115TH CONGRESS
2d Session
HOUSE OF REPRESENTATIVES
REPORT
115–502

ENHANCING GEOTHERMAL PRODUCTION ON FEDERAL LANDS ACT

JANUARY 9, 2018.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. BISHOP of Utah, from the Committee on Natural Resources, submitted the following

R E P O R T

[To accompany H.R. 4568]

[Including cost estimate of the Congressional Budget Office]

The Committee on Natural Resources, to whom was referred the bill (H.R. 4568) to amend the Geothermal Steam Act of 1970 to promote timely exploration for geothermal resources under geothermal leases, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Enhancing Geothermal Production on Federal Lands Act".

SEC. 2. GEOTHERMAL PRODUCTION ON FEDERAL LANDS.

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 EXPLORATION TEST PROJECTS.

"(a) DEFINITION OF GEOTHERMAL EXPLORATION TEST PROJECT.—In this section, the term 'geothermal exploration test project' means the drilling of a well to test or explore for geothermal resources on lands for which the Secretary has issued a lease under this Act, that—

"(1) is carried out by the holder of the lease;

"(2) causes—

"(A) less than 5 acres of soil or vegetation disruption at the location of each geothermal exploration well; and

"(B) not more than an additional 5 acres of soil or vegetation disruption during access or egress to the test site;

"(3) is developed—

"(A) less than 9 inches in diameter;

"(B) 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;

"(C) without construction of new roads other than upgrading of existing drainage crossings for safety purposes;

"(D) with the use of rubber-tired digging or drilling equipment vehicles; and

"(E) without the use of high-pressure well stimulation;

"(4) is completed in less than 90 days, including the removal of any surface infrastructure from the site; and

"(5) requires the restoration of the project site within 3 years of the date of first exploration drilling to approximately the condition that existed at the time the project began, unless the site is subsequently used as part of energy development under the lease.

"(b) CATEGORICAL EXCLUSION.—

"(1) IN GENERAL.—Unless extraordinary circumstances exist, a project that the Secretary determines under subsection (c) is a geothermal exploration 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).

"(2) EXTRAORDINARY CIRCUMSTANCES DEFINITION.—In this subsection, the term 'extraordinary circumstances' has the same meaning given such term in the Department of the Interior Departmental Manual, 516 DM 2.3A(3) and 516 DM 2, Appendix 2 (or successor provisions).

"(c) PROCESS.—

"(1) REQUIREMENT TO PROVIDE NOTICE.—A leaseholder shall provide notice to the Secretary of the leaseholder's intent to carry out a geothermal exploration test project at least 30 days before the start of drilling under the project.

"(2) REVIEW AND DETERMINATION.—Not later than 10 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 qualifies for a categorical exclusion under subsection (b); and

"(B) notify the leaseholder of such determination.

"(3) OPPORTUNITY TO REMEDY.—If the Secretary determines under paragraph (2)(A) that the project does not qualify for a categorical exclusion under subsection (b), 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).".

SEC. 3. GEOTHERMAL LEASING PRIORITY AREAS.

The Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) is further amended by adding at the end the following:

"SEC. 31. GEOTHERMAL LEASING PRIORITY AREAS.

"(a) DEFINITION OF COVERED LAND.—In this section, the term 'covered land' means land that is—

"(1) Federal land; and

"(2) not excluded from the development of geothermal energy under—

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

"(B) any other Federal law.

"(b) DESIGNATION OF GEOTHERMAL LEASING PRIORITY AREAS.—The Secretary, in consultation with the Secretary of Energy, shall designate portions of covered land as geothermal leasing priority areas as soon as practicable, but not later than 5 years, after the date of the enactment of this section.

"(c) CRITERIA FOR SELECTION.—In determining which covered lands to designate as geothermal leasing priority areas under subsection (b), the Secretary, in consultation with the Secretary of Energy, shall consider if—

"(1) the covered land is preferable for geothermal leasing;

"(2) production of geothermal energy on such land is economically viable, including if such land has access to methods of energy transmission; and

"(3) the designation would be in compliance 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.

