

## Calendar No. 768

107TH CONGRESS  
2D SESSION

## S. 556

[Report No. 107-347]

To amend the Clean Air Act to reduce emissions from electric powerplants, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

MARCH 15, 2001

Mr. JEFFORDS (for himself, Mr. LIEBERMAN, Ms. COLLINS, Mr. SCHUMER, Ms. SNOWE, Mrs. FEINSTEIN, Mr. LEAHY, Mrs. CLINTON, Mr. KERRY, Mr. DODD, Mr. TORRICELLI, Mr. CORZINE, Mr. KENNEDY, Mr. REED, Mrs. BOXER, Mr. FEINGOLD, Mr. CARPER, Mr. BIDEN, Mr. CHAFEE, Mr. WELLSTONE, Mr. SARBANES, Mr. WYDEN, and Mr. EDWARDS) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

NOVEMBER 19, 2002

Reported by Mr. JEFFORDS, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

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**A BILL**

To amend the Clean Air Act to reduce emissions from electric powerplants, and for other purposes.

1       *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the "Clean Power Act of  
3 2001".

4 **SEC. 2. REDUCTION OF EMISSIONS FROM POWERPLANTS.**

5 Part A of title I of the Clean Air Act (42 U.S.C. 7401  
6 et seq.) is amended by adding at the end the following:

7 **"SEC. 132. REDUCTION OF EMISSIONS FROM POWER-**

8 **PLANTS.**

9 **"(a) EMISSION REDUCTION OBJECTIVES.—**The emis-  
10 sion reduction objectives of this section are to reduce in  
11 the States, not later than January 1, 2007—

12       **"(1) aggregate sulfur dioxide emissions from**  
13 **powerplants by 75 percent from the levels required**  
14 **at full implementation of the Phase II sulfur dioxide**  
15 **requirements under title IV (relating to acid deposi-**  
16 **tion control);**

17       **"(2) aggregate nitrogen oxide emissions from**  
18 **powerplants by 75 percent from 1997 levels;**

19       **"(3) aggregate carbon dioxide emissions from**  
20 **powerplants to the level of carbon dioxide emissions**  
21 **from powerplants in 1990; and**

22       **"(4) aggregate mercury emissions from power-**  
23 **plants by 90 percent from 1999 levels.**

24       **"(b) AGENCY ACTION.—**

25       **"(1) REGULATIONS.—**

1               “(A) IN GENERAL.—Not later than 2 years  
2               after the date of enactment of this section, the  
3               Administrator shall promulgate regulations to  
4               achieve the emission reduction objectives speci-  
5               fied in subsection (a).

6               “(B) ELEMENTS.—The regulations pro-  
7               mulgated under subparagraph (A)—

8               “(i) shall achieve the objectives in a  
9               manner that the Administrator determines  
10               will allocate required emission reductions  
11               equitably, taking into account emission re-  
12               ductions achieved before the date of enact-  
13               ment of this section and other relevant fac-  
14               tors;

15               “(ii) may include market-oriented  
16               mechanisms (such as emissions trading  
17               based on generation performance stand-  
18               ards, auctions, or other allocation meth-  
19               ods), except that emissions trading in mer-  
20               cury shall be prohibited;

21               “(iii) shall prevent localized adverse  
22               effects on public health and the environ-  
23               ment and ensure that significant emission  
24               reductions are achieved in both the eastern  
25               and western regions;

1                   “(iv) shall ensure that any captured  
2                   or recovered mercury is not re-released  
3                   into the environment; and

4                   “(v) shall include—

5                   “(I) appropriate incentives to in-  
6                   crease energy efficiency, and to use  
7                   renewable energy, to achieve the emis-  
8                   sion reduction objectives specified in  
9                   subsection (a); and

10                   “(II) policies to reduce the rate  
11                   of growth of natural gas consumption  
12                   that are at least as effective as the  
13                   advanced demand-side policies for  
14                   end-use sectors and advanced supply-  
15                   side policies for the electricity sector  
16                   described in the report prepared by  
17                   the Department of Energy entitled  
18                   ‘Scenarios for a Clean Energy Future’  
19                   and dated November 2000.

20                   “(2) EFFECT OF FAILURE TO PROMULGATE.—

21                   If the Administrator fails to promulgate regulations  
22                   in accordance with paragraph (1) by the date speci-  
23                   fied in that paragraph, each powerplant shall achieve  
24                   the emission reduction objectives specified in sub-  
25                   section (a) that are applicable to the powerplant.

1       “(c) ADDITIONAL REDUCTIONS.—The regulations  
2 promulgated under subsection (b) may require additional  
3 reductions in emissions from powerplants if the Adminis-  
4 trator determines that the emission levels necessary to  
5 achieve the emission reduction objectives specified in sub-  
6 section (a) are not reasonably anticipated to protect public  
7 health or welfare.

8       “(d) MODERNIZATION OF OUTDATED POWER-  
9 PLANTS.—

10       “(1) IN GENERAL.—On the later of the date  
11 that is 30 years after the outdated powerplant com-  
12 mences operation or the date that is 5 years after  
13 the date of enactment of this section, each outdated  
14 powerplant shall comply with—

15           “(A) the most recent new source perform-  
16 ance standards promulgated under section 111;  
17 and

18           “(B) the requirements under parts C and  
19 D that are applicable to modified sources.

20       “(2) ADDITIONAL REQUIREMENTS.—The re-  
21 quirements of this subsection shall be in addition to  
22 the requirements of the regulations promulgated  
23 under subsection (b).

1       “(e) OTHER REQUIREMENTS.—This section does not  
 2 affect the applicability of any other requirement of this  
 3 Act.

4       “(f) DEFINITIONS.—In this section:

5           “(1) WESTERN REGION.—The term ‘western re-  
 6 gion’ means all States that have a majority of their  
 7 land area within the region encompassed by the  
 8 Western Systems Coordinating Council.

9           “(2) EASTERN REGION.—The term ‘eastern re-  
 10 gion’ means all States that are not in the western  
 11 region.

12         “(3) OUTDATED POWERPLANT.—The term  
 13 ‘outdated powerplant’ means a powerplant that has  
 14 been in operation for a period of 30 years or more.

15         “(4) POWERPLANT.—The term ‘powerplant’  
 16 means an electric generation facility with a name-  
 17 plate capacity of 15 megawatts or more that uses a  
 18 combustion device to generate electricity for sale.”.

19 **SECTION 1. SHORT TITLE.**

20       *This Act may be cited as the “Clean Power Act of  
 21 2002”.*

22 **SEC. 2. ELECTRIC ENERGY GENERATION EMISSION REDUC-  
 23 TIONS.**

24       *(a) IN GENERAL.—The Clean Air Act (42 U.S.C. 7401  
 25 et seq.) is amended by adding at the end the following:*

1   **“TITLE VII—ELECTRIC ENERGY**  
 2   **GENERATION EMISSION RE-**  
 3   **DUCTIONS**

“Sec. 701. *Findings.*  
 “Sec. 702. *Purposes.*  
 “Sec. 703. *Definitions.*  
 “Sec. 704. *Emission limitations.*  
 “Sec. 705. *Emission allowances.*  
 “Sec. 706. *Permitting and trading of emission allowances.*  
 “Sec. 707. *Emission allowance allocation.*  
 “Sec. 708. *Mercury emission limitations.*  
 “Sec. 709. *Other hazardous air pollutants.*  
 “Sec. 710. *Effect of failure to promulgate regulations.*  
 “Sec. 711. *Prohibitions.*  
 “Sec. 712. *Modernization of electricity generating facilities.*  
 “Sec. 713. *Relationship to other law.*

4   **“SEC. 701. FINDINGS.**

5       “Congress finds that—  
 6       “(1) *public health and the environment continue*  
 7       *to suffer as a result of pollution emitted by power-*  
 8       *plants across the United States, despite the success of*  
 9       *Public Law 101–549 (commonly known as the ‘Clean*  
 10       *Air Act Amendments of 1990’) (42 U.S.C. 7401 et*  
 11       *seq.) in reducing emissions;*  
 12       “(2) *according to the most reliable scientific*  
 13       *knowledge, acid rain precursors must be significantly*  
 14       *reduced for the ecosystems of the Northeast and South-*  
 15       *east to recover from the ecological harm caused by*  
 16       *acid deposition;*  
 17       “(3) *because lakes and sediments across the*  
 18       *United States are being contaminated by mercury*  
 19       *emitted by powerplants, there is an increasing risk of*

1       *mercury poisoning of aquatic habitats and fish-con-*  
2       *suming human populations;*

3           “(4)(A) electricity generation accounts for ap-  
4       *proximately 40 percent of the total emissions in the*  
5       *United States of carbon dioxide, a major greenhouse*  
6       *gas causing global warming; and*

7           “(B) the quantity of carbon dioxide in the at-  
8       *mosphere is growing without constraint and well be-*  
9       *yond the international commitments of the United*  
10      *States;*

11       “(5) the cumulative impact of powerplant emis-  
12       *sions on public and environmental health must be ad-*  
13       *dressed swiftly by reducing those harmful emissions to*  
14       *levels that are less threatening; and*

15       “(6)(A) the atmosphere is a public resource; and  
16           “(B) emission allowances, representing permis-  
17       *sion to use that resource for disposal of air pollution*  
18       *from electricity generation, should be allocated to pro-*  
19       *mote public purposes, including—*

20           “(i) protecting electricity consumers from  
21       *adverse economic impacts;*

22           “(ii) providing transition assistance to ad-  
23       *versely affected employees, communities, and in-*  
24       *dustries; and*

1                   “(iii) promoting clean energy resources and  
2                   energy efficiency.

