

110TH CONGRESS  
1ST SESSION

# S. 1201

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

APRIL 24, 2007

Mr. SANDERS (for himself, Mr. LIEBERMAN, Mr. LEAHY, and Mr. FEINGOLD)  
introduced the following bill; which was read twice and referred to the  
Committee on Environment and Public Works

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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 Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Clean Power Act of  
5       2007”.

6       **SEC. 2. ELECTRIC ENERGY GENERATION EMISSION REDUC-**  
7       **TIONS.**

8       (a) IN GENERAL.—The Clean Air Act (42 U.S.C.  
9       7401 et seq.) is amended by adding at the end the fol-  
10      lowing:

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. Emission standards for affected units.

“Sec. 711. Low-carbon generation requirement.

“Sec. 712. Geological disposal of global warming pollutants.

“Sec. 713. Energy efficiency performance standard.

“Sec. 714. Renewable portfolio standard.

“Sec. 715. Standards to account for biological sequestration of carbon.

“Sec. 716. Effect of failure to promulgate regulations.

“Sec. 717. Prohibitions.

“Sec. 718. Modernization of electric generation facilities.

“Sec. 719. Condition for treatment of electric generation facilities after 2020.

“Sec. 720. Paramount interest waiver.

“Sec. 721. Relationship to other law.

4 **“SEC. 701. FINDINGS.**

5 “Congress finds that—

6 “(1) public health and the environment con-  
 7 tinue to suffer as a result of pollution emitted by  
 8 powerplants across the United States, despite the  
 9 success of Public Law 101–549 (commonly known  
 10 as the ‘Clean Air Act Amendments of 1990’) (42  
 11 U.S.C. 7401 et 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

1 Southeast to recover from the ecological harm  
2 caused by acid deposition;

3 “(3) because lakes and sediments across the  
4 United States are being contaminated by mercury  
5 emitted by powerplants, there is an increasing risk  
6 of mercury poisoning of aquatic habitats and fish-  
7 consuming human populations;

8 “(4) electricity generation accounts for approxi-  
9 mately 40 percent of the total emissions in the  
10 United States of carbon dioxide, a major global  
11 warming pollutant causing global warming;

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

16 “(6) 1,803,000,000 metric tons of carbon diox-  
17 ide equivalent were emitted during 1990;

18 “(7)(A) the atmosphere is a public resource;  
19 and

20 “(B) emission allowances, representing permis-  
21 sion to use that resource for disposal of air pollution  
22 from electricity generation, should be allocated to  
23 promote public purposes, including—

24 “(i) protecting electricity consumers from  
25 adverse economic impacts;

1           “(ii) providing transition assistance to ad-  
2           versely affected employees, communities, and  
3           industries; and

4           “(iii) promoting clean energy resources and  
5           energy efficiency;

6           “(8) an array of technological options exist for  
7           use in reducing global warming pollution emissions,  
8           and significant reductions can be attained using a  
9           portfolio of options that will not adversely impact  
10          the economy;

11          “(9) the ingenuity of the people of the United  
12          States will allow the United States to become a lead-  
13          er in solving global warming; and

14          “(10) it should be a goal of the United States  
15          to achieve a reduction in global warming pollution  
16          emissions in the United States—

17               “(A) to ensure that the average global  
18               temperature does not increase by more than 3.6  
19               degrees Fahrenheit (2 degrees Celsius); and

20               “(B) to ensure the achievement of an aver-  
21               age global atmospheric concentration of global  
22               warming pollutants that does not exceed 450  
23               parts per million in carbon dioxide equivalent.

24   **“SEC. 702. PURPOSES.**

25          “The purposes of this title are—

1           “(1) to alleviate the environmental and public  
2           health damage caused by emissions of sulfur dioxide,  
3           nitrogen oxides, global warming pollutants, and mer-  
4           cury resulting from the combustion of fossil fuels in  
5           the generation of electric and thermal energy;

6           “(2) to reduce the annual national emissions  
7           from electric generation facilities to not more than—

8                   “(A) for calendar years 2010 through  
9           2012—

10                   “(i) 2,250,000 tons of sulfur dioxide;

11                   and

12                   “(ii) 1,510,000 tons of nitrogen ox-  
13                   ides; and

