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To promote economically sound modernization of electric power generation capacity in the United States, to establish requirements to improve the combustion heat rate efficiency of fossil fuel-fired electric utility generating units, to reduce emissions of mercury, carbon dioxide, nitrogen oxides, and sulfur dioxide, to require that all fossil fuel-fired electric utility generating units operating in the United States meet new source review requirements, to promote the use of clean coal technologies, and to promote alternative energy and clean energy sources such as solar, wind, biomass, and fuel cells.

IN THE SENATE OF THE UNITED STATES

NOVEMBER 17, 1999

Mr. LEAHY introduced the following bill; which was read twice and referred to the Committee on Finance

A BILL

To promote economically sound modernization of electric power generation capacity in the United States, to establish requirements to improve the combustion heat rate efficiency of fossil fuel-fired electric utility generating units, to reduce emissions of mercury, carbon dioxide, nitrogen oxides, and sulfur dioxide, to require that all fossil fuel-fired electric utility generating units operating in the United States meet new source review requirements, to promote the use of clean coal technologies, and to promote alternative energy and clean energy sources such as solar, wind, biomass, and fuel cells.

1 *Be it enacted by the Senate and House of Representa-*
 2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
 5 “Clean Power Plant and Modernization Act of 1999”.

6 (b) TABLE OF CONTENTS.—The table of contents of
 7 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings and purposes.
- Sec. 3. Definitions.
- Sec. 4. Combustion heat rate efficiency standards for fossil fuel-fired generating units.
- Sec. 5. Air emission standards for fossil fuel-fired generating units.
- Sec. 6. Extension of renewable energy production credit.
- Sec. 7. Megawatt hour generation fees.
- Sec. 8. Clean Air Trust Fund.
- Sec. 9. Accelerated depreciation for investor-owned generating units.
- Sec. 10. Grants for publicly owned generating units.
- Sec. 11. Recognition of permanent emission reductions in future climate change implementation programs.
- Sec. 12. Renewable and clean power generation technologies.
- Sec. 13. Clean coal, advanced gas turbine, and combined heat and power demonstration program.
- Sec. 14. Evaluation of implementation of this Act and other statutes.
- Sec. 15. Assistance for workers adversely affected by reduced consumption of coal.
- Sec. 16. Community economic development incentives for communities adversely affected by reduced consumption of coal.
- Sec. 17. Carbon sequestration.

8 **SEC. 2. FINDINGS AND PURPOSES.**

9 (a) FINDINGS.—Congress finds that—

10 (1) the United States is relying increasingly on
 11 old, needlessly inefficient, and highly polluting pow-
 12 erplants to provide electricity;

13 (2) the pollution from those powerplants causes
 14 a wide range of health and environmental damage,
 15 including—

1 (A) fine particulate matter that is associ-
2 ated with the deaths of approximately 50,000
3 Americans annually;

4 (B) urban ozone, commonly known as
5 “smog”, that impairs normal respiratory func-
6 tions and is of special concern to individuals af-
7 flicted with asthma, emphysema, and other res-
8 piratory ailments;

9 (C) rural ozone that obscures visibility and
10 damages forests and wildlife;

11 (D) acid deposition that damages estu-
12 aries, lakes, rivers, and streams (and the plants
13 and animals that depend on them for survival)
14 and leaches heavy metals from the soil;

15 (E) mercury and heavy metal contamina-
16 tion that renders fish unsafe to eat, with espe-
17 cially serious consequences for pregnant women
18 and their fetuses;

19 (F) eutrophication of estuaries, lakes, riv-
20 ers, and streams; and

21 (G) global climate change that may fun-
22 damentally and irreversibly alter human, ani-
23 mal, and plant life;

24 (3) tax laws and environmental laws—

1 (A) provide a very strong incentive for
2 electric utilities to keep old, dirty, and ineffi-
3 cient generating units in operation; and

4 (B) provide a strong disincentive to invest-
5 ing in new, clean, and efficient generating tech-
6 nologies;

7 (4) fossil fuel-fired power plants, consisting of
8 plants fueled by coal, fuel oil, and natural gas,
9 produce nearly two-thirds of the electricity generated
10 in the United States;

11 (5) since, according to the Department of En-
12 ergy, the average combustion heat rate efficiency of
13 fossil fuel-fired power plants in the United States is
14 33 percent, 67 percent of the heat generated by
15 burning the fuel is wasted;

16 (6) technology exists to increase the combustion
17 heat rate efficiency of coal combustion from 35 per-
18 cent to 50 percent above current levels, and techno-
19 logical advances are possible that would boost the
20 net combustion heat rate efficiency even more;

21 (7) coal-fired power plants are the leading
22 source of mercury emissions in the United States,
23 releasing an estimated 52 tons of this potent
24 neurotoxin each year;

1 (8) in 1996, fossil fuel-fired power plants in the
2 United States produced over 2,000,000,000 tons of
3 carbon dioxide, the primary greenhouse gas;

4 (9) on average—

5 (A) fossil fuel-fired power plants emit
6 1,999 pounds of carbon dioxide for every mega-
7 watt hour of electricity produced;