3   **“SEC. 702. PURPOSES.**

4                   “*The purposes of this title are—*

5                   “(1) to alleviate the environmental and public  
6                   health damage caused by emissions of sulfur dioxide,  
7                   nitrogen oxides, carbon dioxide, and mercury resulting  
8                   from the combustion of fossil fuels in the generation  
9                   of electric and thermal energy;

10                   “(2) to reduce by 2008 the annual national emissions  
11                   from electricity generating facilities to not more  
12                   than—

13                   “(A) 2,250,000 tons of sulfur dioxide;

14                   “(B) 1,510,000 tons of nitrogen oxides;

15                   “(C) 2,050,000,000 tons of carbon dioxide;

16                   and

17                   “(D) 5 tons of mercury;

18                   “(3) to effectuate the reductions described in  
19                   paragraph (2) by—

20                   “(A) requiring electricity generating facilities to comply with specified emission limitations by specified deadlines; and

23                   “(B) allowing electricity generating facilities to meet the emission limitations (other than the emission limitation for mercury) through an

1           *alternative method of compliance consisting of*  
2           *an emission allowance and transfer system; and*  
3           *“(4) to encourage energy conservation, use of re-*  
4           *newable and clean alternative technologies, and pollu-*  
5           *tion prevention as long-range strategies, consistent*  
6           *with this title, for reducing air pollution and other*  
7           *adverse impacts of energy generation and use.*

8   **“SEC. 703. DEFINITIONS.**

9           *“In this title:*

10           *“(1) COVERED POLLUTANT.—The term ‘covered*  
11           *pollutant’ means—*  
12           *“(A) sulfur dioxide;*  
13           *“(B) any nitrogen oxide;*  
14           *“(C) carbon dioxide; and*  
15           *“(D) mercury.*

16           *“(2) ELECTRICITY GENERATING FACILITY.—The*  
17           *term ‘electricity generating facility’ means an electric*  
18           *or thermal electricity generating unit, a combination*  
19           *of such units, or a combination of 1 or more such*  
20           *units and 1 or more combustion devices, that—*

21           *“(A) has a nameplate capacity of 15*  
22           *megawatts or more (or the equivalent in thermal*  
23           *energy generation, determined in accordance*  
24           *with a methodology developed by the Adminis-*  
25           *trator);*

1               “(B) generates electric energy, for sale,  
2               through combustion of fossil fuel; and

3               “(C) emits a covered pollutant into the at-  
4               mosphere.

5               “(3) *ELECTRICITY INTENSIVE PRODUCT*.—The  
6               term ‘electricity intensive product’ means a product  
7               with respect to which the cost of electricity consumed  
8               in the production of the product represents more than  
9               5 percent of the value of the product.

10               “(4) *EMISSION ALLOWANCE*.—The term ‘emission  
11               allowance’ means a limited authorization to emit in  
12               accordance with this title—

13               “(A) 1 ton of sulfur dioxide;

14               “(B) 1 ton of nitrogen oxides; or

15               “(C) 1 ton of carbon dioxide.

16               “(5) *ENERGY EFFICIENCY PROJECT*.—The term  
17               ‘energy efficiency project’ means any specific action  
18               (other than ownership or operation of an energy effi-  
19               cient building) commenced after the date of enactment  
20               of this title—

21               “(A) at a facility (other than an electricity  
22               generating facility), that verifiably reduces the  
23               annual electricity or natural gas consumption  
24               per unit output of the facility, as compared with  
25               the annual electricity or natural gas consump-

1           tion per unit output that would be expected in  
2           the absence of an allocation of emission allow-  
3           ances (as determined by the Administrator); or  
4           “(B) by an entity that is primarily engaged  
5           in the transmission and distribution of elec-  
6           tricity, that significantly improves the efficiency  
7           of that type of entity, as compared with stand-  
8           ards for efficiency developed by the Adminis-  
9           trator, in consultation with the Secretary of En-  
10           ergy, after the date of enactment of this title.

11           “(6) ENERGY EFFICIENT BUILDING.—The term  
12           ‘energy efficient building’ means a residential build-  
13           ing or commercial building completed after the date  
14           of enactment of this title for which the projected life-  
15           time consumption of electricity or natural gas for  
16           heating, cooling, and ventilation is at least 30 percent  
17           less than the lifetime consumption of a typical new  
18           residential building or commercial building, as deter-  
19           mined by the Administrator (in consultation with the  
20           Secretary of Energy)—

21           “(A) on a State or regional basis; and  
22           “(B) taking into consideration—  
23           “(i) applicable building codes; and  
24           “(ii) consumption levels achieved in  
25           practice by new residential buildings or

1                   *commercial buildings in the absence of an*  
2                   *allocation of emission allowances.*

3                   “(7) *ENERGY EFFICIENT PRODUCT.*—The term  
4                   ‘energy efficient product’ means a product manufac-  
5                   tured after the date of enactment of this title that has  
6                   an expected lifetime electricity or natural gas con-  
7                   sumption that—

8                   “(A) is less than the average lifetime elec-  
9                   tricity or natural gas consumption for that type  
10                   of product; and

11                   “(B) does not exceed the lesser of—  
12                   “(i) the maximum energy consumption  
13                   that qualifies for the applicable Energy  
14                   Star label for that type of product; or

15                   “(ii) the average energy consumption  
16                   of the most efficient 25 percent of that type  
17                   of product manufactured in the same year.

18                   “(8) *LIFETIME.*—The term ‘lifetime’ means—

19                   “(A) in the case of a residential building  
20                   that is an energy efficient building, 30 years;

21                   “(B) in the case of a commercial building  
22                   that is an energy efficient building, 15 years;  
23                   and

24                   “(C) in the case of an energy efficient prod-  
25                   uct, a period determined by the Administrator to

1           be the average life of that type of energy efficient  
2           product.

3           “(9) MERCURY.—The term ‘mercury’ includes  
4           any mercury compound.

5           “(10) NEW CLEAN FOSSIL FUEL-FIRED ELEC-  
6           TRICITY GENERATING UNIT.—The term ‘new clean fos-  
7           sil fuel-fired electricity generating unit’ means a unit  
8           that—

9                   “(A) has been in operation for 10 years or  
10           less; and

11                   “(B) is—

12                   “(i) a natural gas fired generator  
13           that—

14                   “(I) has an energy conversion effi-  
15           ciency of at least 55 percent; and

16                   “(II) uses best available control  
17           technology (as defined in section 169);

18                   “(ii) a generator that—

19                   “(I) uses integrated gasification  
20           combined cycle technology;

21                   “(II) uses best available control  
22           technology (as defined in section 169);

23           and

24                   “(III) has an energy conversion  
25           efficiency of at least 45 percent; or

1                             “(iii) a fuel cell operating on fuel de-  
2                             rived from a nonrenewable source of energy.

3                             “(11) NONWESTERN REGION.—The term  
4                             ‘nonwestern region’ means the area of the States that  
5                             is not included in the western region.

6                             “(12) RENEWABLE ELECTRICITY GENERATING  
7                             UNIT.—The term ‘renewable electricity generating  
8                             unit’ means a unit that—

9                             “(A) has been in operation for 10 years or  
10                             less; and

11                             “(B) generates electric energy by means  
12                             of—

13                             “(i) wind;  
14                             “(ii) biomass;  
15                             “(iii) landfill gas;

16                             “(iv) a geothermal, solar thermal, or  
17                             photovoltaic source; or

18                             “(v) a fuel cell operating on fuel de-  
19                             rived from a renewable source of energy.