14                   “(B) for calendar year 2013 and each cal-  
15           endar year thereafter—

16                   “(i) 1,300,000 tons of sulfur dioxide;

17                   and

18                   “(ii) 900,000 tons of nitrogen oxides;

19           “(3)(A) to reduce, by December 31, 2012, the  
20           annual national emissions of mercury from electric  
21           generation facilities to not more than 5 tons; and

22           “(B) to the maximum extent practicable, to  
23           achieve a facility-specific reduction in emissions of  
24           mercury of more than 90 percent;

1 “(4) beginning in calendar year 2010, to reduce  
2 each calendar year the annual national emissions of  
3 global warming pollutants from electric generation  
4 facilities to achieve a reduction in emissions of global  
5 warming pollutants equal to—

6 “(A) by December 31, 2011, not more  
7 than 2,300,000,000 metric tons of carbon diox-  
8 ide equivalent;

9 “(B) by December 31, 2015, not more  
10 than 2,100,000,000 metric tons of carbon diox-  
11 ide equivalent;

12 “(C) by December 31, 2020, not more  
13 than 1,803,000,000 metric tons of carbon diox-  
14 ide equivalent; and

15 “(D) by December 31, 2025, not more  
16 than 1,500,000,000 metric tons of carbon diox-  
17 ide equivalent;

18 “(5) to effectuate the reductions described in  
19 paragraphs (2) through (4) by—

20 “(A) requiring electric generation facilities  
21 to comply with specified emission limitations by  
22 specified deadlines; and

23 “(B) allowing electric generation facilities  
24 to meet the emission limitations (other than the  
25 emission limitation for mercury) through an al-

1           ternative method of compliance consisting of an  
2           emission allowance and transfer system;

3           “(6) to reduce, by December 31, 2050, emis-  
4           sions from power plants of global warming pollut-  
5           ants that cause global warming to facilitate the  
6           achievement of an economy-wide reduction, con-  
7           sistent with the goal of stabilization of worldwide at-  
8           mospheric concentrations of global warming pollut-  
9           ants at 450 parts per million carbon dioxide equiva-  
10          lent; and

11          “(7) to encourage energy conservation, use of  
12          renewable and clean alternative technologies, and  
13          pollution prevention as long-range strategies, con-  
14          sistent with this title, for reducing air pollution and  
15          other adverse impacts of energy generation and use.

16 **“SEC. 703. DEFINITIONS.**

17          “In this title:

18           “(1) ACADEMY.—The term ‘Academy’ means  
19           the National Academy of Sciences.

20           “(2) CARBON DIOXIDE EQUIVALENT.—The  
21           term ‘carbon dioxide equivalent’ means, for each  
22           global warming pollutant, the quantity of the global  
23           warming pollutant that makes the same contribution  
24           to global warming as 1 metric ton of carbon dioxide,

as determined by the Administrator, taking into consideration the report described in section 705(d)(1).

“(3) COVERED POLLUTANT.—The term ‘covered pollutant’ means—

“(A) sulfur dioxide;

“(B) any nitrogen oxide;

“(C) mercury; and

“(D) any global warming pollutant.

“(4) ELECTRIC GENERATION FACILITY.—The term ‘electric generation facility’ means an electric or thermal electricity generating unit, a combination of such units, or a combination of 1 or more such units and 1 or more combustion devices, that—

“(A) has a nameplate capacity of 25 megawatts or more (or the equivalent in thermal energy generation, determined in accordance with a methodology developed by the Administrator);

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

“(C) emits a covered pollutant into the atmosphere.

“(5) ELECTRICITY INTENSIVE PRODUCT.—The term ‘electricity intensive product’ means a product with respect to which the cost of electricity con-



1       sumed in the production of the product represents  
2       more than 5 percent of the value of the product.

3               “(6) EMISSION ALLOWANCE.—The term ‘emis-  
4       sion allowance’ means a limited authorization to  
5       emit in accordance with this title—

6                       “(A) 1 ton of sulfur dioxide;

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

8                       “(C) 1 ton of global warming pollutant.

