

## SUBCHAPTER VI—COAL

PART A—RESEARCH, DEVELOPMENT,  
DEMONSTRATION, AND COMMERCIAL APPLICATION**§ 13331. Coal research, development, demonstration, and commercial application programs****(a) Establishment**

The Secretary shall, in accordance with section<sup>1</sup> 13541 and 13542 of this title, conduct programs for research, development, demonstration, and commercial application on coal-based technologies. Such research, development, demonstration, and commercial application programs shall include the programs established under this part, and shall have the goals and objectives of—

- (1) ensuring a reliable electricity supply;
- (2) complying with applicable environmental requirements;
- (3) achieving the control of sulfur oxides, oxides of nitrogen, air toxics, solid and liquid wastes, greenhouse gases, or other emissions resulting from coal use or conversion at levels of proficiency greater than or equal to applicable currently available commercial technology;
- (4) achieving the cost competitive conversion of coal into energy forms usable in the transportation sector;
- (5) demonstrating the conversion of coal to synthetic gaseous, liquid, and solid fuels;
- (6) demonstrating, in cooperation with other Federal and State agencies, the use of coal-derived fuels in mobile equipment, with opportunities for industrial cost sharing participation;
- (7) ensuring the timely commercial application of cost-effective technologies or energy production processes or systems utilizing coal which achieve—
  - (A) greater efficiency in the conversion of coal to useful energy when compared to currently available commercial technology for the use of coal; and
  - (B) the control of emissions from the utilization of coal; and
- (8) ensuring the availability for commercial use of such technologies by the year 2010.

**(b) Demonstration and commercial application programs**

(1) In selecting either a demonstration project or a commercial application project for financial assistance under this part, the Secretary shall seek to ensure that, relative to otherwise comparable commercially available technologies or products, the selected project will meet one or more of the following criteria:

- (A) It will reduce environmental emissions to an extent greater than required by applicable provisions of law.
- (B) It will increase the overall efficiency of the utilization of coal, including energy conversion efficiency and, where applicable, production of products derived from coal.
- (C) It will be a more cost-effective technological alternative, based on life cycle capital

and operating costs per unit of energy produced and, where applicable, costs per unit of product produced.

Priority in selection shall be given to those projects which, in the judgment of the Secretary, best meet one or more of these criteria.

(2) In administering demonstration and commercial application programs authorized by this part, the Secretary shall establish accounting and project management controls that will be adequate to control costs.

(3)(A) Not later than 180 days after October 24, 1992, the Secretary shall establish procedures and criteria for the recoupment of the Federal share of each cost shared demonstration and commercial application project authorized pursuant to this part. Such recoupment shall occur within a reasonable period of time following the date of completion of such project, but not later than 20 years following such date, taking into account the effect of recoupment on—

- (i) the commercial competitiveness of the entity carrying out the project;
- (ii) the profitability of the project; and
- (iii) the commercial viability of the coal-based technology utilized.

(B) The Secretary may at any time waive or defer all or some portion of the recoupment requirement as necessary for the commercial viability of the project.

(4) Projects selected by the Secretary under this part for demonstration or commercial application of a technology shall, in the judgment of the Secretary, be capable of enhancing the state of the art for such technology.

**(c) Report**

Within 240 days after October 24, 1992, the Secretary shall transmit to the Committee on Energy and Commerce and the Committee on Science, Space, and Technology of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate a report which shall include each of the following:

(1) A detailed description of ongoing research, development, demonstration, and commercial application activities regarding coal-based technologies undertaken by the Department of Energy, other Federal or State government departments or agencies and, to the extent such information is publicly available, other public or private organizations in the United States and other countries.

(2) A listing and analysis of current Federal and State government regulatory and financial incentives that could further the goals of the programs established under this part.

(3) Recommendations regarding the manner in which any ongoing coal-based demonstration and commercial application program might be modified and extended in order to ensure the timely demonstrations of advanced coal-based technologies so as to ensure that the goals established under this section are achieved and that such demonstrated technologies are available for commercial use by the year 2010.

(4) Recommendations, if any, regarding the manner in which the cost sharing demonstrations conducted pursuant to the Clean Coal

<sup>1</sup> So in original. Probably should be "sections".

Program established by Public Law 98-473 might be modified and extended in order to ensure the timely demonstration of advanced coal-based technologies.