"(d) REVIEW AND MODIFICATION.—Not less frequently than once every 10 years, the Secretary shall—

"(1) review covered land and, if appropriate, make additional designations of geothermal leasing priority areas; and

"(2) review each area designated as a geothermal leasing priority area under this section, and, if appropriate, remove such designation.

"(e) PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT.—

"(1) INITIAL DESIGNATIONS.—No later than one year after the initial designation of a geothermal leasing priority area, the Secretary shall prepare a supplement to any final programmatic environmental impact statement for geothermal leasing that is the most recently finalized such statement with respect to covered land designated as a geothermal leasing priority area under subsection (b).

"(2) SUBSEQUENT DESIGNATIONS.—Each designation of a geothermal leasing priority area under subsection (d) shall be included in a programmatic environmental impact statement for geothermal leasing or in a supplement to such a statement.

"(3) CONSULTATIONS.—In developing any programmatic environmental impact statement for geothermal leasing or supplement to such a statement under this section, the Secretary shall consult, on an ongoing basis, with appropriate State, Tribal, and local governments, transmission infrastructure owners and operators, developers, and other appropriate entities.

"(4) PROCEDURE.—The Secretary may not delay issuing a permit or holding a lease sale under this Act because the supplement required under paragraph (1) has not been finalized by the Secretary.

"(f) COMPLIANCE WITH NEPA.—If the Secretary determines that the designation of a geothermal leasing priority area has been sufficiently analyzed by a programmatic environmental impact statement, the Secretary shall not prepare any additional analysis under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to geothermal lease sales for such geothermal leasing priority area.".

SEC. 4. 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 subsection (c) by the holder of the oil and gas lease—

"(A) on a determination that geothermal energy will be produced from a well producing or capable of producing oil and gas; and

"(B) in order to provide for the coproduction of geothermal energy with oil and gas.".

SEC. 5. NONCOMPETITIVE LEASING OF ADJOINING AREAS FOR DEVELOPMENT OF GEOTHERMAL RESOURCES.

Section 4(b) of the Geothermal Steam Act of 1970 (30 U.S.C. 1003(b)) is further amended by adding at the end the following:

"(5) 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) except as provided in this clause, shall be equal to the market value per acre (taking into account the determination under subparagraph (B)(iii) regarding a valid discovery on the adjoining land) as determined by the Secretary under regulations issued under this paragraph;

"(II) shall be determined by the Secretary with respect to a lease under this paragraph, by not later than the end of the 180-day period beginning on the date the Secretary receives an application for the lease; and

"(III) 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 re-

sources, 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 otherwise 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 who may hold a geothermal lease under this Act (including applicable regulations).

"(vi) VALID DISCOVERY.—The term 'valid discovery' means a discovery of a geothermal resource by a new or existing slim hole or production well, 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) that geothermal feature extends into the adjoining areas.

"(C) DETERMINATION OF FAIR MARKET VALUE.—

"(i) IN GENERAL.—The Secretary shall—

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

"(II) determine fair market value for purposes of this paragraph in accordance with procedures for making those determinations that are established by regulations issued by the Secretary;

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

"(IV) provide to the qualified lessee and any adversely affected party the opportunity to appeal the final determination of fair market value 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 under subsection (a) any nomination of the land for leasing 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.

"(D) REGULATIONS.—Not later than 270 days after the date of enactment of this paragraph, the Secretary shall issue regulations to carry out this paragraph.".

PURPOSE OF THE BILL

The purpose of H.R. 4568 is to amend the Geothermal Steam Act of 1970 to promote timely exploration for geothermal resources under geothermal leases.

BACKGROUND AND NEED FOR LEGISLATION

Reliable and affordable domestic energy sources are essential for our economic health at the local, state, and federal level. Increasing the accessibility and affordability of renewable energy on federal lands is a critical component in an all-of-the-above energy strategy, which bolsters our nation's energy security and diminishes our reliance on foreign sources.

