280b-1f), relating to safety of seniors.”.

(b) **MODERNIZATION.**—Section 203(c) (42 U.S.C. 3013(c)) is amended—

(1) in paragraph (1)—

(A) by striking “the Federal officials” and inserting “other Federal officials”; and

(B) by striking “Committee on Aging” and inserting “Committee on Healthy Aging and Age-Friendly Communities”; and

(C) by inserting “and the development of a national set of recommendations, in accordance with paragraph (6), to support the ability of older individuals to age in place and access homelessness prevention services, preventive health care, promote age-friendly communities, and address the ability of older individuals to access long-term care supports, including access to caregivers and home- and community-based health services” before the period;

(2) in paragraph (4), by adding at the end the following: “The first term, after the date of enactment of the Supporting Older Americans Act of 2020, shall start not later than 1 year after such date of enactment.”;

(3) in paragraph (6)—

(A) in the matter preceding subparagraph (A), by striking “The Committee shall” and inserting “The recommendations described in paragraph (1) may include recommendations for”; and

(B) in subparagraph (A)—

(i) by striking “share information with and establish an ongoing system to” and inserting “ways to”; and

(ii) by striking “for older individuals and recommend improvements” and all that follows through “accessibility of such programs and services” and inserting “that impact older individuals”;

(C) in subparagraph (B)—

(i) by striking “identify, promote, and implement (as appropriate),”;

(ii) in clause (i), by striking “and” after the semicolon;

(iii) in clause (ii), by inserting “and” after the semicolon; and

(iv) by adding at the end the following:

“(iii) best practices identified in coordination with the Centers for Disease Control and Prevention, the National Institute on Aging, the Centers for Medicare & Medicaid Services, the Office of Lead Hazard Control and Healthy Homes of the Department of Housing and Urban Development, and other Federal agencies, as appropriate, to reduce and prevent falls among older individuals, that incorporate evidence-based falls prevention programs and home modifications, which recommendations shall supplement and not unnecessarily duplicate activities authorized under section 393D of the Public Health Service Act (42 U.S.C. 280b-1f), relating to safety of seniors.”;

(D) in subparagraph (C)—

(i) by inserting “ways to” before “collect”;

(ii) by striking “older individuals and”;

and

(iii) by striking “the individuals to ensure” and all that follows through “information” and inserting “older individuals to ensure that such information is accessible”;

(E) in subparagraph (D), by striking “work with” and all that follows through “member agencies to ensure” and inserting “ways to ensure”;

(F) in subparagraph (E), by striking “seek input” and all that follows through “foundations” and inserting “seeking input from and consulting with nonprofit organizations, academic or research institutions, community-based organizations, philanthropic organizations, or other entities supporting age-friendly communities”;

(G) in subparagraph (F), by striking “identify” and inserting “identifying”; and

(H) by amending subparagraph (G) to read as follows:

“(G) ways to improve coordination to provide housing, health care, and other supportive services to older individuals.”;

(4) in paragraph (7)(A)(i), by striking “services for older individuals” and inserting “services that impact older individuals”; and

(5) by adding at the end the following:

“(9) In this subsection, the term ‘age-friendly community’ means a community that—

“(A) is taking measurable steps to—

“(i) include adequate and accessible housing, public spaces and buildings, safe and secure paths, variable route transportation services, and programs and services designed to support health and well-being;

“(ii) respect and include older individuals in social opportunities, civic participation, volunteerism, and employment; and

“(iii) facilitate access to supportive services for older individuals;

“(B) is not an assisted living facility or long-term care facility; and

“(C) has a plan in place to meet local needs for housing, transportation, civic participation, social connectedness, and accessible public spaces.”.

(C) ADMINISTRATION OF THE ACT.—Section 205(a)(2) (42 U.S.C. 3016(a)(2)) is amended—

(1) by redesignating subparagraph (C) as subparagraph (D); and

(2) by inserting after subparagraph (B) the following:

“(C) The Assistant Secretary may provide technical assistance, including through the

regional offices of the Administration, to State agencies, area agencies on aging, local government agencies, or leaders in age-friendly communities (as defined, for purposes of this subparagraph, in section 203(c)(9) regarding—

“(i) dissemination of, or consideration of ways to implement, best practices and recommendations from the Interagency Coordinating Committee on Healthy Aging and Age-Friendly Communities established under section 203(c); and

“(ii) methods for managing and coordinating existing programs to meet the needs of growing age-friendly communities.”.

#### SEC. 125. PROFESSIONAL STANDARDS FOR A NUTRITION OFFICIAL UNDER THE ASSISTANT SECRETARY.

Section 205(a)(2)(D)(ii) (42 U.S.C. 3016(a)(2)(D)(ii)), as redesignated by section 124(c)(1), is amended to read as follows:

“(ii) be a registered dietitian or registered dietitian nutritionist.”.

#### SEC. 126. REPORT ON SOCIAL ISOLATION.

(a) PREPARATION OF REPORT.—

(1) IN GENERAL.—The Secretary shall, in carrying out activities under section 206(a) of the Older Americans Act of 1965 (42 U.S.C. 3017(a)), prepare a report on programs authorized by such Act (42 U.S.C. 3001 et seq.), and supported or funded by the Administration on Aging, that include a focus on addressing the negative health effects associated with social isolation through targeting older individuals identified as being in greatest social need, as appropriate.

(2) IMPACT.—Such report shall identify—

(A) whether social isolation is being adequately addressed under such programs, including, to the extent practicable—

(i) the prevalence of social isolation in rural areas and in urban areas;

(ii) the negative public health effects associated with social isolation; and

(iii) the role of preventive measures or of services, including nutrition services, in addressing the negative health effects associated with social isolation among older individuals; and

(B) public awareness of and efforts to address the negative health effects associated with social isolation.

(3) TYPES OF PROGRAMS.—Such report shall identify whether programs described in paragraph (1)—

(A) support projects in local communities and involve diverse sectors associated with such communities to decrease the negative health effects associated with social isolation among older individuals and caregivers;

(B) support outreach activities to screen older individuals for negative health effects associated with social isolation; and

(C) include a focus on decreasing the negative health effects associated with social isolation.

(4) RECOMMENDATIONS.—Such report shall, as appropriate, include recommendations for reducing the negative health effects associated with social isolation and to address any negative health effects identified under clauses (ii) and (iii) of subparagraph (A), and subparagraph (B), of paragraph (2).

(b) SUBMISSION OF REPORT.—

(1) INTERIM STATUS REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit an interim report, to the committees of the Senate and of the House of Representatives with jurisdiction over the Older Americans Act of 1965 (42 U.S.C. 3001 et seq.), and the Special Committee on Aging of the Senate, on the status of the evaluation underway to develop the final report required under this section.

(2) FINAL REPORT.—Not later than 5 years after the date of enactment of this Act, the Secretary shall submit a final report that

meets the requirements of this section to the committees of the Senate and of the House of Representatives with jurisdiction over the Older Americans Act of 1965 (42 U.S.C. 3001 et seq.), and the Special Committee on Aging of the Senate.

#### SEC. 127. RESEARCH AND EVALUATION.

(a) CENTER.—Section 201 (42 U.S.C. 3011) is amended by adding at the end the following:

“(g)(1) The Assistant Secretary shall, as appropriate, coordinate the research and evaluation functions of this Act under a Research, Demonstration, and Evaluation Center for the Aging Network (in this subsection referred to as the ‘Center’), which shall be headed by a director designated by the Assistant Secretary from individuals described in paragraph (4).

“(2) The purpose of the Center shall be—

“(A) to coordinate, as appropriate, research, research dissemination, evaluation, demonstration projects, and related activities carried out under this Act;

“(B) to provide assessment of the programs and interventions authorized under this Act; and

“(C) to increase the repository of information on evidence-based programs and interventions available to the aging network, which information shall be applicable to existing programs and interventions and help in the development of new evidence-based programs and interventions.

“(3) Activities of the Center shall include, as appropriate, conducting, promoting, coordinating, and providing support for—

“(A) research and evaluation activities that support the objectives of this Act, including—

“(i) evaluation of new and existing programs and interventions authorized by this Act; and

“(ii) research on and assessment of the relationship between programs and interventions under this Act and the health outcomes, social determinants of health, quality of life, and independence of individuals served under this Act;

“(B) demonstration projects that support the objectives of this Act, including activities to bring effective demonstration projects to scale with a prioritization of projects that address the needs of underserved populations, and promote partnerships among aging services, community-based organizations, and Medicare and Medicaid providers, plans, and health (including public health) systems;

“(C) outreach and dissemination of research findings; and

“(D) technical assistance related to the activities described in this paragraph.

“(4) The director shall be an individual with substantial knowledge of and experience in aging and health policy, and research administration.

“(5) Not later than October 1, 2020, and at 5-year intervals thereafter, the director shall prepare and publish in the Federal Register for public comment a draft of a 5-year plan that—

“(A) outlines priorities for research, research dissemination, evaluation, demonstration projects, and related activities;

“(B) explains the basis for such priorities; and

“(C) describes how the plan will meet the needs of underserved populations.

“(6) The director shall coordinate, as appropriate, research, research dissemination, evaluation, and demonstration projects, and related activities with appropriate agency program staff, and, as appropriate, with other Federal departments and agencies involved in research in the field of aging.

“(7) Not later than December 31, 2020, and annually thereafter, the director shall prepare, and submit to the Secretary, the Committee on Health, Education, Labor, and

Pensions of the Senate, the Special Committee on Aging of the Senate, and the Committee on Education and Labor of the House of Representatives, a report on the activities funded under this section and title IV.

“(8) The director shall, as appropriate, consult with experts on aging research and evaluation and aging network stakeholders on the implementation of the activities described under paragraph (3) of this subsection.

“(9) The director shall coordinate, as appropriate, all research and evaluation authorities under this Act.”.

(b) EVALUATION.—Section 206 (42 U.S.C. 3017) is amended—

(1) by redesignating subsections (b) through (g) as subsections (c) through (h), respectively; and

(2) by inserting after subsection (a) the following:

“(b) Not later than July 1, 2020, the Secretary shall provide, directly or through grant or contract, for an evaluation of programs under this Act, which shall include, to the extent practicable, an analysis of the relationship of such programs, including demonstration projects under title IV of this Act, to health care expenditures under the Medicare program established under title XVIII of the Social Security Act (42 U.S.C. 1395 et seq.) and the Medicaid program established under title XIX of the Social Security Act (42 U.S.C. 1396 et seq.). The Secretary shall oversee analyses of data obtained in connection with program evaluation to evaluate, where feasible, the relationship of programs under this Act to health care expenditures, including under the Medicare and Medicaid programs.”.

(c) REPORT ON HEALTH CARE EXPENDITURES.—Section 207 (42 U.S.C. 3018) is amended by adding at the end the following:

“(d) The Assistant Secretary shall provide the evaluation required under section 206(b) to—

“(1) the Committee on Health, Education, Labor, and Pensions of the Senate;

“(2) the Committee on Appropriations of the Senate;

“(3) the Special Committee on Aging of the Senate;

“(4) the Committee on Education and Labor of the House of Representatives; and

“(5) the Committee on Appropriations of the House of Representatives.”.

## TITLE II—IMPROVING GRANTS FOR STATE AND COMMUNITY PROGRAMS ON AGING

### SEC. 201. SOCIAL DETERMINANTS OF HEALTH.

Section 301(a)(1) (42 U.S.C. 3021(a)(1)) is amended—

(1) in subparagraph (C), by striking “and” at the end;

(2) in subparagraph (D), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(E) measure impacts related to social determinants of health of older individuals.”.