20                             “(13) SMALL ELECTRICITY GENERATING FACIL-  
21                             ITY.—The term ‘small electricity generating facility’  
22                             means an electric or thermal electricity generating  
23                             unit, or combination of units, that—

24                             “(A) has a nameplate capacity of less than  
25                             15 megawatts (or the equivalent in thermal en-

1                   *ergy generation, determined in accordance with*  
2                   *a methodology developed by the Administrator);*  
3                   *“(B) generates electric energy, for sale,*  
4                   *through combustion of fossil fuel; and*  
5                   *“(C) emits a covered pollutant into the at-*  
6                   *mosphere.*

7                   *“(14) WESTERN REGION.—The term ‘western re-*  
8                   *gion’ means the area comprising the States of Ari-*  
9                   *zona, California, Colorado, Idaho, Montana, Nevada,*  
10                   *New Mexico, Oregon, Utah, Washington, and Wyo-*  
11                   *ming.*

12                   **“SEC. 704. EMISSION LIMITATIONS.**

13                   *“(a) IN GENERAL.—Subject to subsections (b) and (c),*  
14                   *the Administrator shall promulgate regulations to ensure*  
15                   *that, during 2008 and each year thereafter, the total annual*  
16                   *emissions of covered pollutants from all electricity gener-*  
17                   *ating facilities located in all States does not exceed—*

18                   *“(1) in the case of sulfur dioxide—*

19                   *“(A) 275,000 tons in the western region; or*  
20                   *“(B) 1,975,000 tons in the nonwestern re-*  
21                   *gion;*

22                   *“(2) in the case of nitrogen oxides, 1,510,000*  
23                   *tons;*

24                   *“(3) in the case of carbon dioxide, 2,050,000,000*  
25                   *tons; or*

1           “(4) in the case of mercury, 5 tons.

2           “(b) *EXCESS EMISSIONS BASED ON UNUSED ALLOW-*  
3    *ANCES.*—*The regulations promulgated under subsection (a)*  
4    *shall authorize emissions of covered pollutants in excess of*  
5    *the national emission limitations established under that*  
6    *subsection for a year to the extent that the number of tons*  
7    *of the excess emissions is less than or equal to the number*  
8    *of emission allowances that are—*

9           “(1) *used in the year; but*

10           “(2) *allocated for any previous year under sec-*  
11    *tion 707.*

12           “(c) *REDUCTIONS.*—*For 2008 and each year there-*  
13    *after, the quantity of emissions specified for each covered*  
14    *pollutant in subsection (a) shall be reduced by the sum of—*

15           “(1) *the number of tons of the covered pollutant*  
16    *that were emitted by small electricity generating fa-*  
17    *cilities in the second preceding year; and*

18           “(2) *any number of tons of reductions in emis-*  
19    *sions of the covered pollutant required under section*  
20    *705(h).*

21    **“SEC. 705. EMISSION ALLOWANCES.**

22           “(a) *CREATION AND ALLOCATION.*—

23           “(1) *IN GENERAL.*—*For 2008 and each year*  
24    *thereafter, subject to paragraph (2), there are created,*

1 and the Administrator shall allocate in accordance  
2 with section 707, emission allowances as follows:

3 “(A) In the case of sulfur dioxide—

4 “(i) 275,000 emission allowances for  
5 each year for use in the western region; and

6 “(ii) 1,975,000 emission allowances for  
7 each year for use in the nonwestern region.

8 “(B) In the case of nitrogen oxides,  
9 1,510,000 emission allowances for each year.

10 “(C) In the case of carbon dioxide,  
11 2,050,000,000 emission allowances for each year.

12 “(2) REDUCTIONS.—For 2008 and each year  
13 thereafter, the number of emission allowances speci-  
14 fied for each covered pollutant in paragraph (1) shall  
15 be reduced by a number equal to the sum of—

16 “(A) the number of tons of the covered pol-  
17 lutant that were emitted by small electricity gen-  
18 erating facilities in the second preceding year;  
19 and

20 “(B) any number of tons of reductions in  
21 emissions of the covered pollutant required under  
22 subsection (h).

23 “(b) NATURE OF EMISSION ALLOWANCES.—

1           “(1) *NOT A PROPERTY RIGHT*.—An emission al-  
2 lowance allocated by the Administrator under sub-  
3 section (a) is not a property right.

4           “(2) *NO LIMIT ON AUTHORITY TO TERMINATE OR*  
5 *LIMIT*.—Nothing in this title or any other provision  
6 of law limits the authority of the United States to ter-  
7 minate or limit an emission allowance.

8           “(3) *TRACKING AND TRANSFER OF EMISSION AL-*  
9 *LOWANCES*.—

10           “(A) *IN GENERAL*.—Not later than 1 year  
11 after the date of enactment of this title, the Ad-  
12 ministrator shall promulgate regulations to es-  
13 tablish an emission allowance tracking and  
14 transfer system for emission allowances of sulfur  
15 dioxide, nitrogen oxides, and carbon dioxide.

16           “(B) *REQUIREMENTS*.—The emission allow-  
17 ance tracking and transfer system established  
18 under subparagraph (A) shall—

19           “(i) incorporate the requirements of  
20 subsections (b) and (d) of section 412  
21 (except that written certification by the  
22 transferee shall not be necessary to effect a  
23 transfer); and

24           “(ii) permit any entity—

5                             “(C) PROCEEDS OF TRANSFERS.—Proceeds  
6                             from the transfer of emission allowances by any  
7                             person to which the emission allowances have  
8                             been allocated—

13        "(c) IDENTIFICATION AND USE —

14           “(1) *IN GENERAL.*—Each emission allowance al-  
15           located by the Administrator shall bear a unique se-  
16           rial number, including—

17                   “(A) an identifier of the covered pollutant  
18                   to which the emission allowance pertains; and

19                             “(B) the first year for which the allowance  
20                             may be used

21           “(2) SULFUR DIOXIDE EMISSION ALLOWANCES—

22        *In the case of sulfur dioxide emission allowances, the*  
23        *Administrator shall ensure that the emission allow-*  
24        *ances allocated to electricity generating facilities in*  
25        *the western region are distinguishable from emission*

1       *allowances allocated to electricity generating facilities*  
2       *in the nonwestern region.*

3       “(3) *YEAR OF USE.*—*Each emission allowance*  
4       *may be used in the year for which the emission allow-*  
5       *ance is allocated or in any subsequent year.*

6       “(d) *ANNUAL SUBMISSION OF EMISSION ALLOW-*  
7       *ANCES.*—

8       “(1) *IN GENERAL.*—*On or before April 1, 2009,*  
9       *and April 1 of each year thereafter, the owner or op-*  
10       *erator of each electricity generating facility shall sub-*  
11       *mit to the Administrator 1 emission allowance for the*  
12       *applicable covered pollutant (other than mercury) for*  
13       *each ton of sulfur dioxide, nitrogen oxides, or carbon*  
14       *dioxide emitted by the electricity generating facility*  
15       *during the previous calendar year.*

16       “(2) *SPECIAL RULE FOR OZONE*  
17       *EXCEEDANCES.*—

18       “(A) *IDENTIFICATION OF FACILITIES CON-*  
19       *TRIBUTING TO NONATTAINMENT.*—*Not later than*  
20       *December 31, 2007, and the end of each 3-year*  
21       *period thereafter, each State, consistent with the*  
22       *obligations of the State under section*  
23       *110(a)(2)(D), shall identify the electricity gener-*  
24       *ating facilities in the State and in other States*  
25       *that are significantly contributing (as deter-*

1                   *mined based on guidance issued by the Adminis-*  
2                   *trator) to nonattainment of the national ambient*  
3                   *air quality standard for ozone in the State.*

4                   “(B) *SUBMISSION OF ADDITIONAL ALLOW-*  
5                   *ANCES.—In 2008 and each year thereafter, on*  
6                   *petition from a State or a person demonstrating*  
7                   *that the control measures in effect at an elec-*  
8                   *tricity generating facility that is identified*  
9                   *under subparagraph (A) as significantly contrib-*  
10                   *uting to nonattainment of the national ambient*  
11                   *air quality standard for ozone in a State during*  
12                   *the previous year are inadequate to prevent the*  
13                   *significant contribution described in subpara-*  
14                   *graph (A), the Administrator, if the Adminis-*  
15                   *trator determines that the electricity generating*  
16                   *facility is inadequately controlled for nitrogen*  
17                   *oxides, may require that the electricity gener-*  
18                   *ating facility submit 3 nitrogen oxide emission*  
19                   *allowances for each ton of nitrogen oxides emit-*  
20                   *ted by the electricity generating facility during*  
21                   *any period of an exceedance of the national am-*  
22                   *bient air quality standard for ozone in the State*  
23                   *during the previous year.*

24                   “(3) *REGIONAL LIMITATIONS FOR SULFUR DIOX-*  
25                   *IDE.—The Administrator shall not allow—*

1           “(A) the use of sulfur dioxide emission al-  
2 lowances allocated for the western region to meet  
3 the obligations under this subsection of electricity  
4 generating facilities in the nonwestern region; or  
5           “(B) the use of sulfur dioxide emission al-  
6 lowances allocated for the nonwestern region to  
7 meet the obligations under this subsection of elec-  
8 tricity generating facilities in the western region.

9           “(e) *EMISSION VERIFICATION, MONITORING, AND REC-*  
10 *ORDKEEPING.*—

11           “(1) *IN GENERAL.*—The Administrator shall en-  
12 sure that Federal regulations, in combination with  
13 any applicable State regulations, are adequate to  
14 verify, monitor, and document emissions of covered  
15 pollutants from electricity generating facilities.

