

(7) include business commercialization plans that have the potential for production of equipment at high volumes and operation and support at a large number of sites; and

(8) satisfy other criteria that the Secretary determines are necessary to carry out the program and collect necessary data and information.

The Secretary shall give preference to assessments that address multiple elements contained in paragraphs (1) through (8).

**(c) Grant awards**

Each grant award for demonstration of geothermal technology such as advanced organic rankine cycle systems at oil and gas wells made by the Secretary under subsection (b) shall include—

(1) necessary and appropriate site engineering study;

(2) detailed economic assessment of site specific conditions;

(3) appropriate feasibility studies to determine whether the demonstration can be replicated;

(4) design or adaptation of existing technology for site specific circumstances or conditions;

(5) installation of equipment, service, and support;

(6) operation for a minimum of 1 year and monitoring for the duration of the demonstration; and

(7) validation of technical and economic assumptions and documentation of lessons learned.

**(d) Geopressed gas resource recovery and production**

(1) The Secretary shall implement a program to support the research, development, demonstration, and commercial application of cost-effective techniques to produce energy from geopressed resources.

(2) The Secretary shall solicit preliminary engineering designs for geopressed resources production and recovery facilities.

(3) Based upon a review of the preliminary designs, the Secretary shall award grants, which may be cost-shared, to support the detailed development and completion of engineering, architectural and technical plans needed to support construction of new designs.

(4) Based upon a review of the final design plans above, the Secretary shall award cost-shared development and construction grants for demonstration geopressed production facilities that show potential for economic recovery of the heat, kinetic energy and gas resources from geopressed resources.

**(e) Competitive grant selection**

Not less than 90 days after December 19, 2007, the Secretary shall conduct a national solicitation for applications for grants under the programs outlined in subsections (b) and (d). Grant recipients shall be selected on a competitive basis based on criteria in the respective subsection.

**(f) Well drilling**

No funds may be used under this section for the purpose of drilling new wells.

(Pub. L. 110-140, title VI, §616, Dec. 19, 2007, 121 Stat. 1681.)

**§ 17196. Cost sharing and proposal evaluation**

**(a) Federal share**

The Federal share of costs of projects funded under this part shall be in accordance with section 16352 of this title.

**(b) Organization and administration of programs**

Programs under this part shall incorporate the following elements:

(1) The Secretary shall coordinate with, and where appropriate may provide funds in furtherance of the purposes of this part to, other Department of Energy research and development programs focused on drilling, subsurface characterization, and other related technologies.

(2) In evaluating proposals, the Secretary shall give priority to proposals that demonstrate clear evidence of employing a systems approach.

(3) The Secretary shall coordinate and consult with the appropriate Federal land management agencies in selecting proposals for funding under this part.

(4) Nothing in this part shall be construed to alter or affect any law relating to the management or protection of Federal lands.

(Pub. L. 110-140, title VI, §617, Dec. 19, 2007, 121 Stat. 1682.)

**§ 17197. Center for Geothermal Technology Transfer**

**(a) In general**

The Secretary shall award to an institution of higher education (or consortium thereof) a grant to establish a Center for Geothermal Technology Transfer (referred to in this section as the "Center").

**(b) Duties**

The Center shall—

(1) serve as an information clearinghouse for the geothermal industry by collecting and disseminating information on best practices in all areas relating to developing and utilizing geothermal resources;

(2) make data collected by the Center available to the public; and

(3) seek opportunities to coordinate efforts and share information with domestic and international partners engaged in research and development of geothermal systems and related technology.

**(c) Selection criteria**

In awarding the grant under subsection (a) the Secretary shall select an institution of higher education (or consortium thereof) best suited to provide national leadership on geothermal related issues and perform the duties enumerated under subsection (b).

**(d) Duration of grant**

A grant made under subsection (a)—

(1) shall be for an initial period of 5 years; and

(2) may be renewed for additional 5-year periods on the basis of—

(A) satisfactory performance in meeting the duties outlined in subsection (b); and

(B) any other requirements specified by the Secretary.