### SEC. 202. YOUNGER ONSET ALZHEIMER'S DISEASE.

The Act (42 U.S.C. 3001 et seq.) is amended—

(1) in section 302(3) (42 U.S.C. 3022(3)), by inserting “of any age” after “an individual”; and

(2) in section 711(6) (42 U.S.C. 3058f(6)), by inserting “of any age” after “individual”.

### SEC. 203. REAUTHORIZATION.

(a) GRANTS FOR STATE AND COMMUNITY PROGRAMS ON AGING.—Subsections (a) through (e) of section 303 (42 U.S.C. 3023) are amended to read as follows:

“(a)(1) There are authorized to be appropriated to carry out part B (relating to supportive services) \$412,029,180 for fiscal year 2020, \$436,750,931 for fiscal year 2021, \$462,955,987 for fiscal year 2022, \$490,733,346 for

fiscal year 2023, and \$520,177,347 for fiscal year 2024.

“(2) Funds appropriated under paragraph (1) shall be available to carry out section 712.

“(b)(1) There are authorized to be appropriated to carry out subpart 1 of part C (relating to congregate nutrition services) \$530,015,940 for fiscal year 2020, \$561,816,896 for fiscal year 2021, \$595,525,910 for fiscal year 2022, \$631,257,465 for fiscal year 2023, and \$669,132,913 for fiscal year 2024.

“(2) There are authorized to be appropriated to carry out subpart 2 of part C (relating to home delivered nutrition services) \$268,935,940 for fiscal year 2020, \$285,072,096 for fiscal year 2021, \$302,176,422 for fiscal year 2022, \$320,307,008 for fiscal year 2023, and \$339,525,428 for fiscal year 2024.

“(c) Grants made under part B, and subparts 1 and 2 of part C, of this title may be used for paying part of the cost of—

“(1) the administration of area plans by area agencies on aging designated under section 305(a)(2)(A), including the preparation of area plans on aging consistent with section 306 and the evaluation of activities carried out under such plans; and

“(2) the development of comprehensive and coordinated systems for supportive services, and congregate and home delivered nutrition services under subparts 1 and 2 of part C, the development and operation of multipurpose senior centers, and the delivery of legal assistance.

“(d) There are authorized to be appropriated to carry out part D (relating to disease prevention and health promotion services) \$26,587,360 for fiscal year 2020, \$28,182,602 for fiscal year 2021, \$29,873,558 for fiscal year 2022, \$31,665,971 for fiscal year 2023, and \$33,565,929 for fiscal year 2024.

“(e) There are authorized to be appropriated to carry out part E (relating to family caregiver support) \$193,869,020 for fiscal year 2020, \$205,501,161 for fiscal year 2021, \$217,831,231 for fiscal year 2022, \$230,901,105 for fiscal year 2023, and \$244,755,171 for fiscal year 2024.”.

(b) NUTRITION SERVICES INCENTIVE PROGRAM.—Section 311(e) (42 U.S.C. 3030a(e)) is amended to read as follows:

“(e) There are authorized to be appropriated to carry out this section (other than subsection (c)(1)) \$171,273,830 for fiscal year 2020, \$181,550,260 for fiscal year 2021, \$192,443,275 for fiscal year 2022, \$203,989,872 for fiscal year 2023, and \$216,229,264 for fiscal year 2024.”.

### SEC. 204. HOLD HARMLESS FORMULA.

(a) IN GENERAL.—Section 304(a)(3)(D) (42 U.S.C. 3024(a)(3)(D)) is amended to read as follows:

“(D)(i) In this subparagraph and paragraph (5)—

“(I) the term ‘allot’ means allot under this subsection from a sum appropriated under section 303(a) or 303(b)(1), as the case may be; and

“(II) the term ‘covered fiscal year’ means any of fiscal years 2020 through 2029.

“(ii) If the sum appropriated under section 303(a) or 303(b)(1) for a particular covered fiscal year is less than or equal to the sum appropriated under section 303(a) or 303(b)(1), respectively, for fiscal year 2019, amounts shall be allotted to States from the sum appropriated for the particular year in accordance with paragraphs (1) and (2), and subparagraphs (A) through (C) as applicable, but no State shall be allotted an amount that is less than—

“(I) for fiscal year 2020, 99.75 percent of the State's allotment from the corresponding sum appropriated for fiscal year 2019;

“(II) for fiscal year 2021, 99.50 percent of that allotment;

“(III) for fiscal year 2022, 99.25 percent of that allotment;

“(IV) for fiscal year 2023, 99.00 percent of that allotment;

“(V) for fiscal year 2024, 98.75 percent of that allotment;

“(VI) for fiscal year 2025, 98.50 percent of that allotment;

“(VII) for fiscal year 2026, 98.25 percent of that allotment;

“(VIII) for fiscal year 2027, 98.00 percent of that allotment;

“(IX) for fiscal year 2028, 97.75 percent of that allotment; and

“(X) for fiscal year 2029, 97.50 percent of that allotment.

“(iii) If the sum appropriated under section 303(a) or 303(b)(1) for a particular covered fiscal year is greater than the sum appropriated under section 303(a) or 303(b)(1), respectively, for fiscal year 2019, the allotments to States from the sum appropriated for the particular year shall be calculated as follows:

“(I) From the portion equal to the corresponding sum appropriated for fiscal year 2019, amounts shall be allotted in accordance with paragraphs (1) and (2), and subparagraphs (A) through (C) as applicable, but no State shall be allotted an amount that is less than the percentage specified in clause (ii), for that particular year, of the State's allotment from the corresponding sum appropriated for fiscal year 2019.

“(II) From the remainder, amounts shall be allotted in accordance with paragraph (1), subparagraphs (A) through (C) as applicable, and paragraph (2) to the extent needed to meet the requirements of those subparagraphs.”.

(b) REPEAL.—Section 304(a)(3)(D) (42 U.S.C. 3024(a)(3)(D)) is repealed, effective October 1, 2029.

(c) CONFORMING AMENDMENT.—Section 304(a)(5) (42 U.S.C. 3024(a)(5)) is amended by striking “of the prior year” and inserting “as required by paragraph (3)”.

### SEC. 205. OUTREACH EFFORTS.

Section 306(a)(4)(B) (42 U.S.C. 3026(a)(4)(B)) is amended—

(1) in clause (i)(VII), by inserting “, specifically including survivors of the Holocaust” after “placement”; and

(2) in clause (ii), by striking “(VI)” and inserting “(VII)”.

### SEC. 206. STATE LONG-TERM CARE OMBUDSMAN PROGRAM MINIMUM FUNDING AND MAINTENANCE OF EFFORT.

The Act (42 U.S.C. 3001 et seq.) is amended—

(1) by amending section 306(a)(9) (42 U.S.C. 3026(a)(9)) to read as follows:

“(9) provide assurances that—

“(A) the area agency on aging, in carrying out the State Long-Term Care Ombudsman program under section 307(a)(9), will expend not less than the total amount of funds appropriated under this Act and expended by the agency in fiscal year 2019 in carrying out such a program under this title; and

“(B) funds made available to the area agency on aging pursuant to section 712 shall be used to supplement and not supplant other Federal, State, and local funds expended to support activities described in section 712;”;

(2) by amending section 307(a)(9) (42 U.S.C. 3027(a)(9)) to read as follows:

“(9) The plan shall provide assurances that—

“(A) the State agency will carry out, through the Office of the State Long-Term Care Ombudsman, a State Long-Term Care Ombudsman program in accordance with section 712 and this title, and will expend for such purpose an amount that is not less than the amount expended by the State agency with funds received under this title for fiscal year 2019, and an amount that is not less

than the amount expended by the State agency with funds received under title VII for fiscal year 2019; and

“(B) funds made available to the State agency pursuant to section 712 shall be used to supplement and not supplant other Federal, State, and local funds expended to support activities described in section 712.”.

#### SEC. 207. COORDINATION WITH RESOURCE CENTERS.

(a) AREA PLANS.—Section 306(a) (42 U.S.C. 3026(a)) is amended—

(1) in paragraph (16), by striking “and” at the end;

(2) in paragraph (17), by striking the period at the end and inserting a semicolon; and

(3) by adding at the end the following:

“(18) provide assurances that the area agency on aging will collect data to determine—

“(A) the services that are needed by older individuals whose needs were the focus of all centers funded under title IV in fiscal year 2019; and

“(B) the effectiveness of the programs, policies, and services provided by such area agency on aging in assisting such individuals; and

“(19) provide assurances that the area agency on aging will use outreach efforts that will identify individuals eligible for assistance under this Act, with special emphasis on those individuals whose needs were the focus of all centers funded under title IV in fiscal year 2019.”.

(b) STATE PLANS.—Section 307(a) (42 U.S.C. 3027(a)), as amended by section 118(c), is further amended by adding at the end the following:

“(30) The plan shall contain an assurance that the State shall prepare and submit to the Assistant Secretary annual reports that describe—

“(A) data collected to determine the services that are needed by older individuals whose needs were the focus of all centers funded under title IV in fiscal year 2019;

“(B) data collected to determine the effectiveness of the programs, policies, and services provided by area agencies on aging in assisting such individuals; and

“(C) outreach efforts and other activities carried out to satisfy the assurances described in paragraphs (18) and (19) of section 306(a).”.

#### SEC. 208. SENIOR LEGAL HOTLINES.

Not later than 4 years after the date of enactment of this Act, the Assistant Secretary shall prepare and submit to Congress a report containing—

(1) information on which States or localities operate senior legal hotlines;

(2) information on how such hotlines operated by States or localities are funded;

(3) information on the usefulness of senior legal hotlines in the coordination and provision of legal assistance; and

(4) recommendations on additional actions that should be taken related to senior legal hotlines.

#### SEC. 209. INCREASE IN LIMIT ON USE OF ALLOTMENT FUNDS FOR STATE ADMINISTRATIVE COSTS.

Section 308 (42 U.S.C. 3028) is amended—

(1) in subsection (a), in paragraphs (1) and (2), by striking “subsection (b)(1)” and inserting “subsection (b)”;

(2) in subsection (b)—

(A) in each of paragraphs (1) and (2)—

(i) in subparagraph (A)—

(I) by striking “clause (ii)” and inserting “subparagraph (B)”;

(II) by striking “greater of” and all that follows through “or” and inserting the following: “greater of—

“(i) 5 percent of the total amount of the allotments made to a State under sections 304(a)(1) and 373(f); or

“(ii)”;

(i) in subparagraph (B), by striking “such allotment” and inserting “such total amount”;

(B) in paragraph (2)(A), by striking “\$500,000” and inserting “\$750,000”.

#### SEC. 210. IMPROVEMENTS TO NUTRITION PROGRAMS.

Section 308(b)(4) (42 U.S.C. 3028(b)(4)) is amended by adding at the end the following:

“(D) The State, in consultation with area agencies on aging, shall ensure the process used by the State in transferring funds under this paragraph (including requirements relating to the authority and timing of such transfers) is simplified and clarified to reduce administrative barriers and direct limited resources to the greatest nutrition service needs at the community level. Such process shall be modified to attempt to lessen the administrative barriers of such transfers, and help direct limited resources to where they are needed the most as the unmet need for nutrition services grows.”.

#### SEC. 211. REVIEW OF REPORTS.

Section 308(b) (42 U.S.C. 3028(b)) is amended by adding at the end the following:

“(8) The Assistant Secretary shall review the reports submitted under section 307(a)(30) and include aggregate data in the report required by section 207(a), including data on—

“(A) the effectiveness of the programs, policies, and services provided by area agencies on aging in assisting older individuals whose needs were the focus of all centers funded under title IV in fiscal year 2019; and

“(B) outreach efforts and other activities carried out to satisfy the assurances described in paragraphs (18) and (19) of section 306(a), to identify such older individuals and their service needs.”.