16           “(2) *INVENTORY OF EMISSIONS FROM SMALL*  
17 *ELECTRICITY GENERATING FACILITIES.*—On or before  
18 January 1, 2004, the Administrator, in cooperation  
19 with State agencies, shall complete, and on an annual  
20 basis update, a comprehensive inventory of emissions  
21 of sulfur dioxide, nitrogen oxides, carbon dioxide, and  
22 particulate matter from small electricity generating  
23 facilities.

24           “(3) *MONITORING INFORMATION.*—

1                   “(A) *IN GENERAL.*—Not later than 180  
2                   *days after the date of enactment of this title, the*  
3                   *Administrator shall promulgate regulations to*  
4                   *require each electricity generating facility to sub-*  
5                   *mit to the Administrator—*

6                   “(i) *not later than April 1 of each*  
7                   *year, verifiable information on covered pol-*  
8                   *lutants emitted by the electricity generating*  
9                   *facility in the previous year, expressed in—*

10                   “(I) *tons of covered pollutants;*

11                   *and*

12                   “(II) *tons of covered pollutants*  
13                   *per megawatt hour of energy (or the*  
14                   *equivalent thermal energy) generated;*  
15                   *and*

16                   “(ii) *as part of the first submission*  
17                   *under clause (i), verifiable information on*  
18                   *covered pollutants emitted by the electricity*  
19                   *generating facility in 1999, 2000, and 2001,*  
20                   *if the electricity generating facility was re-*  
21                   *quired to report that information in those*  
22                   *years.*

23                   “(B) *SOURCE OF INFORMATION.*—*Informa-*  
24                   *tion submitted under subparagraph (A) shall be*

1        obtained using a continuous emission monitoring system (as defined in section 402).

3                “(C) AVAILABILITY TO THE PUBLIC.—The  
4        information described in subparagraph (A) shall  
5        be made available to the public—

6                        “(i) in the case of the first year in  
7        which the information is required to be submitted under that subparagraph, not later  
8        than 18 months after the date of enactment  
9        of this title; and

10                        “(ii) in the case of each year thereafter,  
11        not later than April 1 of the year.

12                “(4) AMBIENT AIR QUALITY MONITORING FOR  
13        SULFUR DIOXIDE AND HAZARDOUS AIR POLLUT-  
14        ANTS.—

15                “(A) IN GENERAL.—Beginning January 1,  
16        2004, each coal-fired electricity generating facil-  
17        ity with an aggregate generating capacity of 50  
18        megawatts or more shall, in accordance with  
19        guidelines issued by the Administrator, com-  
20        mence ambient air quality monitoring within a  
21        30-mile radius of the coal-fired electricity gener-  
22        ating facility for the purpose of measuring max-  
23        imum concentrations of sulfur dioxide and haz-

1           *ardous air pollutants emitted by the coal-fired*  
2           *electricity generating facility.*

3           “*(B) LOCATION OF MONITORING POINTS.*—

4           *Monitoring under subparagraph (A) shall in-*  
5           *clude monitoring at not fewer than 2 points—*

6           “*(i) that are at ground level and with-*  
7           *in 3 miles of the coal-fired electricity gener-*  
8           *ating facility;*

9           “*(ii) at which the concentration of pol-*  
10           *lutants being monitored is expected to be the*  
11           *greatest; and*

12           “*(iii) at which the monitoring shall be*  
13           *the most frequent.*

14           “*(C) FREQUENCY OF MONITORING OF SUL-*  
15           *FUR DIOXIDE.*—*Monitoring of sulfur dioxide*  
16           *under subparagraph (A) shall be carried out on*  
17           *a continuous basis and averaged over 5-minute*  
18           *periods.*

19           “*(D) AVAILABILITY TO THE PUBLIC.*—*The*  
20           *results of the monitoring under subparagraph*  
21           *(A) shall be made available to the public.*

22           “*(f) EXCESS EMISSION PENALTY.*—

23           “*(1) IN GENERAL.*—*Subject to paragraph (2),*  
24           *section 411 shall be applicable to an owner or oper-*  
25           *ator of an electricity generating facility.*

1       “(2) *CALCULATION OF PENALTY.*—2               “(A) *IN GENERAL.*—Except as provided in  
3               subparagraph (B), the penalty for failure to sub-  
4               mit emission allowances for covered pollutants as  
5               required under subsection (d) shall be equal to 3  
6               times the product obtained by multiplying—

7               “(i) as applicable—

8                       “(I) the number of tons emitted in  
9                       excess of the emission limitation re-  
10                       quirement applicable to the electricity  
11                       generating facility; or12                       “(II) the number of emission al-  
13                       lowances that the owner or operator  
14                       failed to submit; and15                       “(ii) the average annual market price  
16                       of emission allowances (as determined by  
17                       the Administrator).18               “(B) *MERCURY.*—In the case of mercury,  
19               the penalty shall be equal to 3 times the product  
20               obtained by multiplying—21                       “(i) the number of grams emitted in  
22                       excess of the emission limitation require-  
23                       ment for mercury applicable to the elec-  
24                       tricity generating facility; and

1                             “(ii) the average cost of mercury con-  
2                             trols at electricity generating units that  
3                             have a nameplate capacity of 15 megawatts  
4                             or more in all States (as determined by the  
5                             Administrator).

6                     “(g) SIGNIFICANT ADVERSE LOCAL IMPACTS.—

7                     “(1) IN GENERAL.—If the Administrator deter-  
8                     mines that emissions of an electricity generating fa-  
9                     cility may reasonably be anticipated to cause or con-  
10                     tribute to a significant adverse impact on an area  
11                     (including endangerment of public health, contribu-  
12                     tion to acid deposition in a sensitive receptor area,  
13                     and other degradation of the environment), the Ad-  
14                     ministrator shall limit the emissions of the electricity  
15                     generating facility as necessary to avoid that impact.

16                     “(2) VIOLATION.—Notwithstanding the avail-  
17                     ability of emission allowances, it shall be a violation  
18                     of this Act for any electricity generating facility to  
19                     exceed any limitation on emissions established under  
20                     paragraph (1).

21                     “(h) ADDITIONAL REDUCTIONS.—

22                     “(1) PROTECTION OF PUBLIC HEALTH OR WEL-  
23                     FARE OR THE ENVIRONMENT.—If the Administrator  
24                     determines that the emission levels necessary to  
25                     achieve the national emission limitations established

1       *under section 704 are not reasonably anticipated to*  
2       *protect public health or welfare or the environment*  
3       *(including protection of children, pregnant women,*  
4       *minority or low-income communities, and other sen-*  
5       *sitive populations), the Administrator may require*  
6       *reductions in emissions from electricity generating fa-*  
7       *cilities in addition to the reductions required under*  
8       *the other provisions of this title.*

9           “(2) EMISSION ALLOWANCE TRADING.—

10           “(A) STUDIES.—

11           “(i) IN GENERAL.—*In 2011 and at the*  
12       *end of each 3-year period thereafter, the Ad-*  
13       *ministrator shall complete a study of the*  
14       *impacts of the emission allowance trading*  
15       *authorized under this title.*

16           “(ii) REQUIRED ASSESSMENT.—*The*  
17       *study shall include an assessment of ambi-*  
18       *ent air quality in areas surrounding elec-*  
19       *tricity generating facilities that participate*  
20       *in emission allowance trading, including a*  
21       *comparison between—*

22           “(I) *the ambient air quality in*  
23       *those areas; and*

24           “(II) *the national average ambi-*  
25       *ent air quality.*

1                   “(B) *LIMITATION ON EMISSIONS.*—If the  
2                   Administrator determines, based on the results of  
3                   a study under subparagraph (A), that adverse  
4                   local impacts result from emission allowance  
5                   trading, the Administrator may require reduc-  
6                   tions in emissions from electricity generating fa-  
7                   cilities in addition to the reductions required  
8                   under the other provisions of this title.

9                   “(i) *USE OF CERTAIN OTHER EMISSION ALLOW-  
10                   ANCES.*—

11                   “(1) *IN GENERAL.*—Subject to paragraph (2),  
12                   emission allowances or other emission trading instru-  
13                   ments created under title I or IV for sulfur dioxide  
14                   or nitrogen oxides shall not be valid for submission  
15                   under subsection (d).