8 (B) coal-fired power plants emit 2,110
9 pounds of carbon dioxide for every megawatt
10 hour of electricity produced; and

11 (C) coal-fired power plants emit 205
12 pounds of carbon dioxide for every million Brit-
13 ish thermal units of fuel consumed;

14 (10) the average fossil fuel-fired generating unit
15 in the United States commenced operation in 1964,
16 6 years before the Clean Air Act (42 U.S.C. 7401
17 et seq.) was amended to establish requirements for
18 stationary sources;

19 (11)(A) according to the Department of En-
20 ergy, only 23 percent of the 1,000 largest emitting
21 units are subject to stringent new source perform-
22 ance standards under section 111 of the Clean Air
23 Act (42 U.S.C. 7411); and

1 (B) the remaining 77 percent, commonly re-
2 ferred to as “grandfathered” power plants, are sub-
3 ject to much less stringent requirements;

4 (12) on the basis of scientific and medical evi-
5 dence, exposure to mercury and mercury compounds
6 is of concern to human health and the environment;

7 (13) pregnant women and their developing
8 fetuses, women of childbearing age, and children are
9 most at risk for mercury-related health impacts such
10 as neurotoxicity;

11 (14) although exposure to mercury and mercury
12 compounds occurs most frequently through con-
13 sumption of mercury-contaminated fish, such expo-
14 sure can also occur through—

15 (A) ingestion of breast milk;

16 (B) ingestion of drinking water, and foods
17 other than fish, that are contaminated with
18 methyl mercury; and

19 (C) dermal uptake through contact with
20 soil and water;

21 (15) the report entitled “Mercury Study Report
22 to Congress” and submitted by the Environmental
23 Protection Agency under section 112(n)(1)(B) of the
24 Clean Air Act (42 U.S.C. 7412(n)(1)(B)), in con-
25 junction with other scientific knowledge, supports a

1 plausible link between mercury emissions from com-
2 bustion of coal and other fossil fuels and mercury
3 concentrations in air, soil, water, and sediments;

4 (16)(A) the Environmental Protection Agency
5 report described in paragraph (15) supports a plau-
6 sible link between mercury emissions from combus-
7 tion of coal and other fossil fuels and methyl mer-
8 cury concentrations in freshwater fish;

9 (B) in 1997, 39 States issued health advisories
10 that warned the public about consuming mercury-
11 tainted fish, as compared to 27 States that issued
12 such advisories in 1993; and

13 (C) the number of mercury advisories nation-
14 wide increased from 899 in 1993 to 1,675 in 1996,
15 an increase of 86 percent;

16 (17) pollution from powerplants can be reduced
17 through adoption of modern technologies and prac-
18 tices, including—

19 (A) methods of combusting coal that are
20 intrinsically more efficient and less polluting,
21 such as pressurized fluidized bed combustion
22 and an integrated gasification combined cycle
23 system;

1 (B) methods of combusting cleaner fuels,
2 such as gases from fossil and biological re-
3 sources and combined cycle turbines;

4 (C) treating flue gases through application
5 of pollution controls;

6 (D) methods of extracting energy from
7 natural, renewable resources of energy, such as
8 solar and wind sources;

9 (E) methods of producing electricity and
10 thermal energy from fuels without conventional
11 combustion, such as fuel cells; and

12 (F) combined heat and power methods of
13 extracting and using heat that would otherwise
14 be wasted, for the purpose of heating or cooling
15 office buildings, providing steam to processing
16 facilities, or otherwise increasing total effi-
17 ciency; and

18 (18) adopting the technologies and practices de-
19 scribed in paragraph (17) would increase competi-
20 tiveness and productivity, secure employment, save
21 lives, and preserve the future.

22 (b) PURPOSES.—The purposes of this Act are—

23 (1) to protect and preserve the environment
24 while safeguarding health by ensuring that each fos-
25 sil fuel-fired generating unit minimizes air pollution

1 to levels that are technologically feasible through
2 modernization and application of pollution controls;

3 (2) to greatly reduce the quantities of mercury,
4 carbon dioxide, sulfur dioxide, and nitrogen oxides
5 entering the environment from combustion of fossil
6 fuels;

7 (3) to permanently reduce emissions of those
8 pollutants by increasing the combustion heat rate ef-
9 ficiency of fossil fuel-fired generating units to levels
10 achievable through—

11 (A) use of commercially available combus-
12 tion technology, including clean coal tech-
13 nologies such as pressurized fluidized bed com-
14 bustion and an integrated gasification combined
15 cycle system;

16 (B) installation of pollution controls;

17 (C) expanded use of renewable and clean
18 energy sources such as biomass, geothermal,
19 solar, wind, and fuel cells; and

20 (D) promotion of application of combined
21 heat and power technologies;

22 (4)(A) to create financial and regulatory incen-
23 tives to retire thermally inefficient generating units
24 and replace them with new units that employ high-
25 thermal-efficiency combustion technology; and

