the status of energy export development in Mexico and a description of all significant efforts by the Secretary and other departments and agencies to promote a constructive relationship with Mexico regarding the development of that nation's energy capacity. In particular this report shall outline efforts the Secretary and other departments and agencies have made to ensure that regulatory approval and oversight of United States/Mexico border projects that result in the expansion of Mexican energy capacity are effectively coordinated across departments and with the Mexican government.

(Pub. L. 109-58, title XVIII, §1807, Aug. 8, 2005, 119 Stat. 1124.)

# § 16522. Low-volume gas reservoir study (a) Study

The Secretary shall make a grant to an organization of oil and gas producing States, specifically those containing significant numbers of marginal oil and natural gas wells, for conducting an annual study of low-volume natural gas reservoirs. Such organization shall work with the State geologist of each State being studied.

#### (b) Contents

The studies under this section shall-

- (1) determine the status and location of marginal wells and gas reservoirs;
- (2) gather the production information of these marginal wells and reservoirs;
- (3) estimate the remaining producible reserves based on variable pipeline pressures;
- (4) locate low-pressure gathering facilities and pipelines;
- (5) recommend incentives which will enable the continued production of these resources;
- (6) produce maps and literature to disseminate to States to promote conservation of natural gas reserves; and
- (7) evaluate the amount of natural gas that is being wasted through the practice of venting or flaring of natural gas produced in association with crude oil well production.

## (c) Data analysis

Data development and analysis under this section shall be performed by an institution of higher education with GIS capabilities. If the organization receiving the grant under subsection (a) does not have GIS capabilities, such organization shall contract with one or more entities with—

- (1) technological capabilities and resources to perform advanced image processing, GIS programming, and data analysis; and
  - (2) the ability to—
  - (A) process remotely sensed imagery with high spatial resolution;
    - (B) deploy global positioning systems;
  - (C) process and synthesize existing, variable-format gas well, pipeline, gathering facility, and reservoir data;
  - (D) create and query GIS databases with infrastructure location and attribute information:
  - (E) write computer programs to customize relevant GIS software;
  - (F) generate maps, charts, and graphs which summarize findings from data re-

search for presentation to different audiences; and

(G) deliver data in a variety of formats, including Internet Map Server for query and display, desktop computer display, and access through handheld personal digital assistants.

## (d) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section—

- (1) \$1,500,000 for fiscal year 2006; and
- (2) \$450,000 for each of the fiscal years 2007 through 2010.

## (e) Definitions

For purposes of this section, the term "GIS" means geographic information systems technology that facilitates the organization and management of data with a geographic component.

(Pub. L. 109-58, title XVIII, §1808, Aug. 8, 2005, 119 Stat. 1124.)

#### § 16523. Alaska natural gas pipeline

Not later than 180 days after August 8, 2005, and every 180 days thereafter until the Alaska natural gas pipeline commences operation, the Federal Energy Regulatory Commission shall submit to Congress a report describing—

- (1) the progress made in licensing and constructing the pipeline; and
  - (2) any issue impeding that progress.

(Pub. L. 109–58, title XVIII, §1810, Aug. 8, 2005, 119 Stat. 1126.)

# § 16524. Study on the benefits of economic dispatch

## (a) Study

The Secretary, in coordination and consultation with the States, shall conduct a study on—

- (1) the procedures currently used by electric utilities to perform economic dispatch;
- (2) identifying possible revisions to those procedures to improve the ability of non-utility generation resources to offer their output for sale for the purpose of inclusion in economic dispatch; and
- (3) the potential benefits to residential, commercial, and industrial electricity consumers nationally and in each state 1 if economic dispatch procedures were revised to improve the ability of nonutility generation resources to offer their output for inclusion in economic dispatch.

## (b) Definition

The term "economic dispatch" when used in this section means the operation of generation facilities to produce energy at the lowest cost to reliably serve consumers, recognizing any operational limits of generation and transmission facilities.