Geothermal energy, naturally produced from the immense heat of the earth's core, is a clean, sustainable energy source. Unlike other renewables such as wind and solar, geothermal is not an intermittent source of energy, and therefore not reliant on a backup power source.[1] As it requires no fossil fuels, it acts as an economic stabilizer in the energy market.[2] Despite its usefulness and potential, geothermal energy is hampered by an unpredictable regulatory process, discouraging development.

The Enhancing Geothermal Production on Federal Lands Act begins by easing the regulatory hurdles at the very beginning of development—the exploration of a potential resource. Ninety percent of viable geothermal resources in the United States are on federally-managed lands, making almost all geothermal projects subject to review under the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. 4321 et seq.).[3] Conceivably, it may take as long as seven to ten years for a geothermal project to begin production from its initial land use planning stage.[4]

While the general presence of a geothermal resource can be estimated by seismic surveys and other technologies, pinpointing the precise location requires an exploration well to test what is beneath the surface.[5] Currently, most geothermal exploration wells require an Environmental Assessment (EA) to be filed before exploration begins. As an EA for geothermal projects averages 10 months, interested parties must wait nearly a year to determine if a viable geothermal resource even exists.[6] Permitting testing sites without an extensive, lengthy NEPA analysis would greatly mitigate the risk of investing the high up-front capital costs that geothermal development requires.[7]

The bill also allows for geothermal development on lands already leased for oil and gas development. This would encourage utilization of a valid geothermal resource if discovered on an existing federal oil and gas lease.

---

[1] Verdolini, Elena, Francesco Vona, and David Popp. "Bridging the Gap: Do Fast Reacting Fossil Technologies Facilitate Renewable Energy Diffusion?" *The National Bureau of Economic Research* (2016). *http://www.nber.org/papers/w22454.pdf*.

[2] Geothermal Energy Association. Potential Use (updated 2014). *http://geo-energy.org/PotentialUse.aspx* (Accessed November 13, 2017).

[3] *Supra.*

[4] Young, *et al.,* 894.

[5] Young, Katherine R., Kermit Witherbee, Aaron Levine, Adam Keller, Jeremy Balu, and Mitchell Bennett. "Geothermal Permitting and NEPA Timelines." *Geothermal Resources Council Transactions* 38 (2014): 893–904. *https://www.geothermal-library.org/index.php?mode=pubs&action=view&record=1033639*.

[6] Young, *et al.,* 900.

[7] *Supra,* 893.

Finally, this bill permits noncompetitive leasing on adjacent federal lands for geothermal energy production. This enables a current leaseholder to acquire neighboring lands at fair market value, so that the geothermal resource may be fully accessed. Without this provision, the boundaries of a lease could conceivably cut a resource in two, and thereby limit the amount of resources the leaseholder may access. If the adjoining land where the resource extends were leased for another purpose, the geothermal resource there could be rendered completely inaccessible.

COMMITTEE ACTION

H.R. 4568 was introduced on December 6, 2017, by Congressman Raul R. Labrador (R–ID). The bill was referred to the Committee on Natural Resources. On December 12, 2017, the Natural Resources Committee met to consider the bill. Congressman Raul R. Labrador offered an amendment designated #1; it was adopted by unanimous consent. No further amendments were offered, and the bill, as amended, was ordered favorably reported to the House of Representatives by unanimous consent on December 13, 2017.

COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

Regarding clause 2(b)(1) of rule X and clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee on Natural Resources' oversight findings and recommendations are reflected in the body of this report.

COMPLIANCE WITH HOUSE RULE XIII

1. Cost of Legislation and the Congressional Budget Act. With respect to the requirements of clause 3(c)(2) and (3) of rule XIII of the Rules of the House of Representatives and sections 308(a) and 402 of the Congressional Budget Act of 1974, the Committee has received the following estimate for the bill from the Director of the Congressional Budget Office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, December 18, 2017.

