

(1) assess conflicting guidance on the economic potential of concentrating solar power for electricity production received from the National Research Council in the report entitled “Renewable Power Pathways: A Review of the U.S. Department of Energy’s Renewable Energy Programs” and dated 2000 and subsequent reviews of that report funded by the Department; and

(2) provide an assessment of the potential impact of technology used to concentrate solar power for electricity before, or concurrent with, submission of the budget for fiscal year 2008.

(d) Report

Not later than 5 years after August 8, 2005, the Secretary shall provide to Congress a report on the economic and technical potential for electricity or hydrogen production, with or without cogeneration, with concentrating solar power, including the economic and technical feasibility of potential construction of a pilot demonstration facility suitable for commercial production of electricity or hydrogen from concentrating solar power.

(Pub. L. 109–58, title IX, §934, Aug. 8, 2005, 119 Stat. 872.)

§ 16235. Renewable energy in public buildings

(a) Demonstration and technology transfer program

The Secretary shall establish a program for the demonstration of innovative technologies for solar and other renewable energy sources in buildings owned or operated by a State or local government, and for the dissemination of information resulting from such demonstration to interested parties.

(b) Limit on Federal funding

Notwithstanding section 16352 of this title, the Secretary shall provide under this section no more than 40 percent of the incremental costs of the solar or other renewable energy source project funded.

(c) Requirements

As part of the application for awards under this section, the Secretary shall require all applicants—

(1) to demonstrate a continuing commitment to the use of solar and other renewable energy sources in buildings they own or operate; and

(2) to state how they expect any award to further their transition to the significant use of renewable energy.

(Pub. L. 109–58, title IX, §935, Aug. 8, 2005, 119 Stat. 873.)

§ 16236. Research and development into integrating renewable energy onto the electric grid

(a) In general

Not later than 180 days after December 27, 2020, the Secretary shall establish a research, development, and demonstration program on technologies that enable integration of renewable energy generation sources onto the electric

grid across multiple program offices of the Department. The program shall include—

(1) forecasting for predicting generation from variable renewable energy sources;

(2) development of cost-effective low-loss, long-distance transmission lines; and

(3) development of cost-effective advanced technologies for variable renewable generation sources to provide grid services.

(b) Coordination

In carrying out this program, the Secretary shall coordinate across all relevant program offices at the Department to achieve the goals established in this section, including the Office of Electricity.

(c) Adoption of technologies

In carrying out this section, the Secretary shall consider barriers to adoption and commercial application of technologies that enable integration of renewable energy sources onto the electric grid, including cost and other economic barriers, and shall coordinate with relevant entities to reduce these barriers.

(Pub. L. 109–58, title IX, §936, as added Pub. L. 116–260, div. Z, title VIII, §8004(b), Dec. 27, 2020, 134 Stat. 2583.)

§ 16237. Wind energy research and development

(a) Definitions

In this section:

(1) Critical material

The term “critical material” has the meaning given the term in section 1606 of title 30.

(2) Economically distressed area

The term “economically distressed area” means an area described in section 3161(a) of this title.

(3) Eligible entity

The term “eligible entity” means—

(A) an institution of higher education, including a minority-serving institution;

(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).

(4) Indian Tribe

The term “Indian Tribe” has the meaning given the term in section 5304 of title 25.

(5) Institution of higher education

The term “institution of higher education” means—

(A) an institution of higher education (as defined in section 1001(a) of title 20); or