1 (B) to increase use of renewable and clean en-
2 ergy sources such as biomass, geothermal, solar,
3 wind, and fuel cells;

4 (5) to establish the Clean Air Trust Fund to
5 fund the training, economic development, carbon se-
6 questration, and research, development, and dem-
7 onstration programs established under this Act;

8 (6) to eliminate the “grandfather” loophole in
9 the Clean Air Act relating to sources in operation
10 before the promulgation of standards under section
11 111 of that Act (42 U.S.C. 7411);

12 (7) to express the sense of Congress that per-
13 manent reductions in emissions of greenhouse gases
14 that are accomplished through the retirement of old
15 units and replacement by new units that meet the
16 combustion heat rate efficiency and emission stand-
17 ards specified in this Act should be credited to the
18 utility sector and the owner or operator in any cli-
19 mate change implementation program;

20 (8) to promote permanent and safe disposal of
21 mercury recovered through coal cleaning, flue gas
22 control systems, and other methods of mercury pol-
23 lution control;

24 (9) to increase public knowledge of the sources
25 of mercury exposure and the threat to public health

1 from mercury, particularly the threat to the health
 2 of pregnant women and their fetuses, women of
 3 childbearing age, and children;

4 (10) to decrease significantly the threat to
 5 human health and the environment posed by mer-
 6 cury;

7 (11) to provide worker retraining for workers
 8 adversely affected by reduced consumption of coal;
 9 and

10 (12) to provide economic development incentives
 11 for communities adversely affected by reduced con-
 12 sumption of coal.

13 **SEC. 3. DEFINITIONS.**

14 In this Act:

15 (1) ADMINISTRATOR.—The term “Adminis-
 16 trator” means the Administrator of the Environ-
 17 mental Protection Agency.

18 (2) GENERATING UNIT.—The term “generating
 19 unit” means an electric utility generating unit.

20 **SEC. 4. COMBUSTION HEAT RATE EFFICIENCY STANDARDS**

21 **FOR FOSSIL FUEL-FIRED GENERATING**
 22 **UNITS.**

23 (a) STANDARDS.—

24 (1) IN GENERAL.—Not later than the day that
 25 is 10 years after the date of enactment of this Act,

1 each fossil fuel-fired generating unit that commences
2 operation on or before that day shall achieve and
3 maintain, at all operating levels, a combustion heat
4 rate efficiency of not less than 45 percent (based on
5 the higher heating value of the fuel).

6 (2) FUTURE GENERATING UNITS.—Each fossil
7 fuel-fired generating unit that commences operation
8 more than 10 years after the date of enactment of
9 this Act shall achieve and maintain, at all operating
10 levels, a combustion heat rate efficiency of not less
11 than 50 percent (based on the higher heating value
12 of the fuel), unless granted a waiver under sub-
13 section (d).

14 (b) TEST METHODS.—Not later than 2 years after
15 the date of enactment of this Act, the Administrator, in
16 consultation with the Secretary of Energy, shall promul-
17 gate methods for determining initial and continuing com-
18 pliance with this section.

19 (c) PERMIT REQUIREMENT.—Not later than 10 years
20 after the date of enactment of this Act, each generating
21 unit shall have a permit issued under title V of the Clean
22 Air Act (42 U.S.C. 7661 et seq.) that requires compliance
23 with this section.

24 (d) WAIVER OF COMBUSTION HEAT RATE EFFI-
25 CIENCY STANDARD.—

1 (1) APPLICATION.—The owner or operator of a
2 generating unit that commences operation more than
3 10 years after the date of enactment of this Act may
4 apply to the Administrator for a waiver of the com-
5 bustion heat rate efficiency standard specified in
6 subsection (a)(2) that is applicable to that type of
7 generating unit.

8 (2) ISSUANCE.—The Administrator may grant
9 the waiver only if—

10 (A)(i) the owner or operator of the gener-
11 ating unit demonstrates that the technology to
12 meet the combustion heat rate efficiency stand-
13 ard is not commercially available; or

14 (ii) the owner or operator of the generating
15 unit demonstrates that, despite best technical
16 efforts and willingness to make the necessary
17 level of financial commitment, the combustion
18 heat rate efficiency standard is not achievable
19 at the generating unit; and

20 (B) the owner or operator of the gener-
21 ating unit enters into an agreement with the
22 Administrator to offset by a factor of 1.5 to 1,
23 using a method approved by the Administrator,
24 the emission reductions that the generating unit
25 does not achieve because of the failure to

1 achieve the combustion heat rate efficiency
2 standard specified in subsection (a)(2).

3 (3) EFFECT OF WAIVER.—If the Administrator
4 grants a waiver under paragraph (1), the generating
5 unit shall be required to achieve and maintain, at all
6 operating levels, the combustion heat rate efficiency
7 standard specified in subsection (a)(1).

8 **SEC. 5. AIR EMISSION STANDARDS FOR FOSSIL FUEL-FIRED**
9 **GENERATING UNITS.**

10 (a) ALL FOSSIL FUEL-FIRED GENERATING
11 UNITS.—Not later than 10 years after the date of enact-
12 ment of this Act, each fossil fuel-fired generating unit, re-
13 gardless of its date of construction or commencement of
14 operation, shall be subject to, and operating in physical
15 and operational compliance with, the new source review
16 requirements under section 111 of the Clean Air Act (42
17 U.S.C. 7411).