#### SEC. 212. OTHER PRACTICES.

Section 315 (42 U.S.C. 3030c-2) is amended by adding at the end the following:

“(e) RESPONSE TO AREA AGENCIES ON AGING.—

“(1) IN GENERAL.—Upon request from an area agency on aging, the State shall make available any policies or guidance pertaining to policies established under this section.

“(2) RULE OF CONSTRUCTION.—Nothing in paragraph (1) shall require a State to develop policies or guidance pertaining to policies established under this section.”.

#### SEC. 213. SCREENING FOR NEGATIVE HEALTH EFFECTS ASSOCIATED WITH SOCIAL ISOLATION AND TRAUMATIC BRAIN INJURY.

Section 321(a)(8) (42 U.S.C. 3030d(a)(8)) is amended—

(1) by striking “screening and” and inserting “screening, screening for negative health effects associated with social isolation,”;

and

(2) by inserting “, and traumatic brain injury screening” after “falls prevention services screening”.

#### SEC. 214. SUPPORTIVE SERVICES AND SENIOR CENTERS.

(a) IN GENERAL.—Section 321(a) (42 U.S.C. 3030d(a)) is amended—

(1) in paragraph (24), by striking “and” at the end;

(2) by redesignating paragraph (25) as paragraph (26); and

(3) by inserting after paragraph (24) the following:

“(25) services that promote or support social connectedness and reduce negative health effects associated with social isolation; and”.

(b) SUPPORTIVE SERVICES.—Section 321(a)(7) (42 U.S.C. 3030d(a)(7)) is amended by inserting “cultural experiences (including the arts),” after “art therapy.”.

#### SEC. 215. CULTURALLY APPROPRIATE, MEDICALLY TAILORED MEALS.

Section 339(2)(A)(iii) (42 U.S.C. 3030g-21(2)(A)(iii)) is amended by inserting “, including meals adjusted for cultural considerations and preferences and medically tailored meals” before the comma at the end.

#### SEC. 216. NUTRITION SERVICES STUDY.

Subpart 3 of part C of title III (42 U.S.C. 3030g-21 et seq.) is amended by adding at the end the following:

#### “SEC. 339B. NUTRITION SERVICES IMPACT STUDY.

“(a) STUDY.—

“(1) IN GENERAL.—The Assistant Secretary shall perform a study to assess how to measure and evaluate the discrepancy between available services and the demand for such services in the home delivered nutrition services program and the congregate nutrition services program under this part, which shall include assessing various methods (such as those that States use) to measure and evaluate the discrepancy (such as measurement through the length of waitlists).

“(2) CONTENTS.—In performing the study, the Assistant Secretary shall—

“(A) consider means of obtaining information in rural and underserved communities; and

“(B) consider using existing tools (existing as of the date the Assistant Secretary begins the study) such as the tools developed through the Performance Outcome Measurement Project.

“(3) ANALYSIS.—The Assistant Secretary shall analyze and determine which methods are the least burdensome and most effective for measuring and evaluating the discrepancy described in paragraph (1).

“(b) RECOMMENDATIONS.—

“(1) PREPARATION.—Not later than 3 years after the date of enactment of the Supporting Older Americans Act of 2020, the Assistant Secretary shall prepare recommendations—

“(A) on how to measure and evaluate, with the least burden and the most effectiveness, the discrepancy described in subsection (a)(1) (such as measurement through the length of waitlists); and

“(B) about whether studies similar to the study described in subsection (a) should be carried out for programs carried out under this Act, other than this part.

“(2) ISSUANCE.—The Assistant Secretary shall issue the recommendations, and make the recommendations available as a notification pursuant to section 202(a)(34) and to the committees of the Senate and of the House of Representatives with jurisdiction over this Act, and the Special Committee on Aging of the Senate.”.

#### SEC. 217. NATIONAL FAMILY CAREGIVER SUPPORT PROGRAM.

(a) DEFINITIONS FOR NATIONAL FAMILY CAREGIVER SUPPORT PROGRAM.—Section 372(a) (42 U.S.C. 3030s(a)) is amended—

(1) by redesignating paragraphs (1) through (3) as paragraphs (2) through (4), respectively; and

(2) by inserting before paragraph (2), as so redesignated, the following:

“(1) CAREGIVER ASSESSMENT.—The term ‘caregiver assessment’ means a defined process of gathering information to identify the specific needs, barriers to carrying out caregiving responsibilities, and existing supports of a family caregiver or older relative caregiver, as identified by the caregiver involved, to appropriately target recommendations for support services described in section 373(b). Such assessment shall be administered through direct contact with the caregiver, which may include contact through a home visit, the Internet, telephone or teleconference, or in-person interaction.”.

(b) GENERAL AUTHORITY.—Section 373 (42 U.S.C. 3030s-1) is amended—

(1) in subsection (b), in the matter preceding paragraph (1), by inserting “which may be informed through the use of caregiver assessments,” after “provided,”;

(2) in subsection (e)(3), in the first sentence, by inserting “, including caregiver assessments used in the State,” after “mechanisms”;

(3) by redesignating subsections (e) through (g) as subsections (f) through (h), respectively;

(4) by inserting after subsection (d) the following:

“(e) BEST PRACTICES.—Not later than 1 year after the date of enactment of the Supporting Older Americans Act of 2020 and every 5 years thereafter, the Assistant Secretary shall—

“(1) identify best practices relating to the programs carried out under this section and section 631, regarding—

“(A) the use of procedures and tools to monitor and evaluate the performance of the programs carried out under such sections;

“(B) the use of evidence-based caregiver support services; and

“(C) any other issue determined relevant by the Assistant Secretary; and

“(2) make available, including on the website of the Administration and pursuant to section 202(a)(34), best practices described in paragraph (1), to carry out the programs under this section and section 631.”;

(5) by adding at the end the following:

“(i) ACTIVITIES OF NATIONAL SIGNIFICANCE.—The Assistant Secretary may award funds authorized under this section to States, public agencies, private nonprofit agencies, institutions of higher education, and organizations, including tribal organizations, for conducting activities of national significance that—

“(1) promote quality and continuous improvement in the support provided to family caregivers and older relative caregivers through programs carried out under this section and section 631; and

“(2) include, with respect to such programs, program evaluation, training, technical assistance, and research.

“(j) TECHNICAL ASSISTANCE FOR CAREGIVER ASSESSMENTS.—Not later than 1 year after the date of enactment of the Supporting Older Americans Act of 2020, the Assistant Secretary, in consultation with stakeholders with appropriate expertise and, as appropriate, informed by the strategy developed under the RAISE Family Caregivers Act (42 U.S.C. 3030s note), shall provide technical assistance to promote and implement the use of caregiver assessments. Such technical assistance may include sharing available tools or templates, comprehensive assessment protocols, and best practices concerning—

“(1) conducting caregiver assessments (including reassessments) as needed;

“(2) implementing such assessments that are consistent across a planning and service area, as appropriate; and

“(3) implementing caregiver support service plans, including conducting referrals to and coordination of activities with relevant State services.”.

(c) REPORT ON CAREGIVER ASSESSMENTS.—

(1) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the Assistant Secretary shall issue a report on the use of caregiver assessments by area agencies on aging, entities contracting with such agencies, and tribal organizations. Such report shall include—

(A) an analysis of the current use of caregiver assessments, as of the date of the report;

(B) an analysis of the potential impact of caregiver assessments on—

(i) family caregivers and older relative caregivers; and

(ii) the older individuals to whom the caregivers described in clause (i) provide care;

(C) an analysis of the potential impact of using caregiver assessments on the aging network;

(D) an analysis of how caregiver assessments are being used to identify the specific needs, barriers to carrying out caregiving responsibilities, and existing supports of family caregivers and older relative caregivers, with particular consideration to supporting—

(i) a caregiver specified in this subparagraph who is caring for individuals with disabilities, or, if appropriate, with a serious illness; and

(ii) caregivers with disabilities;

(E) recommendations for furthering the use of caregiver assessments, as appropriate, including in rural or underserved areas; and

(F) recommendations for assisting State agencies and area agencies on aging, particularly in rural or underserved areas, in implementing the use of caregiver assessments.

(2) SUBMISSION.—Not later than 6 months after the issuance of the report specified in paragraph (1), the Assistant Secretary shall submit the report to the committees of the Senate and the House of Representatives with jurisdiction over this Act, and the Special Committee on Aging of the Senate.

(3) DEFINITIONS.—In this subsection—

(A) the terms “caregiver assessment” and “older relative caregiver” have the meanings given such terms in section 372(a) of the Older Americans Act of 1965 (42 U.S.C. 3030s(a));

(B) the term “family caregiver” has the meaning given the term in section 302 of such Act (42 U.S.C. 3022); and

(C) the terms “State agency” and “tribal organization” have the meanings given the terms in section 102 of such Act (42 U.S.C. 3002).

(d) CONFORMING AMENDMENT.—Section 631(b) of such Act (42 U.S.C. 3057k-11(b)) is amended by striking “(c), (d), and (e)” and inserting “(c), (d), and (f)”.

#### SEC. 218. NATIONAL FAMILY CAREGIVER SUPPORT PROGRAM CAP.

(a) FEDERAL SHARE.—Subsection (h)(2), as redesignated by section 217(b)(3) of this Act, of section 373 (42 U.S.C. 3030s-1) is amended by striking subparagraph (C).

(b) MONITORING THE IMPACT OF THE ELIMINATION OF THE CAP ON FUNDS FOR OLDER RELATIVE CAREGIVERS.—

(1) REPORT.—Not later than 18 months after the date of enactment of this Act, and annually thereafter, the Assistant Secretary shall submit to the Committee on Health, Education, Labor, and Pensions of the Senate and the Committee on Education and Labor of the House of Representatives a report on the impact of the amendment made by subsection (a) to eliminate the limitation on funds that States may allocate to provide support services to older relative caregivers in the National Family Caregiver Support Program established under part E of title III of the Older Americans Act of 1965 (42 U.S.C. 3030s et seq.). Each such report shall also be made available to the public.

(2) CONTENTS.—For purposes of reports required by paragraph (1), each State that receives an allotment under such National Family Caregiver Support Program for fiscal year 2020 or a subsequent fiscal year shall report to the Assistant Secretary for the fiscal year involved the amount of funds of the total Federal and non-Federal shares described in section 373(h)(2) of the Older Americans Act of 1965 (42 U.S.C. 3030s-1(h)(2)) used by the State to provide support services for older relative caregivers and the amount of such funds so used for family caregivers.

### TITLE III—MODERNIZING ACTIVITIES FOR HEALTH, INDEPENDENCE, AND LONGEVITY

#### SEC. 301. REAUTHORIZATION.

Section 411(b) (42 U.S.C. 3032(b)) is amended to read as follows:

“(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out—

“(1) aging network support activities under this section, \$14,514,550 for fiscal year 2020, \$15,385,423 for fiscal year 2021, \$16,308,548 for fiscal year 2022, \$17,287,061 for fiscal year 2023, and \$18,324,285 for fiscal year 2024; and

“(2) elder rights support activities under this section, \$15,613,440 for fiscal year 2020, \$16,550,246 for fiscal year 2021, \$17,543,261 for fiscal year 2022, \$18,595,857 for fiscal year 2023, and \$19,711,608 for fiscal year 2024.”.