Hon. ROB BISHOP,
Chairman, Committee on Natural Resources,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 4568, the Enhancing Geothermal Production on Federal Lands Act,

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Jeff LaFave.

Sincerely,

KEITH HALL,
Director.

Enclosure.

H.R. 4568—Enhancing Geothermal Production on Federal Lands Act

H.R. 4568 would authorize the Bureau of Land Management (BLM) to award leases, on a noncompetitive basis, for the development of geothermal resources on certain federal lands. The bill also would require BLM to identify areas that are a priority for such development and would exempt certain geothermal projects from complying with provisions of the National Environmental Policy Act (NEPA).

Using information provided by BLM and assuming the availability of appropriated funds, CBO estimates that implementing H.R. 4568 would cost less than $500,000 a year through 2022. Enacting H.R. 4568 could affect direct spending; therefore, pay-as-you-go procedures apply. However, CBO estimates that the net effect on direct spending would not be significant in any year. Enacting H.R. 4568 would not affect revenues.

CBO estimates that enacting H.R. 4568 would not significantly affect net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

H.R. 4568 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act.

Noncompetitive leasing of geothermal resources

H.R. 4568 would authorize BLM to offer noncompetitive leases of up to 640 acres for lands adjacent to known geothermal discoveries. Under the bill, a company that identified a geothermal resource that extended onto federal land adjacent to company-controlled lands could acquire the lease for a specified amount (called a bonus bid) that is estimated by BLM to be equivalent to the fair market value rather than an amount determined through a competitive auction. In addition to paying the estimated fair market value for the parcel, the bill would require any company awarded such a noncompetitive lease to make annual rental payments equal to those required for lands that are leased competitively. Finally, a company could receive only one noncompetitive lease for each known geothermal discovery.

CBO expects that awarding noncompetitive leases for lands adjacent to known geothermal discoveries could reduce the value of bonus bids on those parcels that would otherwise have been determined by auction. However, because the bill would require the companies that are awarded those leases to pay the estimated fair market value for them, we estimate that implementing H.R. 4568 would not reduce the amount of receipts deposited in the Treasury by more than $500,000 in any year. (Under current law, 75 percent of all receipts from bonus bids, rents, and royalties related to the development of geothermal resources on federal lands is paid to the states and counties in which those lands are located. The remaining funds are deposited in the Treasury and are recorded as offsets to direct spending.)

In addition, CBO expects that implementing H.R. 4568 could increase receipts from royalties paid on geothermal energy production by reducing the amount of time it takes to develop a known geothermal resource and also by reducing the likelihood that lands containing geothermal resources would be acquired for speculative purposes. CBO estimates that any increase in the amount of roy-

alty receipts that would be deposited in the Treasury would not exceed $500,000 in any year. Those amounts would offset any reduction in bonus bids from issuing noncompetitive leases under the bill. On balance, CBO estimates that allowing firms to acquire noncompetitive leases for lands adjacent to known geothermal discoveries would have no significant net effect on direct spending over the 2018–2027 period.

H.R. 4568 also would allow firms with federal oil and gas leases to acquire the rights, on a noncompetitive basis, to produce geothermal resources from those leases. Using information provided by BLM, CBO expects that very few geothermal leases would be acquired under this provision. Thus, enacting this provision would have no significant effect on the federal budget.

Priority areas for the development of geothermal resources

H.R. 4568 would require BLM to designate priority areas on federal lands for the development of geothermal resources. After designating those areas, the agency would be required to prepare a supplement to any existing programmatic environmental impact statement (PEIS) unless the Secretary of the Interior determines that the designated areas were sufficiently analyzed by existing PEIS. Using information provided by BLM and assuming the availability of appropriated funds, CBO estimates that identifying the priority areas and completing the necessary supplement to the PEIS could take up to five years and would cost less than $500,000 a year.