18 (b) EMISSION RATES FOR SOURCES REQUIRED TO
19 MAINTAIN 45 PERCENT EFFICIENCY.—Not later than 10
20 years after the date of enactment of this Act, each fossil
21 fuel-fired generating unit subject to section 4(a)(1) shall
22 be in compliance with the following emission limitations:

23 (1) MERCURY.—Each coal-fired or fuel oil-fired
24 generating unit shall be required to remove 90 per-

1 cent of the mercury contained in the fuel, calculated
2 in accordance with subsection (e).

3 (2) CARBON DIOXIDE.—

4 (A) NATURAL GAS-FIRED GENERATING
5 UNITS.—Each natural gas-fired generating unit
6 shall be required to achieve an emission rate of
7 not more than 0.9 pounds of carbon dioxide per
8 kilowatt hour of net electric power output.

9 (B) FUEL OIL-FIRED GENERATING
10 UNITS.—Each fuel oil-fired generating unit
11 shall be required to achieve an emission rate of
12 not more than 1.3 pounds of carbon dioxide per
13 kilowatt hour of net electric power output.

14 (C) COAL-FIRED GENERATING UNITS.—
15 Each coal-fired generating unit shall be re-
16 quired to achieve an emission rate of not more
17 than 1.55 pounds of carbon dioxide per kilowatt
18 hour of net electric power output.

19 (3) SULFUR DIOXIDE.—Each fossil fuel-fired
20 generating unit shall be required—

21 (A) to remove 95 percent of the sulfur di-
22 oxide that would otherwise be present in the
23 flue gas; and

1 (B) to achieve an emission rate of not
2 more than 0.3 pounds of sulfur dioxide per mil-
3 lion British thermal units of fuel consumed.

4 (4) NITROGEN OXIDES.—Each fossil fuel-fired
5 generating unit shall be required—

6 (A) to remove 90 percent of nitrogen ox-
7 ides that would otherwise be present in the flue
8 gas; and

9 (B) to achieve an emission rate of not
10 more than 0.15 pounds of nitrogen oxides per
11 million British thermal units of fuel consumed.

12 (c) EMISSION RATES FOR SOURCES REQUIRED TO
13 MAINTAIN 50 PERCENT EFFICIENCY.—Each fossil fuel-
14 fired generating unit subject to section 4(a)(2) shall be
15 in compliance with the following emission limitations:

16 (1) MERCURY.—Each coal-fired or fuel oil-fired
17 generating unit shall be required to remove 90 per-
18 cent of the mercury contained in the fuel, calculated
19 in accordance with subsection (e).

20 (2) CARBON DIOXIDE.—

21 (A) NATURAL GAS-FIRED GENERATING
22 UNITS.—Each natural gas-fired generating unit
23 shall be required to achieve an emission rate of
24 not more than 0.8 pounds of carbon dioxide per
25 kilowatt hour of net electric power output.

1 (B) FUEL OIL-FIRED GENERATING
2 UNITS.—Each fuel oil-fired generating unit
3 shall be required to achieve an emission rate of
4 not more than 1.2 pounds of carbon dioxide per
5 kilowatt hour of net electric power output.

6 (C) COAL-FIRED GENERATING UNITS.—
7 Each coal-fired generating unit shall be re-
8 quired to achieve an emission rate of not more
9 than 1.4 pounds of carbon dioxide per kilowatt
10 hour of net electric power output.

11 (3) SULFUR DIOXIDE.—Each fossil fuel-fired
12 generating unit shall be required—

13 (A) to remove 95 percent of the sulfur di-
14 oxide that would otherwise be present in the
15 flue gas; and

16 (B) to achieve an emission rate of not
17 more than 0.3 pounds of sulfur dioxide per mil-
18 lion British thermal units of fuel consumed.

19 (4) NITROGEN OXIDES.—Each fossil fuel-fired
20 generating unit shall be required—

21 (A) to remove 90 percent of nitrogen ox-
22 ides that would otherwise be present in the flue
23 gas; and

1 (B) to achieve an emission rate of not
2 more than 0.15 pounds of nitrogen oxides per
3 million British thermal units of fuel consumed.

4 (d) PERMIT REQUIREMENT.—Not later than 10
5 years after the date of enactment of this Act, each gener-
6 ating unit shall have a permit issued under title V of the
7 Clean Air Act (42 U.S.C. 7661 et seq.) that requires com-
8 pliance with this section.

9 (e) COMPLIANCE DETERMINATION AND MONI-
10 TORING.—

11 (1) REGULATIONS.—Not later than 2 years
12 after the date of enactment of this Act, the Adminis-
13 trator, in consultation with the Secretary of Energy,
14 shall promulgate methods for determining initial and
15 continuing compliance with this section.