#### SEC. 302. PUBLIC AWARENESS OF TRAUMATIC BRAIN INJURY.

Section 411(a)(12) (42 U.S.C. 3032(a)(12)) is amended—

(1) by striking “impairments” and inserting “impairments,”; and

(2) by striking “, and mental disorders” and inserting “, mental disorders, and traumatic brain injury”.

#### SEC. 303. FALLS PREVENTION AND CHRONIC DISEASE SELF-MANAGEMENT EDUCATION.

Section 411(a) (42 U.S.C. 3032(a)), as amended by sections 119 and 120, is further amended—

(1) by redesignating paragraphs (15) and (16) as paragraphs (17) and (18), respectively; and

(2) by inserting after paragraph (14) the following:

“(15) bringing to scale and sustaining evidence-based falls prevention programs that will reduce the number of falls, fear of falling, and fall-related injuries in older individuals, including older individuals with disabilities;

“(16) bringing to scale and sustaining evidence-based chronic disease self-management programs that empower older individuals, including older individuals with disabilities, to better manage their chronic conditions.”.

#### SEC. 304. DEMONSTRATION TO ADDRESS NEGATIVE HEALTH IMPACTS ASSOCIATED WITH SOCIAL ISOLATION.

Section 411(a)(42 U.S.C. 3032(a)), as amended by sections 119, 120, and 303, is further amended—

(1) in paragraph (17), by striking “; and” and inserting a semicolon;

(2) by redesignating paragraph (18) as paragraph (19); and

(3) by inserting after paragraph (17), the following:

“(18) projects that address negative health effects associated with social isolation among older individuals; and”.

#### SEC. 305. TECHNICAL ASSISTANCE AND INNOVATION TO IMPROVE TRANSPORTATION FOR OLDER INDIVIDUALS.

Section 416(b)(2) (42 U.S.C. 3032e(b)(2)) is amended—

(1) in subparagraph (B), by inserting before the semicolon “, call center, website or Internet-based portal, mobile application, or other technological tools”;

(2) in subparagraph (C), by striking “; and” and inserting a semicolon;

(3) by redesignating subparagraph (D) as subparagraph (G); and

(4) by inserting after subparagraph (C) the following:

“(D)(i) improving the aggregation, availability, and accessibility of information on options for transportation services for older individuals, including information on public transit, on-demand transportation services, volunteer-based transportation services, and other private transportation providers; and



“(ii) providing older individuals with the ability to schedule trips both in advance and on demand, as appropriate;

“(E) identifying opportunities to share resources and reduce costs of transportation services for older individuals;

“(F) coordinating individualized trip planning responses to requests from older individuals for transportation services; and”.

#### **SEC. 306. GRANT PROGRAM FOR MULTIGENERATIONAL COLLABORATION.**

Section 417 (42 U.S.C. 3032f) is amended—

(1) by amending subsection (a) to read as follows:

“(a) GRANTS AND CONTRACTS.—The Assistant Secretary shall award grants to and enter into contracts with eligible organizations to carry out projects, serving individuals in younger generations and older individuals, to—

“(1) provide opportunities for older individuals to participate in multigenerational activities and civic engagement activities that contribute to the health and wellness of older individuals and individuals in younger generations by promoting—

“(A) meaningful roles for participants;

“(B) reciprocity in relationship building;

“(C) reduced social isolation and improved participant social connectedness;

“(D) improved economic well-being for older individuals;

“(E) increased lifelong learning; or

“(F) support for caregivers of families by—

“(i) providing support for older relative caregivers (as defined in section 372(a)) raising children (such as support for kinship navigator programs); or

“(ii) involving volunteers who are older individuals who provide support and information to families who have a child with a disability or chronic illness, or other families in need of such family support;

“(2) coordinate multigenerational activities and civic engagement activities, including multigenerational nutrition and meal service programs;

“(3) promote volunteerism, including by providing opportunities for older individuals to become a mentor to individuals in younger generations; and

“(4) facilitate development of, and participation in, multigenerational activities and civic engagement activities.”;

(2) by striking subsection (g);

(3) by redesignating subsections (b) through (f) as subsections (c) through (g), respectively;

(4) by inserting after subsection (a) the following:

“(b) GRANT AND CONTRACT PERIODS.—Each grant awarded and contract entered into under subsection (a) shall be for a period of not less than 36 months.”;

(5) by amending subsection (c), as so redesignated, to read as follows:

“(c) USE OF FUNDS.—

“(1) IN GENERAL.—An eligible organization shall use funds made available under a grant awarded, or a contract entered into, under this section to carry out a project described in subsection (a).

“(2) PROVISION OF PROJECTS THROUGH GRANTEEES.—In awarding grants and entering into contracts under this section, the Assistant Secretary shall ensure that such grants and contracts are for the projects that satisfy each requirement under paragraphs (1) through (4) of subsection (a).”;

(6) in subsection (d), as so redesignated—

(A) in paragraph (1), by inserting “, intent to carry out, or intent to partner with local organizations or multiservice organizations to carry out,” after “record of carrying out”;

(B) in paragraph (3), by striking “; and” and inserting a semicolon;

(C) in paragraph (4), by striking the period and inserting “; and”; and

(D) by adding at the end the following:

“(5) eligible organizations proposing multigenerational activity projects that utilize shared site programs, such as collocated child care and long-term care facilities.”;

(7) by amending subsections (f) and (g), as so redesignated, to read as follows:

“(f) ELIGIBLE ORGANIZATIONS.—Organizations eligible to receive a grant or enter into a contract under subsection (a) shall—

“(1) be a State, an area agency on aging, or an organization that provides opportunities for older individuals to participate in activities described in such subsection; and

“(2) have the capacity to conduct the coordination, promotion, and facilitation described in such subsection through the use of multigenerational coordinators.

“(g) EVALUATION.—

“(1) IN GENERAL.—Not later than 3 years after the date of enactment of the Supporting Older Americans Act of 2020, the Assistant Secretary shall, through data submitted by organizations carrying out projects through grants or contracts under this section, evaluate the activities supported through such grants and contracts to determine—

“(A) the effectiveness of such activities;

“(B) the impact of such activities on the community being served and the organization providing the activities; and

“(C) the impact of such activities on older individuals participating in such projects.

“(2) REPORT TO CONGRESS.—Not later than 6 months after the Assistant Secretary completes the evaluation under paragraph (1), the Assistant Secretary shall prepare and submit to the Speaker of the House of Representatives and the President pro tempore of the Senate a report that assesses such evaluation and contains, at a minimum—

“(A) the names or descriptive titles of the projects funded under subsection (a);

“(B) a description of the nature and operation of such projects;

“(C) the names and addresses of organizations that conducted such projects;

“(D) a description of the methods and success of such projects in recruiting older individuals as employees and as volunteers to participate in the projects;

“(E) a description of the success of the projects in retaining older individuals participating in such projects as employees and as volunteers;

“(F) the rate of turnover of older individuals who are employees or volunteers in such projects;

“(G) a strategy for disseminating the findings resulting from such projects; and

“(H) any policy change recommendations relating to such projects.”; and

(8) in subsection (h)(2)(B)(i), by striking “individuals from the generations with older individuals” and inserting “older individuals”.

#### **TITLE IV—SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM**

##### **SEC. 401. PRIORITY FOR THE SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM.**

(a) PRIORITY.—The Act (42 U.S.C. 3001 et seq.) is amended—

(1) in section 503(a)(4)(C) (42 U.S.C. 3056a(a)(4)(C))—

(A) in clause (iii), by striking “and” at the end;

(B) in clause (iv), by adding “and” at the end; and

(C) by adding at the end the following:

“(v) eligible individuals who have been incarcerated within the last 5 years or are under supervision following release from prison or jail within the last 5 years.”;

(2) in section 514(e)(1) (42 U.S.C. 30561(e)(1)), by inserting “eligible individuals who have been incarcerated or are under supervision following release from prison or jail,” after “need.”; and

(3) in section 518 (42 U.S.C. 3056p)—

(A) in subsection (a)(3)(B)(ii)—

(i) in subclause (IV), by striking “or” at the end;

(ii) in subclause (V), by striking the period at the end and inserting “; or”; and

(iii) by adding at the end the following:

“(VI) have been incarcerated within the last 5 years or are under supervision following release from prison or jail within the last 5 years.”; and

(B) in subsection (b)(2)—

(i) in subparagraph (F), by striking “or” at the end;

(ii) in subparagraph (G), by striking the period at the end and inserting “; or”; and

(iii) by adding at the end the following:

“(H) has been incarcerated within the last 5 years or is under supervision following release from prison or jail within the last 5 years.”.

(b) TRANSITION PERIOD.—This section shall take effect 1 year after the date of enactment of this Act.

##### **SEC. 402. AUTHORIZATION OF APPROPRIATIONS.**

Section 517(a) (42 U.S.C. 3056o(a)) is amended to read as follows:

“(a) IN GENERAL.—There are authorized to be appropriated to carry out this title \$428,000,000 for fiscal year 2020, \$453,680,000 for fiscal year 2021, \$480,900,800 for fiscal year 2022, \$509,754,848 for fiscal year 2023, and \$540,340,139 for fiscal year 2024.”.

#### **TITLE V—ENHANCING GRANTS FOR NATIVE AMERICANS**

##### **SEC. 501. REAUTHORIZATION.**

Title VI (42 U.S.C. 3057 et seq.) is amended—

(1) in part D (42 U.S.C. 3057l et seq.)—

(A) by amending section 643 (42 U.S.C. 3057n) to read as follows:

“SEC. 643. AUTHORIZATION OF APPROPRIATIONS.

“There are authorized to be appropriated to carry out this title—

“(1) for parts A and B, \$37,102,560 for fiscal year 2020, \$39,298,714 for fiscal year 2021, \$41,626,636 for fiscal year 2022, \$44,094,235 for fiscal year 2023, and \$46,709,889 for fiscal year 2024; and

“(2) for part C, \$10,759,920 for fiscal year 2020, \$11,405,515 for fiscal year 2021, \$12,089,846 for fiscal year 2022, \$12,815,237 for fiscal year 2023, and \$13,584,151 for fiscal year 2024.”; and

(B) by adding at the end the following:

“SEC. 644. FUNDING SET ASIDE.

“Of the funds appropriated under section 643(1) for a fiscal year, not more than 5 percent shall be made available to carry out part D for such fiscal year, provided that for such fiscal year—

“(1) the funds appropriated for parts A and B are greater than the funds appropriated for fiscal year 2019; and

“(2) the Assistant Secretary makes available for parts A and B no less than the amount of resources made available for fiscal year 2019.”;

(2) by redesignating part D, as so amended, as part E; and

(3) by inserting after part C the following:

#### **“PART D—SUPPORTIVE SERVICES FOR HEALTHY AGING AND INDEPENDENCE**

##### **“SEC. 636. PROGRAM.**

“(a) IN GENERAL.—The Assistant Secretary may carry out a competitive demonstration program for making grants to tribal organizations or organizations serving Native Hawaiians with applications approved under parts A and B, to pay for the Federal share of carrying out programs, to enable the organizations described in this subsection to

build their capacity to provide a wider range of in-home and community supportive services to enable older individuals to maintain their health and independence and to avoid long-term care facility placement.

**“(b) SUPPORTIVE SERVICES.—**

**“(1) IN GENERAL.—**Subject to paragraph (2), supportive services described in subsection (a) may include any of the activities described in section 321(a).

**“(2) PRIORITY.—**The Assistant Secretary, in making grants under this section, shall give priority to organizations that will use the grant funds for supportive services described in subsection (a) that are for in-home assistance, transportation, information and referral, case management, health and wellness programs, legal services, family caregiver support services, and other services that directly support the independence of the older individuals served.