16                   “(2) *EMISSION ALLOWANCES PLACED IN RE-  
17                   SERVE.*—

18                   “(A) *IN GENERAL.*—Except as provided in  
19                   subparagraph (B), an emission allowance de-  
20                   scribed in paragraph (1) that was placed in re-  
21                   serve under section 404(a)(2) or 405 or through  
22                   regulations implementing controls on nitrogen  
23                   oxides, because an affected unit emitted fewer  
24                   tons of sulfur dioxide or nitrogen oxides than  
25                   were permitted under an emission limitation im-

1           *posed under title I or IV before the date of enact-*  
2           *ment of this title, shall be considered to be equiv-*  
3           *alent to  $\frac{1}{4}$  of an emission allowance created by*  
4           *subsection (a) for sulfur dioxide or nitrogen ox-*  
5           *ides, respectively.*

6           “**(B) EMISSION ALLOWANCES RESULTING**  
7           **FROM ACHIEVEMENT OF NEW SOURCE PERFORMANCE STANDARDS.**—*If an emission allowance de-*  
8           *scribed in subparagraph (A) was created and*  
9           *placed in reserve during the period of 2000*  
10           *through 2007 by the owner or operator of an*  
11           *electricity generating facility through the applica-*  
12           *tion of pollution control technology that re-*  
13           *sulted in the achievement and maintenance by*  
14           *the electricity generating facility of the applica-*  
15           *ble standards of performance required of new*  
16           *sources under section 111, the emission allow-*  
17           *ance shall be valid for submission under sub-*  
18           *section (d).*

20           **“SEC. 706. PERMITTING AND TRADING OF EMISSION ALLOW-**  
21           **ANCES.**

22           “(a) **IN GENERAL.**—*Not later than 1 year after the*  
23           *date of enactment of this title, the Administrator shall pro-*  
24           *mulgate regulations to establish a permitting and emission*  
25           *allowance trading compliance program to implement the*

1 *limitations on emissions of covered pollutants from elec-*  
2 *tricity generating facilities established under section 704.*

3       “(b) *EMISSION ALLOWANCE TRADING WITH FACILI-*  
4 *TIES OTHER THAN ELECTRICITY GENERATING FACILI-*  
5 *TIES.*—

6       “(1) *IN GENERAL.*—Subject to paragraph (2)  
7       *and section 705(i), the regulations promulgated to es-*  
8       *tablish the program under subsection (a) shall pro-*  
9       *hibit use of emission allowances generated from other*  
10       *emission control programs for the purpose of dem-*  
11       *onstrating compliance with the limitations on emis-*  
12       *sions of covered pollutants from electricity generating*  
13       *facilities established under section 704.*

14       “(2) *EXCEPTION FOR CERTAIN CARBON DIOXIDE*  
15       *EMISSION CONTROL PROGRAMS.*—*The prohibition de-*  
16       *scribed in paragraph (1) shall not apply in the case*  
17       *of carbon dioxide emission allowances generated from*  
18       *an emission control program that limits total carbon*  
19       *dioxide emissions from the entirety of any industrial*  
20       *sector.*

21       “(c) *METHODOLOGY.*—*The program established under*  
22       *subsection (a) shall clearly identify the methodology for the*  
23       *allocation of emission allowances, including standards for*  
24       *measuring annual electricity generation and energy effi-*  
25       *ciency as the standards relate to emissions.*

1   **“SEC. 707. EMISSION ALLOWANCE ALLOCATION.**2       “(a) *ALLOCATION TO ELECTRICITY CONSUMERS.*—3           “(1) *IN GENERAL.*—For 2008 and each year  
4    thereafter, after making allocations of emission allow-  
5    ances under subsections (b) through (f), the Adminis-  
6    trator shall allocate the remaining emission allow-  
7    ances created by section 705(a) for the year for each  
8    covered pollutant other than mercury to households  
9    served by electricity.10       “(2) *ALLOCATION AMONG HOUSEHOLDS.*—The  
11    allocation to each household shall reflect—12           “(A) the number of persons residing in the  
13    household; and

14           “(B) the ratio that—

15               “(i) the quantity of the residential elec-  
16    tricity consumption of the State in which  
17    the household is located; bears to18               “(ii) the quantity of the residential  
19    electricity consumption of all States.20       “(3) *REGULATIONS.*—Not later than 1 year after  
21    the date of enactment of this title, the Administrator  
22    shall promulgate regulations making appropriate ar-  
23    rangements for the allocation of emission allowances  
24    to households under this subsection, including as nec-  
25    essary the appointment of 1 or more trustees—

1                   “(A) to receive the emission allowances for  
2                   the benefit of the households;  
3                   “(B) to obtain fair market value for the  
4                   emission allowances; and  
5                   “(C) to distribute the proceeds to the bene-  
6                   ficiaries.

7                   “(b) *ALLOCATION FOR TRANSITION ASSISTANCE.*—

8                   “(1) *IN GENERAL.*—For 2008 and each year  
9                   thereafter through 2017, the Administrator shall allo-  
10                   cate the percentage specified in paragraph (2) of the  
11                   emission allowances created by section 705(a) for the  
12                   year for each covered pollutant other than mercury in  
13                   the following manner:

14                   “(A) 80 percent shall be allocated to provide  
15                   transition assistance to—

16                   “(i) dislocated workers (as defined in  
17                   section 101 of the Workforce Investment Act  
18                   of 1998 (29 U.S.C. 2801)) whose employ-  
19                   ment has been terminated or who have been  
20                   laid off as a result of the emission reduc-  
21                   tions required by this title; and

22                   “(ii) communities that have experi-  
23                   enced disproportionate adverse economic  
24                   impacts as a result of the emission reduc-  
25                   tions required by this title.

1                   “(B) 20 percent shall be allocated to pro-  
2                   ducers of electricity intensive products in a num-  
3                   ber equal to the product obtained by multi-  
4                   plying—

5                   “(i) the ratio that—

6                   “(I) the quantity of each elec-  
7                   tricity intensive product produced by  
8                   each producer in the previous year;  
9                   bears to

10                   “(II) the quantity of the elec-  
11                   tricity intensive product produced by  
12                   all producers in the previous year;

13                   “(ii) the average quantity of electricity  
14                   used in producing the electricity intensive  
15                   product by producers that use the most en-  
16                   ergy efficient process for producing the elec-  
17                   tricity intensive product; and

18                   “(iii) with respect to the previous year,  
19                   the national average quantity (expressed in  
20                   tons) of emissions of each such pollutant per  
21                   megawatt hour of electricity generated by  
22                   electricity generating facilities in all States.

23                   “(2) SPECIFIED PERCENTAGES.—The percentages  
24                   referred to in paragraph (1) are—

25                   “(A) in the case of 2008, 6 percent;

1           “(B) in the case of 2009, 5.5 percent;  
2           “(C) in the case of 2010, 5 percent;  
3           “(D) in the case of 2011, 4.5 percent;  
4           “(E) in the case of 2012, 4 percent;  
5           “(F) in the case of 2013, 3.5 percent;  
6           “(G) in the case of 2014, 3 percent;  
7           “(H) in the case of 2015, 2.5 percent;  
8           “(I) in the case of 2016, 2 percent; and  
9           “(J) in the case of 2017, 1.5 percent.

10           “(3) REGULATIONS FOR ALLOCATION FOR TRAN-  
11           SITION ASSISTANCE TO DISLOCATED WORKERS AND  
12           COMMUNITIES.—

13           “(A) IN GENERAL.—Not later than 1 year  
14           after the date of enactment of this title, the Ad-  
15           ministrator shall promulgate regulations making  
16           appropriate arrangements for the distribution of  
17           emission allowances under paragraph (1)(A), in-  
18           cluding as necessary the appointment of 1 or  
19           more trustees—

20           “(i) to receive the emission allowances  
21           allocated under paragraph (1)(A) for the  
22           benefit of the dislocated workers and com-  
23           munities;

24           “(ii) to obtain fair market value for  
25           the emission allowances; and

1                   “(iii) to apply the proceeds to pro-  
2                   viding transition assistance to the dis-  
3                   located workers and communities.

4                   “(B) FORM OF TRANSITION ASSISTANCE.—  
5                   Transition assistance under paragraph (1)(A)  
6                   may take the form of—

7                   “(i) grants to employers, employer as-  
8                   sociations, and representatives of employ-  
9                   ees—

10                   “(I) to provide training, adjust-  
11                   ment assistance, and employment serv-  
12                   ices to dislocated workers; and

13                   “(II) to make income-mainte-  
14                   nance and needs-related payments to  
15                   dislocated workers; and

16                   “(ii) grants to States and local govern-  
17                   ments to assist communities in attracting  
18                   new employers or providing essential local  
19                   government services.