(Pub. L. 110-140, title VI, §618, Dec. 19, 2007, 121 Stat. 1683.)

#### § 17198. GeoPowering America

The Secretary shall expand the Department of Energy's GeoPowering the West program to extend its geothermal technology transfer activities throughout the entire United States. The program shall be renamed "GeoPowering America". The program shall continue to be based in the Department of Energy office in Golden, Colorado.

(Pub. L. 110-140, title VI, §619, Dec. 19, 2007, 121 Stat. 1683.)

#### § 17199. Educational pilot program

The Secretary shall seek to award grant funding, on a competitive basis, to an institution of higher education for a geothermal-powered energy generation facility on the institution's campus. The purpose of the facility shall be to provide electricity and space heating. The facility shall also serve as an educational resource to students in relevant fields of study, and the data generated by the facility shall be available to students and the general public. The total funding award shall not exceed \$2,000,000.

(Pub. L. 110-140, title VI, §620, Dec. 19, 2007, 121 Stat. 1683.)

#### § 17200. Reports

##### (a) Reports on advanced uses of geothermal energy

Not later than 3 years and 5 years after December 19, 2007, the Secretary shall report to the Committee on Science and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate on advanced concepts and technologies to maximize the geothermal resource potential of the United States. The reports shall include—

- (1) the use of carbon dioxide as an alternative geofluid with potential carbon sequestration benefits;
- (2) mineral recovery from geofluids;
- (3) use of geothermal energy to produce hydrogen;
- (4) use of geothermal energy to produce biofuels;
- (5) use of geothermal heat for oil recovery from oil shales and tar sands; and
- (6) other advanced geothermal technologies, including advanced drilling technologies and advanced power conversion technologies.

##### (b) Progress reports

(1) Not later than 36 months after December 19, 2007, the Secretary shall submit to the Committee on Science and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate an interim report describing the progress made under this part. At the end of 60 months, the Secretary shall submit to Congress a report on the results of projects undertaken under this part and other

such information the Secretary considers appropriate.

(2) As necessary, the Secretary shall report to the Congress on any legal, regulatory, or other barriers encountered that hinder economic development of these resources, and provide recommendations on legislative or other actions needed to address such impediments.

(Pub. L. 110-140, title VI, §621, Dec. 19, 2007, 121 Stat. 1684.)

#### CHANGE OF NAME

Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

#### § 17201. Applicability of other laws

Nothing in this part shall be construed as waiving, modifying, or superseding the applicability of any requirement under any environmental or other Federal or State law. To the extent that activities authorized in this part take place in coastal and ocean areas, the Secretary shall consult with the Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere, regarding the potential marine environmental impacts and measures to address such impacts.

(Pub. L. 110-140, title VI, §622, Dec. 19, 2007, 121 Stat. 1684.)

#### § 17202. Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this part \$90,000,000 for each of the fiscal years 2008 through 2012, of which \$10,000,000 for each fiscal year shall be for carrying out section 17195 of this title. There are also authorized to be appropriated to the Secretary for the Intermountain West Geothermal Consortium \$5,000,000 for each of the fiscal years 2008 through 2012.

(Pub. L. 110-140, title VI, §623, Dec. 19, 2007, 121 Stat. 1684.)

#### § 17203. International geothermal energy development

##### (a) In general

The Secretary of Energy, in coordination with other appropriate Federal and multilateral agencies (including the United States Agency for International Development) shall support international collaborative efforts to promote the research, development, and deployment of geothermal technologies used to develop hydrothermal and enhanced geothermal system resources, including as partners (as appropriate) the African Rift Geothermal Development Facility, Australia, China, France, the Republic of Iceland, India, Japan, and the United Kingdom.

##### (b) United States Trade and Development Agency

The Director of the United States Trade and Development Agency may—

- (1) encourage participation by United States firms in actions taken to carry out subsection (a); and