**“(3) RULE OF CONSTRUCTION.—**Nothing in this section shall be construed or interpreted to prohibit the provision of supportive services under part A or B.”.

**TITLE VI—MODERNIZING ALLOTMENTS FOR VULNERABLE ELDER RIGHTS PROTECTION ACTIVITIES AND OTHER PROGRAMS**

**SEC. 601. REAUTHORIZATION; VULNERABLE ELDER RIGHTS PROTECTION ACTIVITIES.**

Section 702 (42 U.S.C. 3058a) is amended by striking subsections (a) and (b) and inserting the following:

**“(a) OMBUDSMAN PROGRAM.—**There are authorized to be appropriated to carry out chapter 2, \$18,066,950 for fiscal year 2020, \$19,150,967 for fiscal year 2021, \$20,300,025 for fiscal year 2022, \$21,518,027 for fiscal year 2023, and \$22,809,108 for fiscal year 2024.

**“(b) OTHER PROGRAMS.—**There are authorized to be appropriated to carry out chapters 3 and 4, \$5,107,110 for fiscal year 2020, \$5,413,537 for fiscal year 2021, \$5,738,349 for fiscal year 2022, \$6,082,650 for fiscal year 2023, and \$6,447,609 for fiscal year 2024.”.

**SEC. 602. VOLUNTEER STATE LONG-TERM CARE OMBUDSMAN REPRESENTATIVES.**

Section 712(a)(5) (42 U.S.C. 3058g(a)(5)) is amended by adding at the end the following:

**“(E) RULE OF CONSTRUCTION FOR VOLUNTEER OMBUDSMAN REPRESENTATIVES.—**Nothing in this paragraph shall be construed as prohibiting the program from providing and financially supporting recognition for an individual designated under subparagraph (A) as a volunteer to represent the Ombudsman program, or from reimbursing or otherwise providing financial support to such an individual for any costs, such as transportation costs, incurred by the individual in serving as such volunteer.”.

**SEC. 603. PREVENTION OF ELDER ABUSE, NEGLECT, AND EXPLOITATION.**

Section 721(b)(12) (42 U.S.C. 3058i(b)(12)) is amended—

(1) in subparagraph (C), by inserting “community outreach and education,” after “technical assistance,”; and

(2) in subparagraph (F)—

(A) by striking “studying” and inserting “implementing”; and

(B) by inserting “, programs, and materials” after “practices”.

**SEC. 604. PRINCIPLES FOR PERSON-DIRECTED SERVICES AND SUPPORTS DURING SERIOUS ILLNESS.**

(a) DEFINITIONS.—

(1) ADMINISTRATOR.—The term “Administrator” means the Administrator of the Administration for Community Living.

(2) COVERED AGENCY.—The term “covered agency” means—

(A) a State agency or area agency on aging; and

(B) a Federal agency other than the Department of Health and Human Services, and

a unit of that Department other than the Administration on Aging, that the Assistant Secretary determines performs functions for which the principles are relevant, and the Centers for Medicare & Medicaid Services.

(3) PRINCIPLES.—The term “principles” means the Principles for Person-directed Services and Supports during Serious Illness, issued by the Administration for Community Living on September 1, 2017, or an updated set of such Principles.

(4) STATE AGENCY.—The term “State agency” has the meaning given the term in section 102 of the Older Americans Act of 1965 (42 U.S.C. 3002).

(b) DISSEMINATION.—The Administrator shall disseminate the principles to appropriate stakeholders within the aging network, as determined by the Assistant Secretary, and to covered agencies. The covered agencies may use the principles in setting priorities for service delivery and care plans in programs carried out by the agencies.

(c) FEEDBACK.—The Administrator shall solicit, on an ongoing basis, feedback on the principles from covered agencies, experts in the fields of aging and dementia, and stakeholders who provide or receive disability services.

(d) REPORT.—Not less often than once, but not more often than annually, during the 3 years after the date of enactment of this Act, the Administrator shall prepare and submit to Congress a report describing the feedback received under subsection (c) and indicating if any changes or updates are needed to the principles.

**SEC. 605. EXTENSION OF THE SUPPORTING GRANDPARENTS RAISING GRANDCHILDREN ACT.**

Section 3(f) of the Supporting Grandparents Raising Grandchildren Act (Public Law 115–196) is amended by striking “3” and inserting “4”.

**SEC. 606. BEST PRACTICES FOR HOME AND COMMUNITY-BASED OMBUDSMEN.**

Not later than 3 years after the date of enactment of this Act, the Assistant Secretary shall issue a report updating the best practices for home and community-based ombudsmen that were included in the report entitled “Best Practices for Home and Community-Based Ombudsmen”, issued by the National Direct Service Workforce Resource Center of the Centers for Medicare & Medicaid Services and prepared by the Research and Training Center at the University of Minnesota and The Lewin Group (January 2013).

**SEC. 607. SENIOR HOME MODIFICATION ASSISTANCE INITIATIVE.**

Not later than 2 years after the date of enactment of this Act, the Comptroller General of the United States shall conduct a study and issue a report that includes—

(1) an inventory of Federal programs, administered by the Department of Health and Human Services, the Department of Housing and Urban Development, or any other Federal agency or department determined appropriate by the Comptroller General, that support evidence-based falls prevention, home assessments, and home modifications for older individuals and individuals with disabilities;

(2) statistical data, for recent fiscal years, on the number of older individuals and individuals with disabilities served by each Federal program described in paragraph (1) and the approximate amount of Federal funding invested in each such program;

(3) a demographic analysis of individuals served by each such program for recent fiscal years;

(4) an analysis of duplication and gaps in populations supported by the Federal programs described in paragraph (1);

(5) what is known about the impact of the Federal programs described in paragraph (1) on health status and health outcomes in populations supported by such programs;

(6) a review of Federal efforts to coordinate Federal programs existing prior to the date of enactment of this Act that support evidence-based falls prevention, home assessments, and home modifications for older individuals and individuals with disabilities and any considerations for improving coordination, which may include an indication of the Federal agency or department that is best suited to coordinate such Federal programs; and

(7) information on the extent to which consumer-friendly resources, such as a brochure, are available through the National Eldercare Locator Service established under section 202(a)(21) of the Older Americans Act of 1965 (42 U.S.C. 3012(a)(21)), are accessible to all area agencies on aging, and contain information on evidence-based falls prevention, home assessments, and home modifications for older individuals attempting to live independently and safely in their homes and for the caregivers of such individuals.

**TITLE VII—MISCELLANEOUS**

**SEC. 701. TECHNICAL CORRECTIONS.**

The Older Americans Act of 1965 (42 U.S.C. 3001 et seq.) is amended—

(1) in section 102(37)(A) (42 U.S.C. 3002(37)(A)), by striking “paragraph (5)” and inserting “paragraph (26)”;

(2) in section 202(a)(23) (42 U.S.C. 3012(a)(23)), by striking “sections 307(a)(18) and 731(b)(2)” and inserting “sections 307(a)(13) and 731”;

(3) in section 202(e)(1)(A) (42 U.S.C. 3012(e)(1)(A)), by moving the left margin of clause (i) 2 ems to the left;

(4) in sections 203(c)(7) (42 U.S.C. 3013(c)(7)), 207(b)(2)(B) (42 U.S.C. 3018(b)(2)(B)), and 215(i) (42 U.S.C. 3020e–1(i)), by striking “Committee on Education and the Workforce” each place it appears and inserting “Committee on Education and Labor”;

(5) in section 207(b)(3)(A) (42 U.S.C. 3018(b)(3)(A)), by striking “Administrator of the Health Care Finance Administration” and inserting “Administrator of the Centers for Medicare & Medicaid Services”;

(6) in section 304(a)(3)(C) (42 U.S.C. 3024(a)(3)(C)), by striking “term” and all that follows through “does” and inserting “term ‘State’ does”;

(7) in section 304(d)(1)(B), by striking “(excluding)” and all that follows through “303(a)(3)”;

(8) in section 306(a) (42 U.S.C. 3026(a))—

(A) in paragraph (1), by inserting “the number of older individuals at risk for institutional placement residing in such area,” before “and the number of older individuals who are Indians”; and

(B) in paragraph (2)(B), by striking “who are victims of” and inserting “with”;

(9) in section 339(2)(A)(ii)(I) (42 U.S.C. 3030g–21(2)(A)(ii)(I)), by striking “Institute of Medicine of the National Academy of Sciences” and inserting “National Academies of Sciences, Engineering, and Medicine”;

(10) in section 611 (42 U.S.C. 3057b), by striking “(a)”;

(11) in section 614(c)(4) (42 U.S.C. 3057e(c)(4)), by striking “(a)(12)” and inserting “(a)(11)”;

(12) in section 721(i) (42 U.S.C. 3058i(i)), by striking “section 206(g)” and inserting “section 206(h)”.

**SA 1462.** Mr. RISCH submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms.

MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 172, between lines 7 and 8, insert the following:

(1) INCLUSION OF ENHANCED GEOTHERMAL SYSTEMS.—

(1) INCLUSION OF GEOTHERMAL ENERGY AS A COVERED PROJECT.—Section 41001(6) of the FAST Act (42 U.S.C. 4370m(6)) is amended—

(A) in subparagraph (A)—

(i) in the matter preceding clause (i), by inserting “enhanced geothermal systems projects or a program of projects,” after “manufacturing,”;

(ii) in clause (i)(III), by striking “or” at the end;

(iii) in clause (ii)(II), by striking the period at the end and inserting “; or”; and

(iv) by adding at the end the following:

“(iii) is—

“(I) covered by a programmatic or State energy development plan or environmental review developed for the primary purpose of facilitating development of geothermal resources and associated infrastructure in the United States; and

“(II) a project that supports development and deployment of improved tools and methods for geothermal resource identification and extraction, with the goal of achieving material reductions in the cost of exploration with a corresponding increase in the likelihood of drilling success.”; and

(B) by adding at the end the following:

“(C) TREATMENT.—Section 553 of title 5, United States Code, shall not apply to a majority vote described in subparagraph (A) with respect to a project that facilitates the domestic source expansion and extraction of resources that directly benefit renewable energy, including enhanced geothermal systems.”.

(2) DISCRETIONARY PROJECTS.—Section 41003 of the FAST Act (42 U.S.C. 4370m-2) is amended by adding at the end the following:

“(g) DISCRETIONARY PROJECTS.—

“(1) IN GENERAL.—At the request of a project sponsor, a State, or a local or tribal government, the Executive Director shall consider—

“(A) including on the Dashboard, or facilitating formal coordination with agencies represented on the Council of, a geothermal project in the United States that requires authorization or environmental review by a Federal agency; and

“(B) treating as a covered project, or facilitating formal coordination with agencies represented on the Council of, an advanced geothermal energy expansion or deployment project or program of projects that requires authorization or environmental review by a Federal agency.

“(2) REPORT.—

“(A) IN GENERAL.—Not later than 180 days after the date of enactment of the American Energy Innovation Act of 2020, and annually thereafter for 10 years, the Executive Director, in consultation with the Chair of the Council on Environmental Quality, the Administrator of the Environmental Protection Agency, the Secretary of Energy, the Secretary of the Interior, and the head of any other relevant agency (as determined by the President), shall prepare a report that compiles all existing relevant Federal permitting and review information and resources for project applicants, agencies, and other stakeholders with respect to projects for the deployment of enhanced geothermal systems, including—

“(i) the appropriate points of interaction with Federal agencies;

“(ii) clarification of the permitting responsibilities and authorities among Federal, State, and local agencies;

“(iii) best practices and templates for permitting enhanced geothermal systems projects across all public authorities; and

“(iv) identification of gaps in the current Federal regulatory framework for those projects.