9               “(7) ENERGY EFFICIENCY PROJECT.—The term  
10       ‘energy efficiency project’ means any specific action  
11       (other than ownership or operation of an energy effi-  
12       cient building) commenced after the date of enact-  
13       ment of this title—

14                      “(A) at a facility (other than an electric  
15       generation facility), that verifiably reduces the  
16       annual electricity or natural gas consumption  
17       per unit output of the facility, as compared  
18       with the annual electricity or natural gas con-  
19       sumption per unit output that would be ex-  
20       pected in the absence of an allocation of emis-  
21       sion allowances (as determined by the Adminis-  
22       trator); or

23                      “(B) by an entity that is primarily engaged  
24       in the transmission and distribution of elec-  
25       tricity, that significantly improves the efficiency

1 of that type of entity, as compared with stand-  
 2 ards for efficiency developed by the Adminis-  
 3 trator, in consultation with the Secretary of En-  
 4 ergy, after the date of enactment of this title.

5 “(8) ENERGY EFFICIENT BUILDING.—The term  
 6 ‘energy efficient building’ means a residential build-  
 7 ing or commercial building completed after the date  
 8 of enactment of this title for which the projected  
 9 lifetime consumption of electricity or natural gas for  
 10 heating, cooling, and ventilation is at least 30 per-  
 11 cent less than the lifetime consumption of a typical  
 12 new residential building or commercial building, as  
 13 determined by the Administrator (in consultation  
 14 with the Secretary of Energy)—

15 “(A) on a State or regional basis; and

16 “(B) taking into consideration—

17 “(i) applicable building codes; and

18 “(ii) consumption levels achieved in  
 19 practice by new residential buildings or  
 20 commercial buildings in the absence of an  
 21 allocation of emission allowances.

22 “(9) ENERGY EFFICIENT PRODUCT.—The term  
 23 ‘energy efficient product’ means a product manufac-  
 24 tured after the date of enactment of this title that

1 has an expected lifetime electricity or natural gas  
2 consumption that—

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

6 “(B) does not exceed the lesser of—

7 “(i) the maximum energy consump-  
8 tion that qualifies for the applicable En-  
9 ergy Star label for that type of product; or

10 “(ii) the average energy consumption  
11 of the most efficient 25 percent of that  
12 type of product manufactured in the same  
13 year.

14 “(10) FACILITY.—The term ‘facility’ means any  
15 building, structure, or installation that is located—

16 “(A) on 1 or more contiguous or adjacent  
17 properties under the common control of at least  
18 1 person; and

19 “(B) in the United States.

20 “(11) GLOBAL WARMING POLLUTANT.—The  
21 term ‘global warming pollutant’ means—

22 “(A) carbon dioxide;

23 “(B) methane;

24 “(C) nitrous oxide;

25 “(D) hydrofluorocarbons;

1 “(E) perfluorocarbons;

2 “(F) sulfur hexafluoride; and

3 “(G) any other anthropogenically-emitted  
4 gas that the Administrator, after notice and  
5 comment, determines to contribute to global  
6 warming.

7 “(12) GLOBAL WARMING POLLUTION.—The  
8 term ‘global warming pollution’ means any combina-  
9 tion of 1 or more global warming pollutants emitted  
10 into the ambient air or atmosphere.

11 “(13) LIFETIME.—The term ‘lifetime’ means—

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

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

17 “(C) in the case of an energy efficient  
18 product, a period determined by the Adminis-  
19 trator to be the average life of that type of en-  
20 ergy efficient product.

21 “(14) MERCURY.—The term ‘mercury’ includes  
22 any mercury compound.

23 “(15) NAS REPORT.—The term ‘NAS report’  
24 means a report completed by the Academy under  
25 subsection (d)(1) or (e)(2) of section 705.

1           “(16) NONWESTERN REGION.—The term ‘non-  
2       western region’ means the area of the States that is  
3       not included in the western region.