16 (2) CALCULATION OF MERCURY EMISSION RE-
17 DUCTIONS.—Not later than 2 years after the date of
18 enactment of this Act, the Administrator shall pro-
19 mulgate fuel sampling techniques and emission mon-
20 itoring techniques for use by generating units in cal-
21 culating mercury emission reductions for the pur-
22 poses of this section.

23 (3) REPORTING.—

24 (A) IN GENERAL.—Not less often than
25 quarterly, the owner or operator of a generating

1 unit shall submit a pollutant-specific emission
2 report for each pollutant covered by this sec-
3 tion.

4 (B) SIGNATURE.—Each report required
5 under subparagraph (A) shall be signed by a re-
6 sponsible official of the generating unit, who
7 shall certify the accuracy of the report.

8 (C) PUBLIC REPORTING.—The Adminis-
9 trator shall annually make available to the pub-
10 lic, through 1 or more published reports and 1
11 or more forms of electronic media, facility-spe-
12 cific emission data for each generating unit and
13 pollutant covered by this section.

14 (D) CONSUMER DISCLOSURE.—Not later
15 than 2 years after the date of enactment of this
16 Act, the Administrator shall promulgate regula-
17 tions requiring each owner or operator of a gen-
18 erating unit to disclose to residential consumers
19 of electricity generated by the unit, on a regular
20 basis (but not less often than annually) and in
21 a manner convenient to the consumers, data
22 concerning the level of emissions by the gener-
23 ating unit of each pollutant covered by this sec-
24 tion and each air pollutant covered by section
25 111 of the Clean Air Act (42 U.S.C. 7411).

1 (f) DISPOSAL OF MERCURY CAPTURED OR RECOV-
2 ERED THROUGH EMISSION CONTROLS.—

3 (1) CAPTURED OR RECOVERED MERCURY.—Not
4 later than 2 years after the date of enactment of
5 this Act, the Administrator shall promulgate regula-
6 tions to ensure that mercury that is captured or re-
7 covered through the use of an emission control, coal
8 cleaning, or another method is disposed of in a man-
9 ner that ensures that—

10 (A) the hazards from mercury are not
11 transferred from 1 environmental medium to
12 another; and

13 (B) there is no release of mercury into the
14 environment.

15 (2) MERCURY-CONTAINING SLUDGES AND
16 WASTES.—The regulations promulgated by the Ad-
17 ministrator under paragraph (1) shall ensure that
18 mercury-containing sludges and wastes are handled
19 and disposed of in accordance with all applicable
20 Federal and State laws (including regulations).

21 (g) PUBLIC REPORTING OF FACILITY-SPECIFIC
22 EMISSION DATA.—

23 (1) IN GENERAL.—The Administrator shall an-
24 nually make available to the public, through 1 or
25 more published reports and the Internet, facility-spe-

1 cific emission data for each generating unit and for
2 each pollutant covered by this section.

3 (2) SOURCE OF DATA.—The emission data shall
4 be taken from the emission reports submitted under
5 subsection (e)(3).

6 **SEC. 6. EXTENSION OF RENEWABLE ENERGY PRODUCTION**

7 **CREDIT.**

8 Section 45(c) of the Internal Revenue Code of 1986
9 (relating to definitions) is amended—

10 (1) in paragraph (1)—

11 (A) in subparagraph (A), by striking
12 “and”;

13 (B) in subparagraph (B), by striking the
14 period and inserting “, and”; and

15 (C) by adding at the end the following:

16 “(C) solar power.”;

17 (2) in paragraph (3)—

18 (A) by inserting “, and December 31,
19 1998, in the case of a facility using solar power
20 to produce electricity” after “electricity”; and

21 (B) by striking “1999” and inserting
22 “2010”; and

23 (3) by adding at the end the following:

24 “(4) SOLAR POWER.—The term ‘solar power’
25 means solar power harnessed through—

1 “(A) photovoltaic systems,

2 “(B) solar boilers that provide process
3 heat, and

4 “(C) any other means.”.

5 **SEC. 7. MEGAWATT HOUR GENERATION FEES.**

6 (a) **IN GENERAL.**—Chapter 38 of the Internal Rev-
7 enue Code of 1986 (relating to miscellaneous excise taxes)
8 is amended by inserting after subchapter D the following:

9 **“Subchapter E—Megawatt Hour Generation**
10 **Fees**

“Sec. 4691. Imposition of fees.

11 **“SEC. 4691. IMPOSITION OF FEES.**

12 “(a) **TAX IMPOSED.**—There is hereby imposed on
13 each covered fossil fuel-fired generating unit a tax equal
14 to 30 cents per megawatt hour of electricity produced by
15 the covered fossil fuel-fired generating unit.

16 “(b) **ADJUSTMENT OF RATES.**—Not less often than
17 once every 2 years beginning after 2002, the Secretary,
18 in consultation with the Administrator of the Environ-
19 mental Protection Agency, shall evaluate the rate of the
20 tax imposed by subsection (a) and increase the rate if nec-
21 essary for any succeeding calendar year to ensure that the
22 Clean Air Trust Fund established by section 9511 has suf-
23 ficient amounts to fully fund the activities described in
24 section 9511(c).