Exploration test projects for geothermal resources

Under H.R. 4568, certain geothermal exploration projects that meet specified requirements related to the duration of the activities, the amount of land disturbed, and the restoration of the project site would not be required to obtain an environmental impact review under NEPA. The Secretary would have 10 days to review proposed projects to determine whether they meet the requirements necessary to obtain a NEPA exemption. Using information provided by BLM, CBO estimates that implementing this provision would have a negligible effect on the agency's workload.

On September 18, 2017, CBO transmitted a cost estimate for H.R. 825, the Public Land Renewable Energy Development Act of 2017, as ordered reported by the House Committee on Natural Resources on July 26, 2017. H.R. 825 would require BLM to identify priority areas for the development of geothermal and wind resources whereas H.R. 4568 would require the agency to identify priority areas only for the development of geothermal resources. Those differences are reflected in the CBO cost estimates.

The CBO staff contact for this estimate is Jeff LaFave. The estimate was approved by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

2. General Performance Goals and Objectives. As required by clause 3(c)(4) of rule XIII, the general performance goal or objective of this bill is to amend the Geothermal Steam Act of 1970 to promote timely exploration for geothermal resources under geothermal leases.

EARMARK STATEMENT

This bill does not contain any Congressional earmarks, limited tax benefits, or limited tariff benefits as defined under clause 9(e), 9(f), and 9(g) of rule XXI of the Rules of the House of Representatives.

COMPLIANCE WITH PUBLIC LAW 104–4

This bill contains no unfunded mandates.

COMPLIANCE WITH H. RES. 5

Directed Rule Making. This bill contains 1 directed rulemaking. Section 5 requires the Secretary of the Interior to issue regulations determining the fair market value for lands to be leased.

Duplication of Existing Programs. This bill does not establish or reauthorize a program of the federal government known to be duplicative of another program. Such program was not included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111–139 or identified in the most recent Catalog of Federal Domestic Assistance published pursuant to the Federal Program Information Act (Public Law 95–220, as amended by Public Law 98–169) as relating to other programs.

PREEMPTION OF STATE, LOCAL OR TRIBAL LAW

This bill is not intended to preempt any State, local or tribal law.

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, and existing law in which no change is proposed is shown in roman):

GEOTHERMAL STEAM ACT OF 1970

* * * * * * *

SEC. 4. LEASING PROCEDURES.

(a) NOMINATIONS.—The Secretary shall accept nominations of land to be leased at any time from qualified companies and individuals under this Act.

(b) COMPETITIVE LEASE SALE REQUIRED.—

(1) IN GENERAL.—Except as otherwise specifically provided by this Act, all land to be leased that is not subject to leasing under subsection (c) shall be leased as provided in this subsection to the highest responsible qualified bidder, as determined by the Secretary.

(2) COMPETITIVE LEASE SALES.—The Secretary shall hold a competitive lease sale at least once every 2 years for land in a State that has nominations pending under subsection (a) if the land is otherwise available for leasing.

(3) LANDS SUBJECT TO MINING CLAIMS.—Lands that are subject to a mining claim for which a plan of operations has been approved by the relevant Federal land management agency

may be available for noncompetitive leasing under this section to the mining claim holder.

(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 subsection (c) by the holder of the oil and gas lease—

(A) on a determination that geothermal energy will be produced from a well producing or capable of producing oil and gas; and

(B) in order to provide for the coproduction of geothermal energy with oil and gas.

(5) 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) except as provided in this clause, shall be equal to the market value per acre (taking into account the determination under subparagraph (B)(iii) regarding a valid discovery on the adjoining land) as determined by the Secretary under regulations issued under this paragraph;

(II) shall be determined by the Secretary with respect to a lease under this paragraph, by not later than the end of the 180-day period beginning on the date the Secretary receives an application for the lease; and

(III) 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 otherwise 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 who may hold a geothermal lease under this Act (including applicable regulations).

