

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 demonstra-

tion 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 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 com-

mercial 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;

(4) the economics of the refining of coal and coal byproducts to produce nonfuel products;

(5) the economics of coal utilization in comparison with other feedstocks that might be used for the same purposes;

(6) the steps that can be taken by the public and private sectors to bring about commercialization of technologies developed under the program recommended; and

(7) the past development, current status, and future potential of coal products and processes associated with nonfuel uses of coal.

(Pub. L. 102-486, title XIII, § 1304, Oct. 24, 1992, 106 Stat. 2973.)

#### § 13335. Coal refinery program

##### (a) Program

The Secretary shall conduct a program of research, development, demonstration, and commercial application for coal refining technologies.

##### (b) Objectives

The program shall include technologies for refining high sulfur coals, low sulfur coals, sub-bituminous coals, and lignites to produce clean-burning transportation fuels, compliance boiler fuels, fuel additives, lubricants, chemical feedstocks, and carbon-based manufactured products, either alone or in conjunction with the generation of electricity or process heat, or the manufacture of a variety of products from coal. The objectives of such program shall be to achieve—

(1) the timely commercial application of technologies, including mild gasification, hydrocracking and other hydrolysis processes, and other energy production processes or systems to produce coal-derived fuels and coproducts, which achieve greater efficiency and economy in the conversion of coal to electrical energy and coproducts than currently available technology;

(2) the production of energy, fuels, and products which, on a complete energy system basis, will result in environmental emissions no greater than those produced by existing comparable energy systems utilized for the same purpose;

(3) the capability to produce a range of coal-derived transportation fuels, including oxygenated hydrocarbons, boiler fuels, turbine fuels, and coproducts, which can reduce dependence on imported oil by displacing conventional petroleum in the transportation sector and other sectors of the economy;

(4) reduction in the cost of producing such coal-derived fuels and coproducts;

(5) the control of emissions from the combustion of coal-derived fuels; and

(6) the availability for commercial use of such technologies by the year 2000.