1 “(c) PAYMENT OF TAX.—The tax imposed by this
2 section shall be paid quarterly by the owner or operator
3 of each covered fossil fuel-fired generating unit.

4 “(d) COVERED FOSSIL FUEL-FIRED GENERATING
5 UNIT.—The term ‘covered fossil fuel-fired generating unit’
6 means an electric utility generating unit that—

7 “(1) is powered by fossil fuels;

8 “(2) has a generating capacity of 5 or more
9 megawatts; and

10 “(3) because of the date on which the gener-
11 ating unit commenced commercial operation, is not
12 subject to all regulations promulgated under section
13 111 of the Clean Air Act (42 U.S.C. 7411).”.

14 (b) CONFORMING AMENDMENT.—The table of sub-
15 chapters for such chapter 38 is amended by inserting after
16 the item relating to subchapter D the following:

 “SUBCHAPTER E. Megawatt hour generation fees.”.

17 (c) EFFECTIVE DATE.—The amendments made by
18 this section shall apply to electricity produced in calendar
19 years beginning after December 31, 2000.

20 **SEC. 8. CLEAN AIR TRUST FUND.**

21 (a) IN GENERAL.—Subchapter A of chapter 98 of the
22 Internal Revenue Code of 1986 (relating to trust fund
23 code) is amended by adding at the end the following:

1 **“SEC. 9511. CLEAN AIR TRUST FUND.**

2 “(a) CREATION OF TRUST FUND.—There is estab-
3 lished in the Treasury of the United States a trust fund
4 to be known as the ‘Clean Air Trust Fund’ (hereafter re-
5 ferred to in this section as the ‘Trust Fund’), consisting
6 of such amounts as may be appropriated or credited to
7 the Trust Fund as provided in this section or section
8 9602(b).

9 “(b) TRANSFERS TO TRUST FUND.—There are here-
10 by appropriated to the Trust Fund amounts equivalent to
11 the taxes received in the Treasury under section 4691.

12 “(c) EXPENDITURES FROM TRUST FUND.—Amounts
13 in the Trust Fund shall be available, without further Act
14 of appropriation, upon request by the head of the appro-
15 priate Federal agency in such amounts as the agency head
16 determines are necessary—

17 “(1) to provide funding under section 12 of the
18 Clean Power Plant and Modernization Act of 1999,
19 as in effect on the date of enactment of this section;

20 “(2) to provide funding for the demonstration
21 program under section 13 of such Act, as so in ef-
22 fect;

23 “(3) to provide assistance under section 15 of
24 such Act, as so in effect;

25 “(4) to provide assistance under section 16 of
26 such Act, as so in effect; and

1 “(5) to provide funding under section 17 of
2 such Act, as so in effect.”.

3 (b) CONFORMING AMENDMENT.—The table of sec-
4 tions for such subchapter A is amended by adding at the
5 end the following:

 “Sec. 9511. Clean Air Trust Fund.”.

6 **SEC. 9. ACCELERATED DEPRECIATION FOR INVESTOR-**
7 **OWNED GENERATING UNITS.**

8 (a) IN GENERAL.—Section 168(e)(3) of the Internal
9 Revenue Code of 1986 (relating to classification of certain
10 property) is amended—

11 (1) in subparagraph (E) (relating to 15-year
12 property), by striking “and” at the end of clause
13 (ii), by striking the period at the end of clause (iii)
14 and inserting “, and”, and by adding at the end the
15 following:

16 “(iv) any 45-percent efficient fossil
17 fuel-fired generating unit.”; and

18 (2) by adding at the end the following:

19 “(F) 12-YEAR PROPERTY.—The term ‘12-
20 year property’ includes any 50-percent efficient
21 fossil fuel-fired generating unit.”.

22 (b) DEFINITIONS.—Section 168(i) of the Internal
23 Revenue Code of 1986 (relating to definitions and special
24 rules) is amended by adding at the end the following:

1 “(15) FOSSIL FUEL-FIRED GENERATING
2 UNITS.—

3 “(A) 50-PERCENT EFFICIENT FOSSIL
4 FUEL-FIRED GENERATING UNIT.—The term
5 ‘50-percent efficient fossil fuel-fired generating
6 unit’ means any property used in an investor-
7 owned fossil fuel-fired generating unit pursuant
8 to a plan approved by the Secretary, in con-
9 sultation with the Administrator of the Envi-
10 ronmental Protection Agency, to place into
11 service such a unit that is in compliance with
12 sections 4(a)(2) and 5(c) of the Clean Power
13 Plant and Modernization Act of 1999, as in ef-
14 fect on the date of enactment of this paragraph.

15 “(B) 45-PERCENT EFFICIENT FOSSIL
16 FUEL-FIRED GENERATING UNIT.—The term
17 ‘45-percent efficient fossil fuel-fired generating
18 unit’ means any property used in an investor-
19 owned fossil fuel-fired generating unit pursuant
20 to a plan so approved to place into service such
21 a unit that is in compliance with sections
22 4(a)(1) and 5(b) of such Act, as so in effect.”.