4           “(17) RENEWABLE ELECTRICITY GENERATING  
5       UNIT.—The term ‘renewable electricity generating  
6       unit’ means a unit that—

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

9                 “(B) generates electric energy by means  
10      of—

11                         “(i) wind;

12                         “(ii) biomass;

13                         “(iii) landfill gas;

14                         “(iv) a geothermal, solar thermal, or  
15      photovoltaic source; or

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

18           “(18) SMALL ELECTRIC GENERATION FACIL-  
19       ITY.—The term ‘small electric generation facility’  
20       means an electric or thermal electricity generating  
21       unit, or combination of units, that—

22                 “(A) has a nameplate capacity of less than  
23       25 megawatts (or the equivalent in thermal en-  
24       ergy generation, determined in accordance with  
25       a methodology developed by the Administrator);

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

10 **“SEC. 704. CONDITION FOR TREATMENT OF ELECTRIC GEN-  
11 ERATION FACILITIES AFTER 2020.**

12 “If, by December 31, 2012, Congress does not enact,  
13 and the President does not sign, an Act affecting at least  
14 85 percent of manmade sources of global warming pollu-  
15 tion in the United States designed to reduce, on an econ-  
16 omy-wide basis, the quantity of global warming pollutants  
17 emitted from those sources, the emissions limitations for  
18 electric generation facilities shall be successively decreased  
19 by at least 3 percent below the limitations required by this  
20 title for the preceding calendar year—

21 “(1) for each of calendar years 2026 through  
22 2050;

23 “(2) until, as determined by the Administrator,  
24 the purpose described in section 702(6) is achieved;  
25 or

1           “(3) until Congress enacts, and the President  
2           signs, such an Act.

3   **“SEC. 705. EMISSION LIMITATIONS.**

4           “(a) IN GENERAL.—Subject to subsections (b)  
5   through (e), the Administrator shall promulgate regula-  
6   tions to ensure that the total annual emissions of covered  
7   pollutants from all electric generation facilities located in  
8   all States does not exceed—

9           “(1) in the case of sulfur dioxide—

10           “(A) in the western region—

11           “(i) for calendar years 2010 through  
12           2012, 274,500 tons; and

13           “(ii) for calendar year 2013 and each  
14           calendar year thereafter, 158,600 tons;  
15           and

16           “(B) in the nonwestern region—

17           “(i) for calendar years 2010 through  
18           2012, 1,975,500 tons; and

19           “(ii) for calendar year 2013 and each  
20           calendar year thereafter, 1,141,400 tons;

21           “(2) in the case of nitrogen oxides—

22           “(A) for calendar years 2010 through  
23           2012, 1,510,000 tons; and

24           “(B) for calendar year 2013 and each cal-  
25           endar year thereafter, 900,000 tons;

1 “(3) in the case of global warming pollutants,  
2 beginning in calendar year 2010, a quantity to be  
3 reduced each calendar year to achieve a reduction in  
4 emissions of global warming pollutants equal to—

5 “(A) by December 31, 2011, not more  
6 than 2,300,000,000 metric tons of carbon diox-  
7 ide equivalent;

8 “(B) by December 31, 2015, not more  
9 than 2,100,000,000 metric tons of carbon diox-  
10 ide equivalent;

11 “(C) by December 31, 2020, not more  
12 than 1,803,000,000 metric tons of carbon diox-  
13 ide equivalent; and

14 “(D) by December 31, 2025, not more  
15 than 1,500,000,000 metric tons of carbon diox-  
16 ide equivalent; and

17 “(4) in the case of mercury, by December 31,  
18 2012, and during each calendar year thereafter, the  
19 lower of, as applicable—

20 “(A) 5 tons; and

21 “(B) to the maximum extent practicable,  
22 with respect to an electric generation facility, a  
23 quantity of mercury emissions that represents  
24 more than a 90-percent reduction of emissions  
25 of mercury by the electric generation facility, as



1 compared to the average emissions of mercury  
 2 during calendar years 2009 through 2011.

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

11 “(1) used in the calendar year; but

12 “(2) allocated for any preceding calendar year  
 13 under section 708.

14 “(c) REDUCTIONS.—For calendar year 2010 and  
 15 each calendar year thereafter, the quantity of emissions  
 16 specified for each covered pollutant in subsection (a) shall  
 17 be reduced by the sum of—

18 “(1) the number of tons of the covered pollut-  
 19 ant that were emitted by small electric generation  
 20 facilities in the second preceding calendar year; and

21 “(2) any number of tons of reductions in emis-  
 22 sions of the covered pollutant required under section  
 23 706(h).