“(B) SUBMISSION; PUBLICATION.—The Executive Director shall—

“(i) submit the report under subparagraph (A) to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives; and

“(ii) as soon as practicable, make the report publicly available.”.

(3) TERMINATION.—Section 40013 of the FAST Act (42 U.S.C. 4370m-12) is amended by striking “7 years after the date of enactment of this Act” and inserting “on the date on which the final report is published pursuant to section 41003(g)(2)(B)(ii)”.

**SA 1463.** Mr. CRAMER submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of section 2213, add the following:

(e) REPORT.—

(1) IN GENERAL.—Not later than 120 days after the date on which the modeling under subsection (b) is completed, the Secretary shall submit to Congress a report on the modeling scenarios developed under subsection (a) with respect to systems that use intermittent sources of power generation.

(2) REQUIREMENTS.—The report under paragraph (1) shall describe—

(A) the expected costs for—

(i) systems with various amounts of intermittent power generation, from 0 to 100 percent; and

(ii) ratepayers in those systems;

(B) the reliability and economic liabilities of systems that use intermittent sources of power generation for not less than 30 percent of the energy of the system, including—

(i) rate impacts on the business and manufacturing sectors;

(ii) the potential impact on the economic output of manufacturers who are reliant on consistent baseload generation; and

(iii) health and safety impacts in various weather scenarios, including not fewer than 1 scenario of extreme cold in which wind generation cannot occur; and

(C) any recommendations of the Secretary for potential legislative changes to increase reliability and resiliency within the electric grid.

**SA 1464.** Mr. CRAMER submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle H of title I, add the following:

**SEC. 18 . . . BAKKEN AND THREE FORKS NATURAL GAS LIQUIDS REPORT.**

(a) IN GENERAL.—As soon as practicable after the date of enactment of this Act, the Secretary shall submit to the appropriate

committees of Congress a report that assesses the feasibility of establishing a storage and distribution hub for natural gas liquids or any natural gas liquids component (including propane) in the vicinity of the Bakken and Three Forks shale plays in order to address supply chain constraints in the Midwest and other opportunities as a result of the increased production of natural gas liquids from shale developments.

(b) COMPONENTS.—The report submitted under subsection (a) shall include, with respect to the proposed storage and distribution hub, an examination of—

- (1) potential locations;
- (2) economic feasibility;
- (3) geologic and aboveground storage capabilities;
- (4) infrastructure needs; and
- (5) any economic benefits or benefits to energy security.

**SA 1465.** Mr. CRAMER submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle H of title I, add the following:

**SEC. 18 . . . BAKKEN ENERGY FOR NATIONAL SECURITY.**

(a) STUDY ON BUILDING ETHANE AND OTHER NATURAL-GAS-LIQUIDS-RELATED PETROCHEMICAL INFRASTRUCTURE.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Defense, the Secretary of the Treasury, and the heads of other relevant Federal departments and agencies and stakeholders, shall conduct a study assessing the potential national and economic security impacts of building ethane and other natural-gas-liquids-related petrochemical infrastructure in the geographical vicinity of the Bakken and Three Forks shale plays in the United States.

(2) CONTENTS.—The study conducted under paragraph (1) shall include—

(A) the identification of potential benefits of the proposed infrastructure to national and economic security, including the identification of potential risks to national and economic security of significant foreign ownership and control of United States domestic petrochemical resources; and

(B) an examination of, with respect to the proposed infrastructure—

(i) types of additional infrastructure needed to fully optimize the potential national security benefits;

(ii) whether geopolitical diversity in areas to which the ethane and other natural gas liquids will be exported from the producing region would undermine or bolster national security;

(iii) the necessity of evaluating the public interest with respect to exports of ethane, propane, butane, and other natural gas liquids, to ensure the potential strategic national and economic security benefits are preserved within the United States; and

(iv) the potential benefits, with respect to significant weather impacts, compared to other regions, of locating the proposed infrastructure in the geographical vicinity of the Bakken and Three Forks shale plays.

(b) REPORTS.—

(1) STATUS REPORTS.—Prior to completion of the study under subsection (a), the Committees on Energy and Natural Resources and Armed Services of the Senate and the

Committees on Energy and Commerce and Armed Services of the House of Representatives, from time to time, may request and receive from the Secretary status reports with respect to the study, including any findings.

(2) **SUBMISSION AND PUBLICATION OF REPORT.**—On completion of the study under subsection (a), the Secretary shall—

(A) submit to the Committees on Energy and Natural Resources and Armed Services of the Senate and the Committees on Energy and Commerce and Armed Services of the House of Representatives a report describing the results of the study; and

(B) publish the report on the website of the Department.

**SA 1466.** Mr. GARDNER submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle H of title I, add the following:

**SEC. 18. REPORT ON ENERGY-WATER CENTER OF EXCELLENCE.**

Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report on the potential benefits and feasibility of establishing an energy-water center of excellence within the National Laboratories.

**SA 1467.** Mr. BROWN (for himself, Mr. CORNYN, Ms. BALDWIN, Mr. CRAPO, Mr. PETERS, and Ms. STABENOW) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle G of title I, add the following:

**SEC. 1711. PROHIBITION ON FUNDS FOR CERTAIN MANUFACTURERS OF PUBLIC TRANSPORTATION ROLLING STOCK.**

Amounts authorized to be appropriated under this subtitle may not be used for a grant to, or partnership or collaboration with, a manufacturer of public transportation rolling stock for which Federal financial assistance is prohibited under section 5323(u) of title 49, United States Code.

**SA 1468.** Mr. JOHNSON (for himself and Mr. PETERS) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 27, line 5, strike “is cybersecurity” and insert “abides by the cybersecurity standards of the National Institute of Standards and Technology, as appropriate”.

On page 27, line 19, insert “and the Secretary of Homeland Security” after “Services”.

On page 29, line 13, insert “and the cybersecurity guidance of the Cybersecurity and Infrastructure Security Agency of the Department of Homeland Security” after “verification”.

On page 31, line 1, insert “and the cybersecurity guidance of the Cybersecurity and Infrastructure Security Agency of the Department of Homeland Security” after “verification”.

On page 32, line 24, insert “in coordination with the Cybersecurity and Infrastructure Security Agency of the Department of Homeland Security,” before “protecting”.

Beginning on page 33, strike line 23 and all that follows through page 34, line 2, and insert the following:

submit to the Committees on Energy and Natural Resources and Homeland Security and Governmental Affairs of the Senate and the Committees on Energy and Commerce, Science, Space, and Technology, and Homeland Security of the House of Representatives a report on—

On page 452, strike lines 3 and 4 and insert the following:

“(A) the Secretary of Energy;

“(B) the Secretary of Homeland Security; and

“(C) other appropriate Federal agencies; and

On page 454, line 22, insert “the Secretary of Homeland Security,” after “with”.

On page 459, line 16, insert “, in consultation with the Secretary of Homeland Security,” after “Secretary”.

On page 462, line 17, insert “the Secretary of Homeland Security,” after “with”.

On page 464, line 22, insert “the Secretary of Homeland Security,” after “with”.

On page 466, line 15, strike “appropriate Federal agencies” and insert “the Secretary of Homeland Security and, as determined appropriate, other Federal agencies”.

On page 468, line 9, insert “, in consultation with the Federal Acquisition Security Council,” after “Secretary”.

On page 469, line 18, insert “, in coordination with the Cybersecurity and Infrastructure Security Agency of the Department of Homeland Security,” after “provide”.

On page 470, line 3, insert “, in consultation with the Secretary of Homeland Security,” after “Secretary”.

**SA 1469.** Mr. BROWN submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

Beginning on page 28, strike line 13 and all that follows through page 29, line 4, and insert the following:

(C) **INCLUSION OF MULTIFAMILY BUILDINGS PARTICIPATING IN FEDERAL ASSISTANCE OR LOAN GUARANTEE PROGRAMS.**—In making selections under subparagraph (A), the Secretary may include—

(i) a multifamily building in a public housing project;

(ii) a multifamily building in a multifamily housing project receiving rental assistance under subsection (b) of section 8 of the United States Housing Act of 1937 (42 U.S.C. 1437f) that is attached to the structure pursuant to subsection (d)(2) of such section 8; and

(iii) a multifamily building for which the mortgage secured by the building is guaranteed by the Department of Housing and Urban Development.

(3) **TARGETS.**—Not later than 18 months after the date of enactment of this Act, the Secretary shall establish targets for the number of smart buildings to be commissioned and evaluated by key Federal agencies by 3 years and 6 years after the date of enactment of this Act.

(4) **FEDERAL AGENCY DESCRIBED.**—The key Federal agencies referred to in paragraph (2)(A) shall include buildings operated by—

(A) the Department of the Army;

(B) the Department of the Navy;

(C) the Department of the Air Force;

(D) the Department;

(E) the Department of the Interior;

(F) the Department of Veterans Affairs;

(G) the General Services Administration; and

(H) the Department of Housing and Urban Development.

**SA 1470.** Ms. ROSEN (for herself and Mrs. CAPITO) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

In section 2301, redesignate paragraphs (14) through (16) as paragraphs (15) through (17), respectively.

In section 2301, insert after paragraph (13) the following:

(14) **RURAL AREA.**—The term “rural area” means an area that is not an urban area (within the meaning of the notice of final program criteria entitled “Urban Area Criteria for the 2010 Census” (76 Fed. Reg. 53030 (August 24, 2011))).

In section 2304(a)(6), strike “and socioeconomically disadvantaged individuals” and insert “socioeconomically disadvantaged individuals, and individuals in rural areas”.

In section 2304(b)(3)(F), strike “and socioeconomically disadvantaged individuals,” and insert “socioeconomically disadvantaged individuals, and individuals in rural areas,”.

In section 2304(c)(1)(C), strike clauses (iii) and (iv) and insert the following:

(iii) increase outreach to displaced and unemployed energy sector workers;

(iv) make resources available to provide training to displaced and unemployed energy sector workers to reenter the energy workforce; and

(v) increase outreach and make resources available to rural communities; and

In section 2304(f)(1), strike “and displaced and unemployed energy workers” and insert “displaced and unemployed energy workers, and individuals in rural areas”.

In section 2304(f)(2), strike subparagraphs (B) and (C) and insert the following:

(B) institutions that serve veterans, with the objective of increasing the number veterans in the energy industry by ensuring that veterans have the credentials and training necessary to secure careers in the energy industry;

(C) institutions that serve displaced and unemployed energy workers to increase the number of individuals trained for jobs in the energy industry; and

(D) rural-serving institutions of higher education;

In section 2304(f)(3), strike “and displaced and unemployed energy workers” and insert “displaced and unemployed energy workers, and individuals in rural areas”.

In section 2304(f)(4), strike “and displaced and unemployed energy workers” and insert “displaced and unemployed energy workers, and individuals in rural areas”.

**SA 1471.** Mr. MORAN (for himself and Mr. TESTER) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI

and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ COOPERATIVE ASSOCIATIONS THAT SUPPORT RURAL INFRASTRUCTURE DEVELOPMENT.**

Section 11 of the Federal Home Loan Bank Act (12 U.S.C. 1431) is amended by adding at the end the following:

“(m) COOPERATIVE ASSOCIATIONS THAT SUPPORT RURAL INFRASTRUCTURE DEVELOPMENT.—

“(1) IN GENERAL.—Each Federal Home Loan Bank is authorized to purchase investment-grade securities from nonmember lenders that—

“(A) are organized as cooperatives;

“(B) have received financing from the Federal Financing Bank; and

“(C) have demonstrated experience in making loans to cooperatives that are eligible to receive loans or commitments for loans from the Rural Utilities Service (or any successor agency).