20                   “(c) ALLOCATION TO RENEWABLE ELECTRICITY GEN-  
21                   ERATING UNITS, EFFICIENCY PROJECTS, AND CLEANER  
22                   ENERGY SOURCES.—For 2008 and each year thereafter, the  
23                   Administrator shall allocate not more than 20 percent of  
24                   the emission allowances created by section 705(a) for the  
25                   year for each covered pollutant other than mercury—

1           “(1) to owners and operators of renewable elec-  
2       tricity generating units, in a number equal to the  
3       product obtained by multiplying—

4           “(A) the number of megawatt hours of elec-  
5       tricity generated in the previous year by each re-  
6       newable electricity generating unit; and

7           “(B) with respect to the previous year, the  
8       national average quantity (expressed in tons) of  
9       emissions of each such pollutant per megawatt  
10      hour of electricity generated by electricity gener-  
11      ating facilities in all States;

12           “(2) to owners and operators of energy efficient  
13      buildings, producers of energy efficient products, and  
14      entities that carry out energy efficient projects, in a  
15      number equal to the product obtained by multi-  
16      plying—

17           “(A) the number of megawatt hours of elec-  
18       tricity or cubic feet of natural gas saved in the  
19       previous year as a result of each energy efficient  
20       building, energy efficient product, or energy effi-  
21       ciency project; and

22           “(B) with respect to the previous year, the  
23       national average quantity (expressed in tons) of  
24       emissions of each such pollutant per, as appro-  
25       priate—

1                   “(i) megawatt hour of electricity gen-  
2                   erated by electricity generating facilities in  
3                   all States; or

4                   “(ii) cubic foot of natural gas burned  
5                   for a purpose other than generation of elec-  
6                   tricity in all States;

7                   “(3) to owners and operators of new clean fossil  
8                   fuel-fired electricity generating units, in a number  
9                   equal to the product obtained by multiplying—

10                  “(A) the number of megawatt hours of elec-  
11                  tricity generated in the previous year by each  
12                  new clean fossil fuel-fired electricity generating  
13                  unit; and

14                  “(B) with respect to the previous year,  $\frac{1}{2}$  of  
15                  the national average quantity (expressed in tons)  
16                  of emissions of each such pollutant per megawatt  
17                  hour of electricity generated by electricity gener-  
18                  ating facilities in all States; and

19                  “(4) to owners and operators of combined heat  
20                  and power electricity generating facilities, in a num-  
21                  ber equal to the product obtained by multiplying—

22                  “(A) the number of British thermal units of  
23                  thermal energy produced and put to productive  
24                  use in the previous year by each combined heat  
25                  and power electricity generating facility; and

1               “(B) with respect to the previous year, the  
2               national average quantity (expressed in tons) of  
3               emissions of each such pollutant per British ther-  
4               mal unit of thermal energy generated by elec-  
5               tricity generating facilities in all States.

6       “(d) *TRANSITION ASSISTANCE TO ELECTRICITY GEN-  
7 ERATING FACILITIES.*—

8               “(1) *IN GENERAL.*—For 2008 and each year  
9               thereafter through 2017, the Administrator shall allo-  
10               cate the percentage specified in paragraph (2) of the  
11               emission allowances created by section 705(a) for the  
12               year for each covered pollutant other than mercury to  
13               the owners or operators of electricity generating facili-  
14               ties in the ratio that—

15               “(A) the quantity of electricity generated by  
16               each electricity generating facility in 2000; bears  
17               to

18               “(B) the quantity of electricity generated by  
19               all electricity generating facilities in 2000.

20               “(2) *SPECIFIED PERCENTAGES.*—The percentages  
21               referred to in paragraph (1) are—

22               “(A) in the case of 2008, 10 percent;

23               “(B) in the case of 2009, 9 percent;

24               “(C) in the case of 2010, 8 percent;

25               “(D) in the case of 2011, 7 percent;

1           “(E) in the case of 2012, 6 percent;  
2           “(F) in the case of 2013, 5 percent;  
3           “(G) in the case of 2014, 4 percent;  
4           “(H) in the case of 2015, 3 percent;  
5           “(I) in the case of 2016, 2 percent; and  
6           “(J) in the case of 2017, 1 percent.

7        “(e) *ALLOCATION TO ENCOURAGE BIOLOGICAL CAR-*  
8    *BON SEQUESTRATION.*—

9           “(1) *IN GENERAL.*—For 2008 and each year  
10    thereafter, the Administrator shall allocate, on a com-  
11    petitive basis and in accordance with paragraphs (2)  
12    and (3), not more than 0.075 percent of the carbon  
13    dioxide emission allowances created by section 705(a)  
14    for the year for the purposes of—

15           “(A) carrying out projects to reduce net car-  
16    bon dioxide emissions through biological carbon  
17    dioxide sequestration in the United States that—

18           “(i) result in benefits to watersheds  
19    and fish and wildlife habitats; and

20           “(ii) are conducted in accordance with  
21    project reporting, monitoring, and  
22    verification guidelines based on—

23           “(I) measurement of increases in  
24    carbon storage in excess of the carbon

1                   *storage that would have occurred in the*  
2                   *absence of such a project;*

3                   “(II) comprehensive carbon ac-  
4                   *counting that—*

5                   “(aa) reflects net increases in  
6                   *carbon reservoirs; and*

7                   “(bb) takes into account any  
8                   *carbon emissions resulting from*  
9                   *disturbance of carbon reservoirs in*  
10                   *existence as of the date of com-*  
11                   *mencement of the project;*

12                   “(III) adjustments to account  
13                   *for—*

14                   “(aa) emissions of carbon  
15                   *that may result at other locations*  
16                   *as a result of the impact of the*  
17                   *project on timber supplies; or*

18                   “(bb) potential displacement  
19                   *of carbon emissions to other land*  
20                   *owned by the entity that carries*  
21                   *out the project; and*

22                   “(IV) adjustments to reflect the  
23                   *expected carbon storage over various*  
24                   *time periods, taking into account the*  
25                   *likely duration of the storage of the*

1                   *carbon stored in a carbon reservoir;*  
2                   *and*  
3                   *“(B) conducting accurate inventories of car-*  
4                   *bon sinks.*

5                   *“(2) CARBON INVENTORY.—The Administrator,*  
6                   *in consultation with the Secretary of Agriculture,*  
7                   *shall allocate not more than 1/3 of the emission allow-*  
8                   *ances described in paragraph (1) to not more than 5*  
9                   *State or multistate land or forest management agen-*  
10                   *cies or nonprofit entities that—*

11                   *“(A) have a primary goal of land conserva-*  
12                   *tion; and*

13                   *“(B) submit to the Administrator proposals*  
14                   *for projects—*

15                   *“(i) to demonstrate and assess the po-*  
16                   *tential for the development and use of car-*  
17                   *bon inventorying and accounting systems;*

18                   *“(ii) to improve the standards relating*  
19                   *to, and the identification of, incremental*  
20                   *carbon sequestration in forests, agricultural*  
21                   *soil, grassland, or rangeland; or*

22                   *“(iii) to assist in development of a na-*  
23                   *tional biological carbon storage baseline or*  
24                   *inventory.*

1           “(3) REVOLVING LOAN PROGRAM.—The Adminis-  
2           trator shall allocate not more than  $\frac{2}{3}$  of the emission  
3           allowances described in paragraph (1) to States,  
4           based on proposals submitted by States to conduct  
5           programs under which each State shall—

6           “(A) use the value of the emission allow-  
7           ances to establish a State revolving loan fund to  
8           provide loans to owners of nonindustrial private  
9           forest land in the State to carry out forest and  
10           forest soil carbon sequestration activities that  
11           will achieve the purposes specified in paragraph  
12           (2)(B); and

13           “(B) for 2009 and each year thereafter, con-  
14           tribute to the program of the State an amount  
15           equal to 25 percent of the value of the emission  
16           allowances received under this paragraph for the  
17           year in cash, in-kind services, or technical assist-  
18           ance.

19           “(4) USE OF EMISSION ALLOWANCES.—An entity  
20           that receives an allocation of emission allowances  
21           under this subsection may use the proceeds from the  
22           sale or other transfer of the emission allowances only  
23           for the purpose of carrying out activities described in  
24           this subsection.

1           “(5) RECOMMENDATIONS CONCERNING CARBON  
2           DIOXIDE EMISSION ALLOWANCES.—

3           “(A) IN GENERAL.—Not later than 4 years  
4           after the date of enactment of this title, the Ad-  
5           ministrator, in consultation with the Secretary  
6           of Agriculture, shall submit to Congress rec-  
7           ommendations for establishing a system under  
8           which entities that receive grants or loans under  
9           this section may be allocated carbon dioxide  
10           emission allowances created by section 705(a) for  
11           incremental carbon sequestration in forests, agri-  
12           cultural soils, rangeland, or grassland.

13           “(B) GUIDELINES.—The recommendations  
14           shall include recommendations for development,  
15           reporting, monitoring, and verification guide-  
16           lines for quantifying net carbon sequestration  
17           from land use projects that address the elements  
18           specified in paragraph (1)(A).