24 “(d) ACCELERATED GLOBAL WARMING POLLUTION  
 25 EMISSIONS LIMITATIONS.—

1           “(1) ACADEMY REPORT ON GLOBAL CHANGE  
2       EVENTS.—

3           “(A) IN GENERAL.—The Administrator  
4       shall offer to enter into a contract with the  
5       Academy under which the Academy, not later  
6       than 2 years after the date of enactment of this  
7       title, and every 3 years thereafter, shall submit  
8       to Congress and the Administrator a report  
9       that describes whether any event described in  
10      subparagraph (B)—

11           “(i) has occurred or is more likely  
12       than not to occur in the foreseeable future;  
13       and

14           “(ii) in the judgment of the Academy,  
15       is the result of anthropogenic climate  
16       change.

17           “(B) EVENTS.—The events referred to in  
18      subparagraph (A) are—

19           “(i) the exceedance of an atmospheric  
20       concentration of global warming pollutants  
21       of 450 parts per million in carbon dioxide  
22       equivalent; and

23           “(ii) an increase of global average  
24       temperatures in excess of 3.6 degrees

1 Fahrenheit (2 degrees Celsius) above the  
2 preindustrial average.

3 “(2) ACCELERATION OF LIMITATIONS.—If a  
4 NAS report determines that an event described in  
5 paragraph (1)(B) has occurred, or is more likely  
6 than not to occur in the foreseeable future, not later  
7 than 2 years after the date of completion of the  
8 NAS report, the Administrator, after an opportunity  
9 for notice and public comment and taking into con-  
10 sideration the new information contained in the NAS  
11 report, may—

12 “(A) adjust any global warming pollution  
13 emissions limitation under this section; and

14 “(B) promulgate such regulations as the  
15 Administrator determines to be necessary—

16 “(i) to reduce the aggregate net levels  
17 of global warming pollution emissions from  
18 the United States on an accelerated sched-  
19 ule; and

20 “(ii) to minimize the effects of rapid  
21 climate change and otherwise achieve the  
22 purposes of this title.

23 “(e) REPORT ON ACHIEVEMENT OF GLOBAL WARM-  
24 ING POLLUTION EMISSIONS LIMITATIONS.—

1           “(1) DEFINITION OF TECHNOLOGICALLY IN-  
 2           FEASIBLE.—In this subsection, the term ‘techno-  
 3           logically infeasible’, with respect to compliance with  
 4           a standard or requirement under this subsection,  
 5           means that adequate technology or infrastructure  
 6           does not exist, or is not reasonably anticipated to  
 7           exist, within a sufficient time to permit compliance  
 8           with the standard or requirement.

9           “(2) TECHNOLOGY REPORTS.—The Adminis-  
 10          trator shall offer to enter into a contract with the  
 11          Academy under which the Academy, not later than  
 12          2 years after the date of enactment of this title and  
 13          every 3 years thereafter, shall submit to Congress  
 14          and the Administrator a report that analyzes—

15               “(A) the status of current global warming  
 16               pollution emission reduction technologies, in-  
 17               cluding—

18                       “(i) technologies for capture and dis-  
 19                       posal of global warming pollutants;

20                       “(ii) efficiency improvement tech-  
 21                       nologies;

22                       “(iii) zero-global-warming-pollution-  
 23                       emitting energy technologies; and

24                       “(iv) above- and below-ground biologi-  
 25                       cal sequestration technologies;

1           “(B) whether any requirement under this  
2 title (including regulations promulgated pursu-  
3 ant to this title) requires a level of emission  
4 control or reduction that, based on available or  
5 expected technology, will be technologically in-  
6 feasible at the time at which the requirement  
7 becomes effective;

8           “(C) the projected date on which any tech-  
9 nology determined to be technologically infeasible  
10 will become technologically feasible;

11           “(D) whether any technology determined  
12 to be technologically infeasible cannot reason-  
13 ably be expected to become technologically fea-  
14 sible before January 1, 2050; and

15           “(E) the costs of available alternative glob-  
16 al warming pollution emission reduction strate-  
17 gies that could be used or pursued in lieu of  
18 any technology that is determined to be techno-  
19 logically infeasible.

20           “(3) CONCLUSION.—If a NAS report concludes  
21 that a global warming pollution emissions limitation  
22 required by this section cannot be achieved because  
23 the limitation is technologically infeasible, the Ad-  
24 ministrator shall submit to Congress a notification  
25 of that conclusion.