“(2) SECURED INVESTMENTS.—The securities described in paragraph (1) shall be secured investments collateralized by loans of the cooperative lender.

“(3) DISCRETION.—The purchase of the securities described in paragraph (1) shall be at the sole discretion of each Federal Home Loan Bank, consistent with such regulations, restrictions, and limitations as may be prescribed by the Agency.”.

**SA 1472.** Mr. DAINES (for himself and Mrs. CAPITO) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ EXTENSION OF REFINED COAL PRODUCTION TAX CREDIT.**

(a) IN GENERAL.—Section 45(e)(8) of the Internal Revenue Code of 1986 is amended—

(1) in subparagraph (A), by striking “10-year period” each place it appears and inserting “12-year period”; and

(2) in subparagraph (D)(ii)(II), by striking “10-year period” and inserting “12-year period”.

(b) EFFECTIVE DATE.—The amendments made by this section shall apply to coal produced and sold after December 31, 2018.

**SA 1473.** Mr. INHOFE (for himself, Mr. TOOMEY, Mrs. CAPITO, and Mr. CRUZ) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ RENEWABLE FUEL PROGRAM.**

(a) SENSE OF CONGRESS.—It is the sense of Congress that the Administrator of the Environmental Protection Agency has the exist-

ing authority under the Clean Air Act (42 U.S.C. 7401 et seq.) to issue waiver credits to reduce the burden on obligated parties under the renewable fuel program under section 211(o) of that Act (42 U.S.C. 7545(o)).

(b) SALE OF CONVENTIONAL BIOFUEL CREDITS.—Section 211(o)(7) of the Clean Air Act (42 U.S.C. 7545(o)(7)) is amended—

(1) by redesignating subparagraphs (E) and (F) as subparagraphs (F) and (G), respectively; and

(2) by inserting after subparagraph (D) the following:

“(E) CONVENTIONAL BIOFUEL.—

“(i) IN GENERAL.—The Administrator shall make available for sale to obligated parties conventional biofuel credits at 10 cents per gallon.

“(ii) REQUIREMENTS.—The regulations promulgated to carry out clause (i)—

“(I) shall ensure that the credits made available for sale under that clause are available at any time; and

“(II) shall not limit the number of conventional biofuel credits made available in any calendar year”.

(c) TRANSFER OF REVENUE TO HIGHWAY TRUST FUND.—Section 9503(b) of the Internal Revenue Code of 1986 is amended by redesignating paragraph (6) as paragraph (7) and by inserting after paragraph (5) the following new paragraph:

“(6) REVENUE FROM SALE OF CONVENTIONAL BIOFUEL CREDITS.—There are hereby appropriated to the Highway Trust Fund amounts equivalent to the revenues received from sales described in section 211(o)(7)(E) of the Clean Air Act.”.

**SA 1474.** Mr. INHOFE submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 256, line 2, insert “and extraction” after “natural gas use”.

**SA 1475.** Mr. CRAMER (for himself and Mr. HOEVEN) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**SEC. \_\_\_\_ REPEAL OF EXTENSION OF CREDIT FOR ELECTRICITY PRODUCED FROM WIND.**

(a) IN GENERAL.—Section 45(d)(1) of the Internal Revenue Code of 1986, as amended by section 127 of division Q the Further Consolidated Appropriations Act, 2020, is amended by striking “January 1, 2021” and inserting “January 1, 2020”.

(b) ELECTION TO TREAT QUALIFIED FACILITIES AS ENERGY PROPERTY.—Section 48(a)(5)(C)(ii) of the Internal Revenue Code of 1986, as amended by section 127 of division Q the Further Consolidated Appropriations Act, 2020, is amended by striking “January 1, 2021” and inserting “January 1, 2021 (January 1, 2020, in the case of any facility which is described in paragraph (1) of section 45(d))”.

(c) APPLICATION OF PHASEOUT PERCENTAGE.—

(1) IN GENERAL.—Section 45(b)(5) of such Code is amended by inserting “and” at the

end of subparagraph (B), by striking “, and” at the end of subparagraph (C) and inserting a period, and striking subparagraph (D).

(2) TREATMENT AS ENERGY PROPERTY.—Section 48(a)(5)(E) of such Code is amended by inserting “and” at the end of clause (ii), by striking “, and” at the end of clause (iii) and inserting a period, and by striking clause (iv).

(d) EFFECTIVE DATE.—

(1) IN GENERAL.—Except as provided in paragraph (2), the amendments made by this section shall apply to electricity produced at facilities placed in service after December 31, 2019.

(2) ELECTION TO TREAT AS ENERGY PROPERTY.—The amendments made by subsections (b) and (c)(2) shall apply to periods beginning after December 31, 2019.

**SA 1476.** Mr. CRAMER (for himself and Mr. CARDIN) submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

**TITLE \_\_\_\_—NUCLEAR POWER**

**SEC. \_\_\_\_01. SHORT TITLE.**

This title may be cited as the “Nuclear Powers America Act of 2019”.

**SEC. \_\_\_\_02. ENERGY CREDIT FOR NUCLEAR ENERGY PROPERTY.**

(a) IN GENERAL.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986 is amended in clause (vi) by striking “or”, by inserting “or” at the end of clause (vii), and by adding at the end the following new clause:

“(viii) qualified nuclear energy property.”.

(b) ELIGIBLE FOR 30-PERCENT CREDIT.—Section 48(a)(2)(A)(i) of such Code is amended by striking “and” in subclause (III) and by adding at the end the following new subclause:

“(V) energy property described in paragraph (3)(A)(viii) but only with respect to property placed in service before January 1, 2027, and”.

(c) QUALIFIED NUCLEAR ENERGY PROPERTY.—Section 48(c) of such Code is amended by adding at the end the following new paragraph:

“(5) QUALIFIED NUCLEAR ENERGY PROPERTY.—

“(A) IN GENERAL.—The term ‘qualified nuclear energy property’ means any amounts paid or incurred for the refueling of, and any other expenditures described in section 263(a) with respect to, a qualifying nuclear power plant.

“(B) QUALIFYING NUCLEAR POWER PLANT.—The term ‘qualifying nuclear power plant’ means a nuclear power plant which—

“(i) submitted an application for license renewal to the Nuclear Regulatory Commission in accordance with part 54 of title 10, Code of Federal Regulations, before January 1, 2027, or

“(ii) certified to the Secretary (at such time and in such form and in such manner as the Secretary prescribes) that such plant will submit an application for license renewal to the Nuclear Regulatory Commission in accordance with part 54 of title 10, Code of Federal Regulations, before January 1, 2027.

“(C) SPECIAL RULES.—

“(i) BASIS.—For purposes of subsection (a), the cumulative amounts paid or incurred by the taxpayer during the taxable year with respect to a qualifying nuclear power plant, which are properly chargeable to capital account, shall be treated as the basis of the

qualified nuclear energy property placed in service for that taxable year.

“(ii) PLACED IN SERVICE.—For purposes of subsection (a), qualified nuclear energy property shall be treated as having been placed in service on the last day of the taxable year in which the taxpayer pays or incurs such amounts described in clause (i).

“(iii) RECAPTURE.—The Secretary shall, by regulations, provide for recapturing the benefit of any credit allowable under subsection (a) to any qualifying nuclear power plant which made a certification pursuant to subparagraph (B) but does not file an application of license renewal to the Nuclear Regulatory Commission in accordance with part 54 of title 10, Code of Federal Regulations, before January 1, 2027.”.

(d) PHASEOUT OF 30-PERCENT CREDIT RATE FOR NUCLEAR ENERGY PROPERTY.—Section 48(a) of such Code is amended by adding at the end the following new paragraph:

“(8) PHASEOUT FOR QUALIFIED NUCLEAR ENERGY PROPERTY.—In the case of qualified nuclear energy property, the energy percentage determined under paragraph (2) shall be equal to—

“(A) in the case of any property placed in service after December 31, 2024, and before January 1, 2026, 26 percent, and

“(B) in the case of any property placed in service after December 31, 2025, and before January 1, 2027, 22 percent.”.

(e) COORDINATION WITH CREDIT FOR PRODUCTION FROM ADVANCED NUCLEAR POWER FACILITIES.—The last sentence of section 48(a)(3) is amended by inserting “or 45J” after “section 45”.

(f) TRANSFER OF CREDIT BY CERTAIN PUBLIC ENTITIES.—

(1) IN GENERAL.—Section 48 of such Code is amended by adding at the end the following new subsection:

“(e) SPECIAL RULE FOR QUALIFIED NUCLEAR ENERGY PROPERTY.—

“(1) IN GENERAL.—In the case of any qualified nuclear energy property, if, with respect to a credit under subsection (a) for any taxable year—

“(A) the taxpayer would be a qualified public entity, and

“(B) such entity elects the application of this subsection for such taxable year with respect to all (or any portion specified in such election) of such credit, the eligible project partner specified in such election (and not the qualified public entity) shall be treated as the taxpayer for purposes of this title with respect to such credit (or such portion thereof).

“(2) DEFINITIONS.—For purposes of this subsection—

“(A) QUALIFIED PUBLIC ENTITY.—The term ‘qualified public entity’ means—

“(i) a Federal, State, or local government entity, or any political subdivision, agency, or instrumentality thereof,

“(ii) a mutual or cooperative electric company described in section 501(c)(12) or section 1381(a)(2), or

“(iii) a not-for-profit electric utility which has or had received a loan or loan guarantee under the Rural Electrification Act of 1936.

“(B) ELIGIBLE PROJECT PARTNER.—The term ‘eligible project partner’ means—

“(i) any person responsible for operating, maintaining, or repairing the qualifying nuclear power plant to which the credit under subsection (a) relates,

“(ii) any person who participates in the provision of the nuclear steam supply system to the qualifying nuclear power plant to which the credit under subsection (a) relates,

“(iii) any person who participates in the provision of nuclear fuel to the qualifying nuclear power plant to which the credit under subsection (a) relates, or

“(iv) any person who has an ownership interest in such facility.

“(3) SPECIAL RULES.—

“(A) APPLICATION TO PARTNERSHIPS.—In the case of a credit under subsection (a) which is determined with respect to qualified nuclear energy property at the partnership level—

“(i) for purposes of paragraph (1)(A), a qualified public entity shall be treated as the taxpayer with respect to such entity’s distributive share of such credit, and

“(ii) the term ‘eligible project partner’ shall include any partner of the partnership.

“(B) TAXABLE YEAR IN WHICH CREDIT TAKEN INTO ACCOUNT.—In the case of any credit (or portion thereof) with respect to which an election is made under paragraph (1), such credit shall be taken into account in the first taxable year of the eligible project partner ending with, or after, the qualified public entity’s taxable year with respect to which the credit was determined.

“(C) TREATMENT OF TRANSFER UNDER PRIVATE USE RULES.—For purposes of section 141(b)(1), any benefit derived by an eligible project partner in connection with an election under this subsection shall not be taken into account as a private business use.”.

(2) SPECIAL RULE FOR PROCEEDS OF TRANSFERS FOR MUTUAL OR COOPERATIVE ELECTRIC COMPANIES.—Section 501(c)(12)(I) of such Code is amended by inserting “or 48(e)(1)” after “section 45J(e)(1)”.

(g) CONFORMING AMENDMENT.—Section 48(a)(2)(A) of such Code is amended by striking “and (7)” and inserting “(7), and (8)”.

(h) EFFECTIVE DATE.—The amendments made by this section shall apply to periods after December 31, 2019, in taxable years ending after such date, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the enactment of the Revenue Reconciliation Act of 1990).