19           “(f) ALLOCATION TO ENCOURAGE GEOLOGICAL CAR-  
20           BON SEQUESTRATION.—

21           “(1) IN GENERAL.—For 2008 and each year  
22           thereafter, the Administrator shall allocate not more  
23           than 1.5 percent of the carbon dioxide emission allow-  
24           ances created by section 705(a) to entities that carry  
25           out geological sequestration of carbon dioxide pro-

1       *duced by an electric generating facility in accordance*  
2       *with requirements established by the Administrator—*

3               *“(A) to ensure the permanence of the seque-*  
4       *stration; and*

5               *“(B) to ensure that the sequestration will*  
6       *not cause or contribute to significant adverse ef-*  
7       *fects on the environment.*

8               *“(2) NUMBER OF EMISSION ALLOWANCES.—For*  
9       *2008 and each year thereafter, the Administrator*  
10       *shall allocate to each entity described in paragraph*  
11       *(1) a number of emission allowances that is equal to*  
12       *the number of tons of carbon dioxide produced by the*  
13       *electric generating facility during the previous year*  
14       *that is geologically sequestered as described in para-*  
15       *graph (1).*

16               *“(3) USE OF EMISSION ALLOWANCES.—An entity*  
17       *that receives an allocation of emission allowances*  
18       *under this subsection may use the proceeds from the*  
19       *sale or other transfer of the emission allowances only*  
20       *for the purpose of carrying out activities described in*  
21       *this subsection.*

22       **“SEC. 708. MERCURY EMISSION LIMITATIONS.**

23               *“(a) IN GENERAL.—*

24               *“(1) REGULATIONS.—*

1                   “(A) *IN GENERAL.*—Not later than 1 year  
2                   *after the date of enactment of this title, the Ad-*  
3                   *ministrator shall promulgate regulations to es-*  
4                   *tablish emission limitations for mercury emis-*  
5                   *sions by coal-fired electricity generating facili-*  
6                   *ties.*

7                   “(B) *NO EXCEEDANCE OF NATIONAL LIMITA-*  
8                   *TION.*—*The regulations shall ensure that the na-*  
9                   *tional limitation for mercury emissions from*  
10                   *each coal-fired electricity generating facility es-*  
11                   *tablished under section 704(a)(4) is not exceeded.*

12                   “(C) *EMISSION LIMITATIONS FOR 2008 AND*  
13                   *THEREAFTER.*—*In carrying out subparagraph*  
14                   *(A), for 2008 and each year thereafter, the Ad-*  
15                   *ministrator shall not—*

16                   “(i) *subject to subsections (e) and (f) of*  
17                   *section 112, establish limitations on emis-*  
18                   *sions of mercury from coal-fired electricity*  
19                   *generating facilities that allow emissions in*  
20                   *excess of 2.48 grams of mercury per 1000*  
21                   *megawatt hours; or*

22                   “(ii) *differentiate between facilities*  
23                   *that burn different types of coal.*

24                   “(2) *ANNUAL REVIEW AND DETERMINATION.*—

1                   “(A) *IN GENERAL.*—Not later than April 1  
2                   *of each year, the Administrator shall—*

3                   “(i) *review the total mercury emissions*  
4                   *during the 2 previous years from electricity*  
5                   *generating facilities located in all States;*  
6                   *and*

7                   “(ii) *determine whether, during the 2*  
8                   *previous years, the total mercury emissions*  
9                   *from facilities described in clause (i) exceeded*  
10                   *the national limitation for mercury*  
11                   *emissions established under section*  
12                   *704(a)(4).*

13                   “(B) *EXCEEDANCE OF NATIONAL LIMITA-*  
14                   *TION.*—*If the Administrator determines under*  
15                   *subparagraph (A)(ii) that, during the 2 previous*  
16                   *years, the total mercury emissions from facilities*  
17                   *described in subparagraph (A)(i) exceeded the*  
18                   *national limitation for mercury emissions estab-*  
19                   *lished under section 704(a)(4), the Administrator*  
20                   *shall, not later than 1 year after the date of the*  
21                   *determination, revise the regulations promul-*  
22                   *gated under paragraph (1) to reduce the emis-*  
23                   *sion rates specified in the regulations as nec-*  
24                   *essary to ensure that the national limitation for*

1       *mercury emissions is not exceeded in any future*  
2       *year.*

3       “*(3) COMPLIANCE FLEXIBILITY.*—

4           “*(A) IN GENERAL.*—*Each coal-fired elec-*  
5       *tricity generating facility subject to an emission*  
6       *limitation under this section shall be in compli-*  
7       *ance with that limitation if that limitation is*  
8       *greater than or equal to the quotient obtained by*  
9       *dividing—*

10           “*(i) the total mercury emissions of the*  
11       *coal-fired electricity generating facility dur-*  
12       *ing each 30-day period; by*

13           “*(ii) the quantity of electricity gen-*  
14       *erated by the coal-fired electricity gener-*  
15       *ating facility during that period.*

16           “*(B) MORE THAN 1 UNIT AT A FACILITY.*—  
17       *In any case in which more than 1 coal-fired elec-*  
18       *tricity generating unit at a coal-fired electricity*  
19       *generating facility subject to an emission limita-*  
20       *tion under this section was operated in 1999*  
21       *under common ownership or control, compliance*  
22       *with the emission limitation may be determined*  
23       *by averaging the emission rates of all coal-fired*  
24       *electricity generating units at the electricity gen-*  
25       *erating facility during each 30-day period.*

1       “(b) *P*REVENTION *O*F *R*E-*R*LEASE.—2           “(1) *R*EGULATIONS.—*N*ot later than *J*anuary 1,  
3    *t*he *A*dministrator shall promulgate regulations  
4    *t*o ensure that any mercury captured or recovered by  
5    *e*mision controls installed at an electricity generating  
6    *f*acility is not re-released into the environment.7           “(2) *R*EQUIRED *E*LEMENTS.—*T*he regulations  
8    *s*hall require—9           “(A) *d*aily covers on all active waste dis-  
10    *p*osal units, and permanent covers on all inac-  
11    *t*ive waste disposal units, to prevent the release  
12    *o*f mercury into the air;13           “(B) *m*onitoring of groundwater to ensure  
14    *t*hat mercury or mercury compounds do not mi-  
15    *g*rate from the waste disposal unit;16           “(C) *w*aste disposal siting requirements and  
17    *c*leanup requirements to protect groundwater and  
18    *s*urface water resources;19           “(D) *e*limination of agricultural applica-  
20    *t*ion of coal combustion wastes; and21           “(E) *a*ppropriate limitations on mercury  
22    *e*missions from sources or processes that reprocess  
23    *o*r use coal combustion waste, including manu-  
24    *f*acturers of wallboard and cement.

1   **“SEC. 709. OTHER HAZARDOUS AIR POLLUTANTS.**

2       “(a) *IN GENERAL.*—Not later than January 1, 2004,  
3   the Administrator shall issue to owners and operators of  
4   coal-fired electricity generating facilities requests for infor-  
5   mation under section 114 that are of sufficient scope to gen-  
6   erate data sufficient to support issuance of standards under  
7   section 112(d) for hazardous air pollutants other than mer-  
8   cury emitted by coal-fired electricity generating facilities.

9       “(b) *DEADLINE FOR SUBMISSION OF REQUESTED IN-*  
10 *FORMATION.*—The Administrator shall require each recipi-  
11   ent of a request for information described in subsection (a)  
12   to submit the requested data not later than 180 days after  
13   the date of the request.

14       “(c) *PROMULGATION OF EMISSION STANDARDS.*—The  
15   Administrator shall—

16           “(1) not later than January 1, 2005, propose  
17   emission standards under section 112(d) for haz-  
18   ardous air pollutants other than mercury; and

19           “(2) not later than January 1, 2006, promulgate  
20   emission standards under section 112(d) for haz-  
21   ardous air pollutants other than mercury.

22       “(d) *PROHIBITION ON EXCESS EMISSIONS.*—It shall  
23   be unlawful for an electricity generating facility subject to  
24   standards for hazardous air pollutants other than mercury  
25   promulgated under subsection (c) to emit, after December  
26   31, 2007, any such pollutant in excess of the standards.

1       “(e) EFFECT ON OTHER LAW.—Nothing in this section  
2 or section 708 affects any requirement of subsection (e),  
3 (f)(2), or (n)(1)(A) of section 112, except that the emission  
4 limitations established by regulations promulgated under  
5 this section shall be deemed to represent the maximum  
6 achievable control technology for mercury emissions from  
7 electricity generating units under section 112(d).

10        *“If the Administrator fails to promulgate regulations*  
11 *to implement and enforce the limitations specified in sec-*  
12 *tion 704—*

13           “(1)(A) each electricity generating facility shall  
14        achieve, not later than January 1, 2008, an annual  
15        quantity of emissions that is less than or equal to—

16                   “(i) in the case of nitrogen oxides, 15 per-  
17                   cent of the annual emissions by a similar elec-  
18                   tricity generating facility that has no controls  
19                   for emissions of nitrogen oxides; and

“(ii) in the case of carbon dioxide, 75 per cent of the annual emissions by a similar electricity generating facility that has no controls for emissions of carbon dioxide; and

24                   “(B) each electricity generating facility that does  
25                   not use natural gas as the primary combustion fuel

1       shall achieve, not later than January 1, 2008, an an-  
2       nual quantity of emissions that is less than or equal  
3       to—

4               “(i) in the case of sulfur dioxide, 5 percent  
5               of the annual emissions by a similar electricity  
6               generating facility that has no controls for emis-  
7               sions of sulfur dioxide; and

8               “(ii) in the case of mercury, 10 percent of  
9               the annual emissions by a similar electricity  
10               generating facility that has no controls included  
11               specifically for the purpose of controlling emis-  
12               sions of mercury; and

13               “(2) the applicable permit under this Act for  
14               each electricity generating facility shall be deemed to  
15               incorporate a requirement for achievement of the re-  
16               duced levels of emissions specified in paragraph (1).