23 (c) CONFORMING AMENDMENT.—The table contained
24 in section 168(c) of the Internal Revenue Code of 1986
25 (relating to applicable recovery period) is amended by in-

1 setting after the item relating to 10-year property the fol-
 2 lowing:

“12-year property 12 years”.

3 (d) **EFFECTIVE DATE.**—The amendments made by
 4 this section shall apply to property used after the date of
 5 enactment of this Act.

6 **SEC. 10. GRANTS FOR PUBLICLY OWNED GENERATING**
 7 **UNITS.**

8 Any capital expenditure made after the date of enact-
 9 ment of this Act to purchase, install, and bring into com-
 10 mercial operation any new publicly owned generating unit
 11 that—

12 (1) is in compliance with sections 4(a)(1) and
 13 5(b) shall, for a 15-year period, be eligible for par-
 14 tial reimbursement through annual grants made by
 15 the Secretary of the Treasury, in consultation with
 16 the Administrator, in an amount equal to the mone-
 17 tary value of the depreciation deduction that would
 18 be realized by reason of section 168(c)(3)(E) of the
 19 Internal Revenue Code of 1986 by a similarly-situ-
 20 ated investor-owned generating unit over that pe-
 21 riod; and

22 (2) is in compliance with sections 4(a)(2) and
 23 5(c) shall, over a 12-year period, be eligible for par-
 24 tial reimbursement through annual grants made by
 25 the Secretary of the Treasury, in consultation with

1 the Administrator, in an amount equal to the mone-
2 tary value of the depreciation deduction that would
3 be realized by reason of section 168(c)(3)(D) of such
4 Code by a similarly-situated investor-owned gener-
5 ating unit over that period.

6 **SEC. 11. RECOGNITION OF PERMANENT EMISSION REDUC-**
7 **TIONS IN FUTURE CLIMATE CHANGE IMPLE-**
8 **MENTATION PROGRAMS.**

9 It is the sense of Congress that—

10 (1) permanent reductions in emissions of car-
11 bon dioxide and nitrogen oxides that are accom-
12 plished through the retirement of old generating
13 units and replacement by new generating units that
14 meet the combustion heat rate efficiency and emis-
15 sion standards specified in this Act, or through re-
16 placement of old generating units with nonpolluting
17 renewable power generation technologies, should be
18 credited to the utility sector, and to the owner or op-
19 erator that retires or replaces the old generating
20 unit, in any climate change implementation program
21 enacted by Congress;

22 (2) the base year for calculating reductions
23 under a program described in paragraph (1) should
24 be the calendar year preceding the calendar year in
25 which this Act is enacted; and

1 (3) a reasonable portion of any monetary value
2 that may accrue from the crediting described in
3 paragraph (1) should be passed on to utility cus-
4 tomers.

5 **SEC. 12. RENEWABLE AND CLEAN POWER GENERATION**
6 **TECHNOLOGIES.**

7 (a) **IN GENERAL.**—Under the Renewable Energy and
8 Energy Efficiency Technology Act of 1989 (42 U.S.C.
9 12001 et seq.), the Secretary of Energy shall fund re-
10 search and development programs and commercial dem-
11 onstration projects and partnerships to demonstrate the
12 commercial viability and environmental benefits of electric
13 power generation from—

14 (1) biomass (excluding unseparated municipal
15 solid waste), geothermal, solar, and wind tech-
16 nologies; and

17 (2) fuel cells.

18 (b) **TYPES OF PROJECTS.**—Demonstration projects
19 may include solar power tower plants, solar dishes and en-
20 gines, co-firing of biomass with coal, biomass modular sys-
21 tems, next-generation wind turbines and wind turbine
22 verification projects, geothermal energy conversion, and
23 fuel cells.

24 (c) **AUTHORIZATION OF APPROPRIATIONS.**—In addi-
25 tion to amounts made available under any other law, there

1 is authorized to be appropriated to carry out this section
2 \$75,000,000 for each of fiscal years 2001 through 2010.

3 **SEC. 13. CLEAN COAL, ADVANCED GAS TURBINE, AND COM-**
4 **BINED HEAT AND POWER DEMONSTRATION**
5 **PROGRAM.**

6 (a) IN GENERAL.—Under subtitle B of title XXI of
7 the Energy Policy Act of 1992 (42 U.S.C. 13471 et seq.),
8 the Secretary of Energy shall establish a program to fund
9 projects and partnerships designed to demonstrate the ef-
10 ficiency and environmental benefits of electric power gen-
11 eration from—

12 (1) clean coal technologies, such as pressurized
13 fluidized bed combustion and an integrated gasifi-
14 cation combined cycle system;

15 (2) advanced gas turbine technologies, such as
16 flexible midsized gas turbines and baseload utility
17 scale applications; and

18 (3) combined heat and power technologies.

19 (b) SELECTION CRITERIA.—

20 (1) IN GENERAL.—Not later than 1 year after
21 the date of enactment of this Act, the Secretary of
22 Energy shall promulgate criteria and procedures for
23 selection of demonstration projects and partnerships
24 to be funded under subsection (a).

