

(d) Integrated clean power and energy research**(1) Establishment of center**

The Secretary shall establish a national center or consortium of excellence in clean energy and power generation, using the resources of the Clean Power and Energy Research Consortium in existence on August 8, 2005, to address the critical dependence of the United States on energy and the need to reduce emissions.

(2) Focus areas

The center or consortium shall conduct a program of research, development, demonstration, and commercial application on integrating the following 6 focus areas:

(A) Efficiency and reliability of gas turbines for power generation.

(B) Reduction in emissions from power generation.

(C) Promotion of energy conservation issues.

(D) Effectively using alternative fuels and renewable energy.

(E) Development of advanced materials technology for oil and gas exploration and use in harsh environments.

(F) Education on energy and power generation issues.

(Pub. L. 109-58, title IX, §965, Aug. 8, 2005, 119 Stat. 892.)

§ 16296. Low-volume oil and gas reservoir research program**(a) Definition of GIS**

In this section, the term “GIS” means geographic information systems technology that facilitates the organization and management of data with a geographic component.

(b) Program

The Secretary shall establish a program of research, development, demonstration, and commercial application to maximize the productive capacity of marginal wells and reservoirs.

(c) Data collection

Under the program, the Secretary shall collect data on—

(1) the status and location of marginal wells and oil and gas reservoirs;

(2) the production capacity of marginal wells and oil and gas reservoirs;

(3) the location of low-pressure gathering facilities and pipelines; and

(4) the quantity of natural gas vented or flared in association with crude oil production.

(d) Analysis

Under the program, the Secretary shall—

(1) estimate the remaining producible reserves based on variable pipeline pressures; and

(2) recommend measures that will enable the continued production of those resources.

(e) Study**(1) In general**

The Secretary may award a grant to an organization of States that contain significant

numbers of marginal oil and natural gas wells to conduct an annual study of low-volume natural gas reservoirs.

(2) Organization with no GIS capabilities

If an organization receiving a grant under paragraph (1) does not have GIS capabilities, the organization shall contract with an institution of higher education with GIS capabilities.

(3) State geologists

The organization receiving a grant under paragraph (1) shall collaborate with the State geologist of each State being studied.

(f) Public information

The Secretary may use the data collected and analyzed under this section to produce maps and literature to disseminate to States to promote conservation of natural gas reserves.

(Pub. L. 109-58, title IX, §966, Aug. 8, 2005, 119 Stat. 893.)

§ 16297. Complex Well Technology Testing Facility

The Secretary, in coordination with industry leaders in extended research drilling technology, shall establish a Complex Well Technology Testing Facility at the Rocky Mountain Oilfield Testing Center to increase the range of extended drilling technologies.

(Pub. L. 109-58, title IX, §967, Aug. 8, 2005, 119 Stat. 894.)

PART G—SCIENCE

§ 16311. Science**(a) In general**

The Secretary shall conduct, through the Office of Science, programs of research, development, demonstration, and commercial application in high energy physics, nuclear physics, biological and environmental research, basic energy sciences, advanced scientific computing research, and fusion energy sciences, including activities described in this part. The programs shall include support for facilities and infrastructure, education, outreach, information, analysis, and coordination activities.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out research, development, demonstration, and commercial application activities of the Office of Science, including activities authorized under this part (including the amounts authorized under the amendment made by section 976(b)¹ and including basic energy sciences, advanced scientific and computing research, biological and environmental research, fusion energy sciences, high energy physics, nuclear physics, research analysis, and infrastructure support)—

(1) \$4,153,000,000 for fiscal year 2007;

(2) \$4,586,000,000 for fiscal year 2008;

(3) \$5,200,000,000 for fiscal year 2009;

(4) \$5,814,000,000 for fiscal year 2010;

(5) \$5,247,000,000 for fiscal year 2011;

¹ See References in Text note below.