17       **“SEC. 711. PROHIBITIONS.**

18       “It shall be unlawful—

19               “(1) for the owner or operator of any electricity  
20               generating facility—

21               “(A) to operate the electricity generating fa-  
22               cility in noncompliance with the requirements of  
23               this title (including any regulations imple-  
24               menting this title);

1                   “(B) to fail to submit by the required date  
2                   any emission allowances, or pay any penalty,  
3                   for which the owner or operator is liable under  
4                   section 705;

5                   “(C) to fail to provide and comply with any  
6                   plan to offset excess emissions required under  
7                   section 705(f); or

8                   “(D) to emit mercury in excess of the emis-  
9                   sion limitations established under section 708; or  
10                  “(2) for any person to hold, use, or transfer any  
11                  emission allowance allocated under this title except in  
12                  accordance with regulations promulgated by the Ad-  
13                  ministrator.

14                  **“SEC. 712. MODERNIZATION OF ELECTRICITY GENERATING  
15                   FACILITIES.**

16                  “(a) *IN GENERAL.*—Beginning on the later of January  
17                  1, 2013, or the date that is 40 years after the date on which  
18                  the electricity generating facility commences operation,  
19                  each electricity generating facility shall be subject to emis-  
20                  sion limitations reflecting the application of best available  
21                  control technology on a new major source of a similar size  
22                  and type (as determined by the Administrator) as deter-  
23                  mined in accordance with the procedures specified in part  
24                  C of title I.

1       “(b) *ADDITIONAL REQUIREMENTS.*—*The requirements*  
2 *of this section shall be in addition to the other requirements*  
3 *of this title.*

4 **“SEC. 713. RELATIONSHIP TO OTHER LAW.**

5       “(a) *IN GENERAL.*—*Except as provided in this title,*  
6 *nothing in this title—*

7           “(1) *limits or otherwise affects the application of*  
8 *any other provision of this Act; or*  
9           “(2) *precludes a State from adopting and enforce-*  
10 *ing any requirement for the control of emissions of*  
11 *air pollutants that is more stringent than the require-*  
12 *ments imposed under this title.*

13       “(b) *REGIONAL SEASONAL EMISSION CONTROLS.*—  
14 *Nothing in this title affects any regional seasonal emission*  
15 *control for nitrogen oxides established by the Administrator*  
16 *or a State under title I.”.*

17       (b) *CONFORMING AMENDMENT.*—*Section 412(a) of the*  
18 *Clean Air Act (42 U.S.C. 7651k(a)) is amended in the first*  
19 *sentence by striking “opacity” and inserting “mercury,*  
20 *opacity.”.*

21 **SEC. 3. SAVINGS CLAUSE.**

22       *Section 193 of the Clean Air Act (42 U.S.C. 7515) is*  
23 *amended by striking “date of the enactment of the Clean*  
24 *Air Act Amendments of 1990” each place it appears and*

1 inserting “date of enactment of the Clean Power Act of  
2 2002”.

3 **SEC. 4. ACID PRECIPITATION RESEARCH PROGRAM.**

4 Section 103(j) of the Clean Air Act (42 U.S.C. 7403(j))  
5 is amended—

6 (1) in paragraph (3)—

7 (A) in subparagraph (F)(i), by striking  
8 “effects; and” and inserting “effects, including  
9 an assessment of—

10 “(I) acid-neutralizing capacity;  
11 and

12 “(II) changes in the number of  
13 water bodies in the sensitive ecosystems  
14 referred to in subparagraph (G)(ii)  
15 with an acid-neutralizing capacity  
16 greater than zero; and”; and

17 (B) by adding at the end the following:

18 “(G) SENSITIVE ECOSYSTEMS.—

19 “(i) IN GENERAL.—Beginning in 2004,  
20 and every 4 years thereafter, the report  
21 under subparagraph (E) shall include—

22 “(I) an identification of environ-  
23 mental objectives necessary to be  
24 achieved (and related indicators to be  
25 used in measuring achievement of the

objectives) to adequately protect and  
restore sensitive ecosystems; and

1           *of the lakes and streams that were subjects of the*  
2           *original report under that section.”; and*

3           *(2) by adding at the end the following:*

4           *“(4) PROTECTION OF SENSITIVE ECOSYSTEMS.—*

5           *“(A) DETERMINATION.—Not later than De-*  
6           *cember 31, 2010, the Administrator, taking into*  
7           *consideration the findings and recommendations*  
8           *of the report revisions under paragraph (3)(H),*  
9           *shall determine whether emission reductions*  
10           *under titles IV and VII are sufficient to—*

11           *“(i) achieve the necessary reductions*  
12           *identified under paragraph (3)(F); and*

13           *“(ii) ensure achievement of the envi-*  
14           *ronmental objectives identified under para-*  
15           *graph (3)(G).*

16           *“(B) REGULATIONS.—*

17           *“(i) IN GENERAL.—Not later than 2*  
18           *years after the Administrator makes a de-*  
19           *termination under subparagraph (A) that*  
20           *emission reductions are not sufficient, the*  
21           *Administrator shall promulgate regulations*  
22           *to protect the sensitive ecosystems referred to*  
23           *in paragraph (3)(G)(ii).*

24           *“(ii) CONTENTS.—Regulations under*  
25           *clause (i) shall include modifications to—*

1                   “(I) provisions relating to nitrogen  
2                   oxide and sulfur dioxide emission  
3                   reductions;

4                   “(II) provisions relating to allocations  
5                   of nitrogen oxide and sulfur dioxide  
6                   allowances; and

7                   “(III) such other provisions as the  
8                   Administrator determines to be necessary.”.

10 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS FOR DEPOSI-  
11 TION MONITORING.**

12                   (a) *OPERATIONAL SUPPORT.*—In addition to amounts  
13                   made available under any other law, there are authorized  
14                   to be appropriated for each of fiscal years 2003 through  
15                   2012—

16                   (1) for operational support of the National At-  
17                   mospheric Deposition Program National Trends Net-  
18                   work—

19                   (A) \$2,000,000 to the United States Geologi-  
20                   cal Survey;

21                   (B) \$600,000 to the Environmental Protec-  
22                   tion Agency;

23                   (C) \$600,000 to the National Park Service;  
24                   and

25                   (D) \$400,000 to the Forest Service;

(B) \$400,000 to the United States Geological Survey;

10 (D) \$100,000 to the National Park Service;

15 (4) for the Clean Air Status and Trends Network  
16 \$5,000,000 to the Environmental Protection Agency;  
17 and

(5) for the Temporally Integrated Monitoring of  
Ecosystems and Long-Term Monitoring Program  
\$2,500,000 to the Environmental Protection Agency.

21 (b) MODERNIZATION.—In addition to amounts made  
22 available under any other law, there are authorized to be  
23 appropriated—

24 (1) for equipment and site modernization of the  
25 National Atmospheric Deposition Program National

1        *Trends Network \$6,000,000 to the Environmental  
2        Protection Agency;*

3                *(2) for equipment and site modernization and  
4        network expansion of the National Atmospheric Depo-  
5        sition Program Mercury Deposition Network  
6        \$2,000,000 to the Environmental Protection Agency;*

7                *(3) for equipment and site modernization and  
8        network expansion of the National Atmospheric Depo-  
9        sition Program Atmospheric Integrated Research  
10      Monitoring Network \$1,000,000 to the National Oce-  
11      anic and Atmospheric Administration; and*

12                *(4) for equipment and site modernization and  
13      network expansion of the Clean Air Status and  
14      Trends Network \$4,600,000 to the Environmental  
15      Protection Agency.*

16                *(c) AVAILABILITY OF AMOUNTS.—Each of the amounts  
17      appropriated under subsection (b) shall remain available  
18      until expended.*

19      **SEC. 6. TECHNICAL AMENDMENTS.**

20                *Title IV of the Clean Air Act (relating to noise pollu-  
21      tion) (42 U.S.C. 7641 et seq.)—*

22                *(1) is amended by redesignating sections 401  
23      through 403 as sections 801 through 803, respectively;  
24      and*

1                   (2) is redesignated as title VIII and moved to  
2                   appear at the end of that Act.



**Calendar No. 768**

107TH CONGRESS  
2D SESSION

**S. 556**

**[Report No. 107-347]**

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**A BILL**

To amend the Clean Air Act to reduce emissions  
from electric powerplants, and for other purposes.

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NOVEMBER 19, 2002

Reported with an amendment