

(2) provide grants and other financial support for feasibility and resource assessment studies conducted in, or intended to benefit, less developed countries.

**(c) Authorization of appropriations**

There are authorized to be appropriated to carry out this section \$5,000,000 for each of fiscal years 2008 through 2012.

(Pub. L. 110-140, title VI, §624, Dec. 19, 2007, 121 Stat. 1684.)

**§ 17204. High cost region geothermal energy grant program**

**(a) Definitions**

In this section:

**(1) Eligible entity**

The term “eligible entity” means—

- (A) a utility;
- (B) an electric cooperative;
- (C) a State;
- (D) a political subdivision of a State;
- (E) an Indian tribe; or
- (F) a Native corporation.

**(2) High-cost region**

The term “high-cost region” means a region in which the average cost of electrical power exceeds 150 percent of the national average retail cost, as determined by the Secretary.

**(b) Program**

The Secretary shall use amounts made available to carry out this section to make grants to eligible entities for activities described in subsection (c).

**(c) Eligible activities**

An eligible entity may use grant funds under this section, with respect to a geothermal energy project in a high-cost region, only—

- (1) to conduct a feasibility study, including a study of exploration, geochemical testing, geomagnetic surveys, geologic information gathering, baseline environmental studies, well drilling, resource characterization, permitting, and economic analysis;
- (2) for design and engineering costs, relating to the project; and
- (3) to demonstrate and promote commercial application of technologies related to geothermal energy as part of the project.

**(d) Cost sharing**

The cost-sharing requirements of section 16352 of this title shall apply to any project carried out under this section.

**(e) Authorization of appropriations**

There are authorized to be appropriated such sums as are necessary to carry out this section.

(Pub. L. 110-140, title VI, §625, Dec. 19, 2007, 121 Stat. 1685.)

**PART C—MARINE AND HYDROKINETIC RENEWABLE ENERGY TECHNOLOGIES**

**§ 17211. Definition**

For purposes of this part, the term “marine and hydrokinetic renewable energy” means electrical energy from—

- (1) waves, tides, and currents in oceans, estuaries, and tidal areas;
- (2) free flowing water in rivers, lakes, and streams;
- (3) free flowing water in man-made channels; and
- (4) differentials in ocean temperature (ocean thermal energy conversion).

The term “marine and hydrokinetic renewable energy” does not include energy from any source that uses a dam, diversionary structure, or impoundment for electric power purposes.

(Pub. L. 110-140, title VI, §632, Dec. 19, 2007, 121 Stat. 1686.)

**SHORT TITLE**

This part known as the “Marine and Hydrokinetic Renewable Energy Research and Development Act”, see Short Title note set out under section 17001 of this title.

**§ 17212. Marine and hydrokinetic renewable energy research and development**

**(a) In general**

The Secretary, in consultation with the Secretary of the Interior and the Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere, shall establish a program of research, development, demonstration, and commercial application to expand marine and hydrokinetic renewable energy production, including programs to—

- (1) study and compare existing marine and hydrokinetic renewable energy technologies;
- (2) research, develop, and demonstrate marine and hydrokinetic renewable energy systems and technologies;
- (3) reduce the manufacturing and operation costs of marine and hydrokinetic renewable energy technologies;
- (4) investigate efficient and reliable integration with the utility grid and intermittency issues;
- (5) advance wave forecasting technologies;
- (6) conduct experimental and numerical modeling for optimization of marine energy conversion devices and arrays;
- (7) increase the reliability and survivability of marine and hydrokinetic renewable energy technologies, including development of corrosive-resistant materials;
- (8) identify, in conjunction with the Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere, and other Federal agencies as appropriate, the potential environmental impacts, including potential impacts on fisheries and other marine resources, of marine and hydrokinetic renewable energy technologies, measures to prevent adverse impacts, and technologies and other means available for monitoring and determining environmental impacts;
- (9) 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 and hydrokinetic renewable energy technologies and measures to prevent adverse impacts on navigation;