1           “(4) EVALUATION OF CERTAIN PURPOSE.—Not  
 2       later than December 31, 2037, the Administrator  
 3       shall offer to enter into a contract with the Academy  
 4       under which, not later than December 31, 2039, the  
 5       Academy shall prepare and submit to Congress and  
 6       the Administrator a report on the appropriateness of  
 7       the purpose described in section 702(6), taking into  
 8       consideration—

9           “(A) information that was not available as  
 10       of the date of enactment of this title; and

11           “(B) events that have occurred since that  
 12       date relating to—

13           “(i) climate change;

14           “(ii) climate change technologies; and

15           “(iii) national and international cli-  
 16       mate change commitments.

17   **“SEC. 706. EMISSION ALLOWANCES.**

18       “(a) CREATION AND ALLOCATION.—

19           “(1) IN GENERAL.—Subject to paragraphs (2)  
 20       and (3), there are created, and the Administrator  
 21       shall allocate in accordance with section 708, emis-  
 22       sion allowances as follows:

23           “(A) In the case of sulfur dioxide—

24           “(i) in the western region—

1                   “(I) for calendar years 2010  
2                   through 2012, emission allowances for  
3                   274,500 tons; and

4                   “(II) for calendar year 2013 and  
5                   each calendar year thereafter, emis-  
6                   sion allowances for 158,600 tons; and

7                   “(ii) in the nonwestern region—

8                   “(I) for calendar years 2010  
9                   through 2012, emission allowances for  
10                  1,975,500 tons; and

11                  “(II) for calendar year 2013 and  
12                  each calendar year thereafter, emis-  
13                  sion allowances for 1,141,400 tons.

14                  “(B) In the case of nitrogen oxides—

15                  “(i) for calendar years 2010 through  
16                  2012, emission allowances for 1,510,000  
17                  tons; and

18                  “(ii) for calendar year 2013 and each  
19                  calendar year thereafter, emission allow-  
20                  ances for 900,000 tons.

21                  “(C) In the case of global warming pollut-  
22                  ants, beginning in calendar year 2010, a quan-  
23                  tity of emission allowances to be reduced each  
24                  calendar year to achieve a reduction in emis-  
25                  sions of global warming pollutants equal to—

1 “(i) by December 31, 2011, not more  
2 than 2,300,000,000 metric tons of carbon  
3 dioxide equivalent;

4 “(ii) by December 31, 2015, not more  
5 than 2,100,000,000 metric tons of carbon  
6 dioxide equivalent;

7 “(iii) by December 31, 2020, not  
8 more than 1,803,000,000 metric tons of  
9 carbon dioxide equivalent; and

10 “(iv) by December 31, 2025, not more  
11 than 1,500,000,000 metric tons of carbon  
12 dioxide equivalent.

13 “(2) REDUCTIONS.—For calendar year 2010  
14 and each calendar year thereafter, the number of  
15 emission allowances specified for each covered pollut-  
16 ant in paragraph (1) shall be reduced by a number  
17 equal to the sum of—

18 “(A) the number of tons of the covered  
19 pollutant that were emitted by small electric  
20 generation facilities in the second preceding cal-  
21 endar year; and

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



1           “(3) UPDATES.—Once every 5 years, the Ad-  
2       ministrator shall—

3           “(A) review the formula by which the Ad-  
4       ministrator allocates allowances under this title;  
5       and

6           “(B) update that formula, as the Adminis-  
7       trator determines to be necessary given the re-  
8       sults of the review.

9       “(b) NATURE OF EMISSION ALLOWANCES.—

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

13           “(2) NO LIMIT ON AUTHORITY TO TERMINATE  
14       OR LIMIT.—Nothing in this title or any other provi-  
15       sion of law limits the authority of the United States  
16       to terminate or limit an emission allowance.

17           “(3) TRACKING AND TRANSFER OF EMISSION  
18       ALLOWANCES.—

19           “(A) IN GENERAL.—Not later than 1 year  
20       after the date of enactment of this title, the Ad-  
21       ministrator shall promulgate regulations to es-  
22       tablish an emission allowance tracking and  
23       transfer system for emission allowances of sul-  
24       fur dioxide, nitrogen oxides, and global warm-  
25       ing pollutants.