(5) A detailed plan for conducting the research, development, demonstration, and commercial application programs to achieve the goals and objectives of subsection (a) of this section, which plan shall include a description of—

(A) the program elements and management structure to be utilized;

(B) the technical milestones to be achieved with respect to each of the advanced coal-based technologies included in the plan; and

(C) the dates at which further deadlines for additional cost sharing demonstrations shall be established.

**(d) Status reports**

Within one year after transmittal of the report described in subsection (c) of this section, and every 2 years thereafter for a period of 6 years, the Secretary shall transmit to the Congress a report that provides a detailed description of the status of development of the advanced coal-based technologies and the research, development, demonstration, and commercial application activities undertaken to carry out the programs required by this part.

**(e) Consultation**

In carrying out research, development, demonstration, and commercial application activities under this part, the Secretary shall consult with the National Coal Council and other representatives of the public and private sectors as the Secretary considers appropriate.

(Pub. L. 102-486, title XIII, § 1301, Oct. 24, 1992, 106 Stat. 2970.)

REFERENCES IN TEXT

Public Law 98-473, referred to in subsec. (c)(4), is Pub. L. 98-473, Oct. 12, 1984, 98 Stat. 1837, as amended. For complete classification of this Act to the Code, see Tables.

CHANGE OF NAME

Committee on Energy and Commerce of House of Representatives treated as referring to Committee on Commerce of House of Representatives by section 1(a) of Pub. L. 104-14, set out as a note preceding section 21 of Title 2, The Congress. Committee on Commerce of House of Representatives changed to Committee on Energy and Commerce of House of Representatives, and jurisdiction over matters relating to securities and exchanges and insurance generally transferred to Committee on Financial Services of House of Representatives by House Resolution No. 5, One Hundred Seventh Congress, Jan. 3, 2001.

**§ 13332. Coal-fired diesel engines**

The Secretary shall conduct a program of research, development, demonstration, and commercial application for utilizing coal-derived liquid or gaseous fuels, including ultra-clean coal-water slurries, in diesel engines. The program shall address—

(1) required engine retrofit technology;

(2) coal-fuel production technology;

(3) emission control requirements;

(4) the testing of low-Btu highly reactive fuels;

(5) fuel delivery and storage systems requirements; and

(6) other infrastructure required to support commercial deployment.

(Pub. L. 102-486, title XIII, § 1302, Oct. 24, 1992, 106 Stat. 2972.)

**§ 13333. Clean coal, waste-to-energy**

The Secretary shall establish a program of research, development, demonstration, and commercial application with respect to the use of solid waste combined with coal as a fuel source for clean coal combustion technologies. The program shall address—

(1) the feasibility of cofiring coal and used vehicle tires in fluidized bed combustion units;

(2) the combined gasification of coal and municipal sludge using integrated gasification combined cycle technology;

(3) the creation of fuel pellets combining coal and material reclaimed from solid waste;

(4) the feasibility of cofiring, in fluidized bed combustion units, waste methane from coal mines, including ventilation air, together with coal or coal wastes; and

(5) other sources of waste and coal mixtures in other applications that the Secretary considers appropriate.

(Pub. L. 102-486, title XIII, § 1303, Oct. 24, 1992, 106 Stat. 2972.)

**§ 13334. Nonfuel use of coal**

**(a) Program**

The Secretary shall prepare a plan for and carry out a program of research, development, demonstration, and commercial application with respect to technologies for the nonfuel use of coal, including—

(1) production of coke and other carbon products derived from coal;

(2) production of coal-derived, carbon-based chemical intermediates that are precursors of value-added chemicals and polymers;

(3) production of chemicals from coal-derived synthesis gas;

(4) coal treatment processes, including methodologies such as solvent-extraction techniques that produce low ash, low sulfur, coal-based chemical feedstocks; and

(5) waste utilization, including recovery, processing, and marketing of products derived from sulfur, carbon dioxide, nitrogen, and ash from coal.

**(b) Plan contents**

The plan described in subsection (a) of this section shall address and evaluate—

(1) the known and potential processes for using coal in the creation of products in the chemical, utility, fuel, and carbon-based materials industries;

(2) the costs, benefits, and economic feasibility of using coal products in the chemical and materials industries, including value-added chemicals, carbon-based products, coke, and waste derived from coal;

(3) the economics of coproduction of products from coal in conjunction with the production of electric power, thermal energy, and fuel;