1 (2) REQUIRED CRITERIA.—At a minimum, the
2 selection criteria shall include—

3 (A) the potential of a proposed demonstra-
4 tion project or partnership to reduce or avoid
5 emissions of pollutants covered by section 5 and
6 air pollutants covered by section 111 of the
7 Clean Air Act (42 U.S.C. 7411); and

8 (B) the potential commercial viability of
9 the proposed demonstration project or partner-
10 ship.

11 (c) AUTHORIZATION OF APPROPRIATIONS.—

12 (1) IN GENERAL.—In addition to amounts
13 made available under any other law, there is author-
14 ized to be appropriated to carry out this section
15 \$75,000,000 for each of fiscal years 2001 through
16 2010.

17 (2) DISTRIBUTION.—The Secretary shall make
18 reasonable efforts to ensure that, under the program
19 established under this section, the same amount of
20 funding is provided for demonstration projects and
21 partnerships under each of paragraphs (1), (2), and
22 (3) of subsection (a).

1 **SEC. 14. EVALUATION OF IMPLEMENTATION OF THIS ACT**
2 **AND OTHER STATUTES.**

3 (a) **IN GENERAL.**—Not later than 2 years after the
4 date of enactment of this Act, the Secretary of Energy,
5 in consultation with the Chairman of the Federal Energy
6 Regulatory Commission and the Administrator, shall sub-
7 mit to Congress a report on the implementation of this
8 Act.

9 (b) **IDENTIFICATION OF CONFLICTING LAW.**—The
10 report shall identify any provision of the Energy Policy
11 Act of 1992 (Public Law 102–486), the Energy Supply
12 and Environmental Coordination Act of 1974 (15 U.S.C.
13 791 et seq.), the Public Utility Regulatory Policies Act
14 of 1978 (16 U.S.C. 2601 et seq.), or the Powerplant and
15 Industrial Fuel Use Act of 1978 (42 U.S.C. 8301 et seq.),
16 or the amendments made by those Acts, that conflicts with
17 the intent or efficient implementation of this Act.

18 (c) **RECOMMENDATIONS.**—The report shall include
19 recommendations from the Secretary of Energy, the
20 Chairman of the Federal Energy Regulatory Commission,
21 and the Administrator for legislative or administrative
22 measures to harmonize and streamline the statutes speci-
23 fied in subsection (b) and the regulations implementing
24 those statutes.

1 **SEC. 15. ASSISTANCE FOR WORKERS ADVERSELY AF-**
2 **FFECTED BY REDUCED CONSUMPTION OF**
3 **COAL.**

4 In addition to amounts made available under any
5 other law, there is authorized to be appropriated
6 \$75,000,000 for each of fiscal years 2001 through 2015
7 to provide assistance, under the economic dislocation and
8 worker adjustment assistance program of the Department
9 of Labor authorized by title III of the Job Training Part-
10 nership Act (29 U.S.C. 1651 et seq.), to coal industry
11 workers who are terminated from employment as a result
12 of reduced consumption of coal by the electric power gen-
13 eration industry.

14 **SEC. 16. COMMUNITY ECONOMIC DEVELOPMENT INCEN-**
15 **TIVES FOR COMMUNITIES ADVERSELY AF-**
16 **FFECTED BY REDUCED CONSUMPTION OF**
17 **COAL.**

18 In addition to amounts made available under any
19 other law, there is authorized to be appropriated
20 \$75,000,000 for each of fiscal years 2001 through 2015
21 to provide assistance, under the economic adjustment pro-
22 gram of the Department of Commerce authorized by the
23 Public Works and Economic Development Act of 1965 (42
24 U.S.C. 3121 et seq.), to assist communities adversely af-
25 fected by reduced consumption of coal by the electric
26 power generation industry.

1 **SEC. 17. CARBON SEQUESTRATION.**

2 (a) CARBON SEQUESTRATION STRATEGY.—In addi-
3 tion to amounts made available under any other law, there
4 is authorized to be appropriated to the Environmental
5 Protection Agency and the Department of Energy for each
6 of fiscal years 2001 through 2003 a total of \$15,000,000
7 to conduct research and development activities in basic
8 and applied science in support of development by Sep-
9 tember 30, 2003, of a carbon sequestration strategy that
10 is designed to offset all growth in carbon dioxide emissions
11 in the United States after 2010.

12 (b) METHODS FOR BIOLOGICALLY SEQUESTERING
13 CARBON DIOXIDE.—In addition to amounts made avail-
14 able under any other law, there is authorized to be appro-
15 priated to the Environmental Protection Agency and the
16 Department of Agriculture for each of fiscal years 2001
17 through 2010 a total of \$30,000,000 to carry out soil res-
18 toration, tree planting, wetland protection, and other
19 methods of biologically sequestering carbon dioxide.

20 (c) LIMITATION.—A project carried out using funds
21 made available under this section shall not be used to off-
22 set any emission reduction required under any other provi-
23 sion of this Act.

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