## (c) Report to Congress and the States

Not later than 90 days after August 8, 2005, and on a yearly basis following, the Secretary shall submit a report to Congress and the States on

<sup>&</sup>lt;sup>1</sup> So in original. Probably should be capitalized.

the results of the study conducted under subsection (a), including recommendations to Congress and the States for any suggested legislative or regulatory changes.

(Pub. L. 109–58, title XVIII, §1832, Aug. 8, 2005, 119 Stat. 1138.)

SUBCHAPTER XVII—PROTECTING AMERICA'S COMPETITIVE EDGE THROUGH ENERGY

#### **Editorial Notes**

### CODIFICATION

This subchapter was enacted as part of the America COMPETES Act, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Act, and also as part of the Protecting America's Competitive Edge Through Energy Act, also known as the PACE-Energy Act, and not as part of the Energy Policy Act of 2005, which enacted subchapters I to XVI of this chapter.

## § 16531. Definitions

In this subchapter:

#### (1) Department

The term "Department" means the Department of Energy.

#### (2) Institution of higher education

The term "institution of higher education" has the meaning given the term in section 1001(a) of title 20.

## (3) National Laboratory

The term "National Laboratory" has the meaning given the term in section 15801 of this title.

## (4) Secretary

The term "Secretary" means the Secretary of Energy.

(Pub. L. 110–69, title V,  $\S 5002$ , Aug. 9, 2007, 121 Stat. 600.)

## **Editorial Notes**

## REFERENCES IN TEXT

This subchapter, referred to in introductory provisions, was in the original "this title", meaning title V of Pub. L. 110–69, Aug. 9, 2007, 121 Stat. 600, known as the Protecting America's Competitive Edge Through Energy Act and also as the PACE–Energy Act, which is classified principally to this subchapter. For complete classification of this title to the Code, see Short Title of 2007 Amendment note set out under section 15801 of this title and Tables.

## Statutory Notes and Related Subsidiaries

## SHORT TITLE

For short title of title V of Pub. L. 110-69, which enacted this subchapter, as the "Protecting America's Competitive Edge Through Energy Act" or the "PACE-Energy Act", see section 5001 of Pub. L. 110-69, set out as a note under section 15801 of this title.

# §16532. Nuclear science talent expansion program for institutions of higher education

## (a) Purposes

The purposes of this section are—

(1) to address the decline in the number of and resources available to nuclear science programs at institutions of higher education; and (2) to increase the number of graduates with degrees in nuclear science, an area of strategic importance to the economic competitiveness and energy security of the United States.

#### (b) Definition of nuclear science

In this section, the term "nuclear science" includes—

- (1) nuclear science:
- nuclear engineering;
- (3) nuclear chemistry;
- (4) radio chemistry; and
- (5) health physics.

## (c) Establishment

The Secretary shall establish, in accordance with this section, a program to expand and enhance institution of higher education nuclear science educational capabilities.

# (d) Nuclear science program expansion grants for institutions of higher education

#### (1) In general

The Secretary shall award up to 3 competitive grants for each fiscal year to institutions of higher education that establish new academic degree programs in nuclear science.

#### (2) Priority

In evaluating grants under this subsection, the Secretary shall give priority to proposals that involve partnerships with a National Laboratory or other eligible nuclear-related entity, as determined by the Secretary.

## (3) Criteria

Criteria for a grant awarded under this subsection shall be based on—  $\,$ 

- (A) the potential to attract new students to the program;
  - (B) academic rigor; and
- (C) the ability to offer hands-on learning opportunities.

## (4) Duration and amount

## (A) Duration

A grant under this subsection may be up to 5 years in duration.

## (B) Amount

An institution of higher education that receives a grant under this subsection shall be eligible for up to \$1,000,000 for each year of the grant period.

## (5) Use of funds

An institution of higher education that receives a grant under this subsection may use

- (A) recruit and retain new faculty;
- (B) develop core and specialized course content;
- (C) encourage collaboration between faculty and researchers in the nuclear science field; and
- (D) support outreach efforts to recruit students

# (e) Nuclear science competitiveness grants for institutions of higher education

## (1) In general

The Secretary shall award up to 5 competitive grants for each fiscal year to institutions