**SA 1477.** Ms. MURKOWSKI submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 332, strike lines 17 through 20 and insert the following:

“(E) leverage the principles of sustainable manufacturing and sustainable chemistry to minimize the negative environmental impacts of manufacturing while conserving energy and resources, including—

**SA 1478.** Mr. LANKFORD submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle A of title II, add the following:

**SEC. 21. LOAN GUARANTEES FOR PROJECTS THAT INCREASE THE DOMESTIC SUPPLY OF CRITICAL MINERALS.**

Section 1703(b) of the Energy Policy Act of 2005 (42 U.S.C. 16513(b)) is amended by adding at the end the following:

“(11) Projects that increase the domestic supply of critical minerals (as designated by the Secretary of the Interior under section 2101(c) of the American Energy Innovation Act of 2020), including through mining, recycling, and the fabrication of mineral alternatives.”.

**SA 1479.** Mr. ROMNEY submitted an amendment intended to be proposed to amendment SA 1407 submitted by Ms. MURKOWSKI and intended to be proposed to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle A of title II, add the following:

**SEC. 2103. MONITORING MINERAL INVESTMENTS UNDER BELT AND ROAD INITIATIVE OF PEOPLE’S REPUBLIC OF CHINA.**

(a) REPORT REQUIRED.—Not later than one year after the date of the enactment of this Act, the Director of National Intelligence, in consultation with the Secretary of Interior, the Secretary of Energy, the Secretary of Commerce, the Secretary of State, the Secretary of Defense, and the United States Trade Representative, shall submit to the appropriate congressional committees a report on investments in minerals under the Belt and Road Initiative of the People’s Republic of China that includes an assessment of—

(1) notable past mineral investments;

(2) whether and how such investments have increased the extent of control of minerals by the People’s Republic of China;

(3) any efforts by the People’s Republic of China to counter or interfere with the goals of the Energy Resource Governance Initiative of the Department of State; and

(4) the strategy of the People’s Republic of China with respect to mineral investments.

(b) MONITORING MECHANISM.—In conjunction with each report required by subsection (a), the Director shall submit to the appropriate congressional committees a list of any minerals with respect to which—

(1) the People’s Republic of China, directly or through the Belt and Road Initiative—

(A) is increasing its concentration of extraction and processing;

(B) is acquiring significant mining and processing facilities;

(C) is maintaining or increasing export restrictions; or

(D) has achieved substantial control of the supply of minerals used within an industry or related minerals; or

(2) there is a significant difference between domestic prices in the People’s Republic of China as compared to prices on international markets; or

(3) there is a significant increase or volatility in price as a result of the Belt and Road Initiative of the People’s Republic of China.

(c) CRITICAL MINERAL EVALUATION.—For any mineral included on the list required by subsection (b) that is not already designated as critical by the Secretary of the Interior pursuant to section 2101, the Director shall—

(1) determine, in consultation with the Secretary of the Interior, the Secretary of Energy, the Secretary of Commerce, the Secretary of State, the Secretary of Defense, and the United States Trade Representative, whether the mineral is strategic and critical to the defense or national security of the United States; and

(2) make a recommendation to the Secretary of the Interior regarding the designation of the mineral under section 2101.

(d) ANNUAL UPDATES.—The Director shall update the report required by subsection (a) and list required by subsection (b) not less frequently than annually.

(e) FORM.—Each report or list required by this section shall be submitted in unclassified form but may include a classified annex.

(f) APPROPRIATE CONGRESSIONAL COMMITTEES DEFINED.—In this section, the term



“appropriate congressional committees” means—

(1) the Committee on Energy and Natural Resources, the Committee on Foreign Relations, the Committee on Armed Services, the Committee on Finance, the Committee on Homeland Security and Governmental Affairs, and the Committee on Appropriations of the Senate; and

(2) the Committee on Energy and Commerce, the Committee on Foreign Affairs, the Committee on Armed Services, the Committee on Ways and Means, the Committee on Homeland Security, and the Committee on Appropriations of the House of Representatives.

#### AUTHORITY FOR COMMITTEES TO MEET

Mr. BLUNT. Mr. President, I have 8 requests for committees to meet during today's session of the Senate. They have the approval of the Majority and Minority leaders.

Pursuant to rule XXVI, paragraph 5(a), of the Standing Rules of the Senate, the following committees are authorized to meet during today's session of the Senate:

##### COMMITTEE ON ARMED SERVICES

The Committee on Armed Services is authorized to meet during the session of the Senate on Tuesday, March 3, 2020, at 9:30 a.m., to conduct a hearing.

##### COMMITTEE ON ENERGY AND NATURAL RESOURCES

The Committee on Energy and Natural Resources is authorized to meet during the session of the Senate on Tuesday, March 3, 2020, at 10 a.m., to conduct a hearing.

##### COMMITTEE HEALTH, EDUCATION, LABOR, AND PENSIONS

The Committee Health, Education, Labor, and Pensions is authorized to meet during the session of the Senate on Tuesday, March 3, 2020, at 10 a.m., to conduct a hearing.

##### COMMITTEE ON VETERANS' AFFAIRS

The Committee on Veterans' Affairs is authorized to meet during the session of the Senate on Tuesday, March 3, 2020, at 2 p.m., to conduct a hearing.

##### SELECT COMMITTEE ON INTELLIGENCE

The Select Committee on Intelligence is authorized to meet during the session of the Senate on Tuesday, March 3, 2020, at 2:30 p.m., to conduct a closed roundtable.

##### SUBCOMMITTEE ON CYBERSECURITY

The Subcommittee on Cybersecurity of the Committee on Armed Services is authorized to meet during the session of the Senate on Tuesday, March 3, 2020, at 2:30 p.m., to conduct a hearing.

##### SUBCOMMITTEE ON READINESS AND MANAGEMENT SUPPORT

The Subcommittee on Readiness and Management Support of the Committee on Armed Services is authorized to meet during the session of the Senate on Tuesday, March 3, 2020, at 2:30 p.m., to conduct a hearing.

##### SUBCOMMITTEE ON SCIENCE, OCEANS, FISHERIES, AND WEATHER

The Subcommittee on Science, Oceans, Fisheries, and Weather of the

Committee on Commerce, Science, and Transportation is authorized to meet during the session of the Senate on Tuesday, March 3, 2020, at 2:30 p.m., to conduct a hearing.

#### PRIVILEGES OF THE FLOOR

Mr. LEAHY. Mr. President, I ask unanimous consent that Deborah Fleischaker, a detailee on my Judiciary Committee staff, be granted floor privileges for the remainder of the 116th Congress.

The PRESIDING OFFICER. Without objection, it is so ordered.

#### SECURE FEDERAL LEASES FROM ESPIONAGE AND SUSPICIOUS ENTANGLEMENTS ACT

Ms. MURKOWSKI. Madam President, I ask unanimous consent that the Senate proceed to the immediate consideration of Calendar No. 196, S. 1869.

The PRESIDING OFFICER. The clerk will report the bill by title.

The senior assistant legislative clerk read as follows:

A bill (S. 1869) to require the disclosure of ownership of high-security space leased to accommodate a Federal agency, and for other purposes.

There being no objection, the Senate proceeded to consider the bill, which had been reported from the Committee on Homeland Security and Governmental Affairs, with an amendment to strike all after the enacting clause and insert in lieu thereof the following:

#### SECTION 1. SHORT TITLE; FINDINGS.

(a) **SHORT TITLE.**—This Act may be cited as the “Secure Federal Leases from Espionage and Suspicious Entanglements Act” or the “Secure Federal LEASEs Act”.

(b) **FINDINGS.**—Congress finds that—

(1) the Government Accountability Office has reported that the Federal Government often leases high-security space from private sector landlords;

(2) the General Services Administration collects highest-level and immediate ownership information through the System of Award Management, but it is not currently required to collect beneficial ownership information and lacks an adequate system for doing so;

(3) the General Services Administration and Federal agencies with leasing authority may not know if foreign owners have a stake in the buildings leased by the agencies, either through foreign-incorporated legal entities or through ownership in United States-incorporated legal entities, even when the leased space is used for classified operations or to store sensitive data; and

(4) according to a report of the Government Accountability Office, dated January 2017, that examined the risks of foreign ownership of Government-leased real estate, “leasing space in foreign-owned buildings could present security risks such as espionage and unauthorized cyber and physical access”.

#### SEC. 2. DEFINITIONS.

In this Act:

(1) **BENEFICIAL OWNER.**—

(A) **IN GENERAL.**—Except as provided in subparagraph (B), the term “beneficial owner” means, with respect to a covered entity, each natural person who, directly or indirectly, through any contract, arrangement, understanding, relationship, or otherwise—

(i) exercises control over the covered entity; or  
(ii) has a substantial interest in or receives substantial economic benefits from the assets of the covered entity.

(B) **EXCEPTIONS.**—The term “beneficial owner” does not include, with respect to a covered entity—

(i) a minor child;

(ii) a person acting as a nominee, intermediary, custodian, or agent on behalf of another person;

(iii) a person acting solely as an employee of the covered entity and whose control over or economic benefits from the covered entity derives solely from the employment status of the person;

(iv) a person whose only interest in the covered entity is through a right of inheritance, unless the person also meets the requirements of subparagraph (A); or

(v) a creditor of the covered entity, unless the creditor also meets the requirements of subparagraph (A).

(C) **ANTI-ABUSE RULE.**—The exceptions under subparagraph (B) shall not apply if used for the purpose of evading, circumventing, or abusing the requirements of this Act.

(2) **CONTROL.**—The term “control” means, with respect to a covered entity—

(A) having the authority or ability to determine how a covered entity is utilized; or

(B) having some decision-making power for the use of a covered entity.

(3) **COVERED ENTITY.**—The term “covered entity” means—

(A) a person, corporation, company, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group; or

(B) any governmental entity or instrumentality of a government.

(4) **EXECUTIVE AGENCY.**—The term “Executive agency” has the meaning given the term in section 105 of title 5, United States Code.

(5) **FEDERAL AGENCY.**—The term “Federal agency” means any Executive agency or any establishment in the legislative or judicial branch of the Government.

(6) **FEDERAL LESSEE.**—The term “Federal lessee” means the Administrator of General Services, the Architect of the Capitol, or the head of any Federal agency, other than the Department of Defense, that has independent statutory leasing authority.

(7) **FEDERAL TENANT.**—The term “Federal tenant” means a Federal agency that is occupying or will occupy a high-security leased space for which a lease agreement has been secured on behalf of the Federal agency.

(8) **FOREIGN ENTITY.**—The term “foreign entity” means a covered entity that is headquartered or incorporated in a country that is not the United States.

(9) **FOREIGN PERSON.**—The term “foreign person” means an individual who is not a United States person.

(10) **HIGH-SECURITY LEASED SPACE.**—The term “high-security leased space” means a space leased by a Federal lessee that—

(A) will be occupied by Federal employees for nonmilitary activities; and

(B) has a facility security level of III, IV, or V, as determined by the Federal tenant in consultation with the Interagency Security Committee, the Department of Homeland Security, and the General Services Administration.

(11) **HIGHEST-LEVEL OWNER.**—The term “highest level owner” means the entity that owns or controls an immediate owner of the offeror of a lease, or that owns or controls 1 or more entities that control an immediate owner of the offeror.

(12) **IMMEDIATE OWNER.**—The term “immediate owner” means an entity, other than the offeror of a lease, that has direct control of the offeror, including ownership or interlocking management, identity of interests among family members, shared facilities and equipment, and the common use of employees.