(vi) VALID DISCOVERY.—The term "valid discovery" means a discovery of a geothermal resource by a new or existing slim hole or production well, 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) that geothermal feature extends into the adjoining areas.

(C) DETERMINATION OF FAIR MARKET VALUE.—

(i) IN GENERAL.—The Secretary shall—

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

(II) determine fair market value for purposes of this paragraph in accordance with procedures for making those determinations that are established by regulations issued by the Secretary;

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

(IV) provide to the qualified lessee and any adversely affected party the opportunity to appeal the final determination of fair market value 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 under subsection

(a) any nomination of the land for leasing 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.

(D) REGULATIONS.—Not later than 270 days after the date of enactment of this paragraph, the Secretary shall issue regulations to carry out this paragraph.

(c) NONCOMPETITIVE LEASING.—The Secretary shall make available for a period of 2 years for noncompetitive leasing any tract for which a competitive lease sale is held, but for which the Secretary does not receive any bids in a competitive lease sale.

(d) PENDING LEASE APPLICATIONS.—

(1) IN GENERAL.—It shall be a priority for the Secretary, and for the Secretary of Agriculture with respect to National Forest Systems land, to ensure timely completion of administrative actions, including amendments to applicable forest plans and resource management plans, necessary to process applications for geothermal leasing pending on the date of enactment of this subsection. All future forest plans and resource management plans for areas with high geothermal resource potential shall consider geothermal leasing and development.

(2) ADMINISTRATION.—An application described in paragraph (1) and any lease issued pursuant to the application—

(A) except as provided in subparagraph (B), shall be subject to this section as in effect on the day before the date of enactment of this paragraph; or

(B) at the election of the applicant, shall be subject to this section as in effect on the effective date of this paragraph.

(e) LEASES SOLD AS A BLOCK.—If information is available to the Secretary indicating a geothermal resource that could be produced as 1 unit can reasonably be expected to underlie more than 1 parcel to be offered in a competitive lease sale, the parcels for such a resource may be offered for bidding as a block in the competitive lease sale.

(f) LEASING FOR DIRECT USE OF GEOTHERMAL RESOURCES.—Notwithstanding subsection (b), the Secretary may identify areas in which the land to be leased under this Act exclusively for direct use of geothermal resources, without sale for purposes other than commercial generation of electricity, may be leased to any qualified applicant that first applies for such a lease under regulations issued by the Secretary, if the Secretary—

(1) publishes a notice of the land proposed for leasing not later than 90 days before the date of the issuance of the lease;

(2) does not receive during the 90-day period beginning on the date of the publication any nomination to include the land concerned in the next competitive lease sale; and

(3) determines there is no competitive interest in the geothermal resources in the land to be leased.

(g) AREA SUBJECT TO LEASE FOR DIRECT USE.—

(1) IN GENERAL.—Subject to paragraph (2), a geothermal lease for the direct use of geothermal resources shall cover not more than the quantity of acreage determined by the Secretary to be reasonably necessary for the proposed use.

(2) LIMITATIONS.—The quantity of acreage covered by the lease shall not exceed the limitations established under section 7.

* * * * * * *

SEC. 30. GEOTHERMAL EXPLORATION TEST PROJECTS.

(a) DEFINITION OF GEOTHERMAL EXPLORATION TEST PROJECT.—In this section, the term "geothermal exploration test project" means the drilling of a well to test or explore for geothermal resources on lands for which the Secretary has issued a lease under this Act, that—

(1) is carried out by the holder of the lease;

(2) causes—

(A) less than 5 acres of soil or vegetation disruption at the location of each geothermal exploration well; and

(B) not more than an additional 5 acres of soil or vegetation disruption during access or egress to the test site;

(3) is developed—

(A) less than 9 inches in diameter;

(B) 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;

(C) without construction of new roads other than upgrading of existing drainage crossings for safety purposes;

(D) with the use of rubber-tired digging or drilling equipment vehicles; and

(E) without the use of high-pressure well stimulation;

(4) is completed in less than 90 days, including the removal of any surface infrastructure from the site; and

(5) requires the restoration of the project site within 3 years of the date of first exploration drilling to approximately the condition that existed at the time the project began, unless the site is subsequently used as part of energy development under the lease.

(b) CATEGORICAL EXCLUSION.—

(1) IN GENERAL.—Unless extraordinary circumstances exist, a project that the Secretary determines under subsection (c) is a geothermal exploration 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).

(2) EXTRAORDINARY CIRCUMSTANCES DEFINITION.—In this subsection, the term "extraordinary circumstances" has the same meaning given such term in the Department of the Interior Departmental Manual, 516 DM 2.3A(3) and 516 DM 2, Appendix 2 (or successor provisions).

(c) PROCESS.—

(1) REQUIREMENT TO PROVIDE NOTICE.—A leaseholder shall provide notice to the Secretary of the leaseholder's intent to carry out a geothermal exploration test project at least 30 days before the start of drilling under the project.

(2) REVIEW AND DETERMINATION.—Not later than 10 days after receipt of a notice of intent under paragraph (1), the Sec-

retary shall, with respect to the project described in the notice of intent—

(A) determine if the project qualifies for a categorical exclusion under subsection (b); and

(B) notify the leaseholder of such determination.

(3) OPPORTUNITY TO REMEDY.—If the Secretary determines under paragraph (2)(A) that the project does not qualify for a categorical exclusion under subsection (b), 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).

SEC. 31. GEOTHERMAL LEASING PRIORITY AREAS.

(a) DEFINITION OF COVERED LAND.—In this section, the term "covered land" means land that is—

(1) Federal land; and

(2) not excluded from the development of geothermal energy under—

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

(B) any other Federal law.

(b) DESIGNATION OF GEOTHERMAL LEASING PRIORITY AREAS.—The Secretary, in consultation with the Secretary of Energy, shall designate portions of covered land as geothermal leasing priority areas as soon as practicable, but not later than 5 years, after the date of the enactment of this section.

(c) CRITERIA FOR SELECTION.—In determining which covered lands to designate as geothermal leasing priority areas under subsection (b), the Secretary, in consultation with the Secretary of Energy, shall consider if—

(1) the covered land is preferable for geothermal leasing;

(2) production of geothermal energy on such land is economically viable, including if such land has access to methods of energy transmission; and

(3) the designation would be in compliance 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.

(d) REVIEW AND MODIFICATION.—Not less frequently than once every 10 years, the Secretary shall—

(1) review covered land and, if appropriate, make additional designations of geothermal leasing priority areas; and

(2) review each area designated as a geothermal leasing priority area under this section, and, if appropriate, remove such designation.

(e) PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT.—

(1) INITIAL DESIGNATIONS.—No later than one year after the initial designation of a geothermal leasing priority area, the Secretary shall prepare a supplement to any final programmatic environmental impact statement for geothermal leasing that is the most recently finalized such statement with respect to covered land designated as a geothermal leasing priority area under subsection (b).

(2) SUBSEQUENT DESIGNATIONS.—Each designation of a geothermal leasing priority area under subsection (d) shall be included in a programmatic environmental impact statement for geothermal leasing or in a supplement to such a statement.

(3) CONSULTATIONS.—In developing any programmatic environmental impact statement for geothermal leasing or supplement to such a statement under this section, the Secretary shall consult, on an ongoing basis, with appropriate State, Tribal, and local governments, transmission infrastructure owners and operators, developers, and other appropriate entities.

(4) PROCEDURE.—The Secretary may not delay issuing a permit or holding a lease sale under this Act because the supplement required under paragraph (1) has not been finalized by the Secretary.

(f) COMPLIANCE WITH NEPA.—If the Secretary determines that the designation of a geothermal leasing priority area has been sufficiently analyzed by a programmatic environmental impact statement, the Secretary shall not prepare any additional analysis under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to geothermal lease sales for such geothermal leasing priority area.

○