1           “(B) REQUIREMENTS.—The emission al-  
 2           lowance tracking and transfer system estab-  
 3           lished under subparagraph (A) shall—

4                   “(i) incorporate the requirements of  
 5                   subsections (b) and (d) of section 412 (ex-  
 6                   cept that written certification by the trans-  
 7                   feree shall not be necessary to effect a  
 8                   transfer); and

9                   “(ii) permit any entity—  
 10                           “(I) to buy, sell, or hold an emis-  
 11                           sion allowance; and

12                           “(II) to permanently retire an  
 13                           unused emission allowance.

14           “(C) PROCEEDS OF TRANSFERS.—Pro-  
 15           ceeds from the transfer of emission allowances  
 16           by any person to which the emission allowances  
 17           have been allocated—

18                   “(i) shall not constitute funds of the  
 19                   United States; and

20                   “(ii) shall not be available to meet any  
 21                   obligations of the United States.

22           “(c) IDENTIFICATION AND USE.—

23                   “(1) IN GENERAL.—Each emission allowance  
 24                   allocated by the Administrator shall bear a unique  
 25                   serial number, including—

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

3           “(B) the first calendar year for which the  
4           allowance may be used.

5           “(2) SULFUR DIOXIDE EMISSION ALLOW-  
6           ANCES.—In the case of sulfur dioxide emission al-  
7           lowances, the Administrator shall ensure that the  
8           emission allowances allocated to electric generation  
9           facilities in the western region are distinguishable  
10          from emission allowances allocated to electric gen-  
11          eration facilities in the nonwestern region.

12          “(3) YEAR OF USE.—Each emission allowance  
13          may be used in the calendar year for which the  
14          emission allowance is allocated or in any subsequent  
15          calendar year.

16          “(d) ANNUAL SUBMISSION OF EMISSION ALLOW-  
17          ANCES.—

18          “(1) IN GENERAL.—On or before April 1, 2011,  
19          and April 1 of each year thereafter, the owner or op-  
20          erator of each electric generation facility shall sub-  
21          mit to the Administrator 1 emission allowance for  
22          the applicable covered pollutant (other than mer-  
23          cury) for each ton of sulfur dioxide, nitrogen oxides,  
24          or global warming pollutants emitted by the electric

1 generation facility during the preceding calendar  
2 year.

3 “(2) SPECIAL RULE FOR OZONE  
4 EXCEEDANCES.—

5 “(A) IDENTIFICATION OF FACILITIES CON-  
6 TRIBUTING TO NONATTAINMENT.—Not later  
7 than December 31, 2009, and the end of each  
8 3-year period thereafter, each State, consistent  
9 with the obligations of the State under section  
10 110(a)(2)(D), shall identify the electric genera-  
11 tion facilities in the State and in other States  
12 that are significantly contributing (as deter-  
13 mined based on guidance issued by the Admin-  
14 istrator) to nonattainment of the national ambi-  
15 ent air quality standard for ozone in the State.

16 “(B) SUBMISSION OF ADDITIONAL ALLOW-  
17 ANCES.—In calendar year 2010 and each cal-  
18 endar year thereafter, on petition from a State  
19 or a person demonstrating that the control  
20 measures in effect at an electric generation fa-  
21 cility that is identified under subparagraph (A)  
22 as significantly contributing to nonattainment  
23 of the national ambient air quality standard for  
24 ozone in a State during the preceding calendar  
25 year are inadequate to prevent the significant

1 contribution described in subparagraph (A), the  
 2 Administrator, if the Administrator determines  
 3 that the electric generation facility is inad-  
 4 equately controlled for nitrogen oxides, may re-  
 5 quire that the electric generation facility submit  
 6 3 nitrogen oxide emission allowances for each  
 7 ton of nitrogen oxides emitted by the electric  
 8 generation facility during any period of an ex-  
 9 ceedance of the national ambient air quality  
 10 standard for ozone in the State during the pre-  
 11 ceding calendar year.

12 “(3) REGIONAL LIMITATIONS FOR SULFUR DI-  
 13 OXIDE.—The Administrator shall not allow—

14 “(A) the use of sulfur dioxide emission al-  
 15 lowances allocated for the western region to  
 16 meet the obligations under this subsection of  
 17 electric generation facilities in the nonwestern  
 18 region; or

19 “(B) the use of sulfur dioxide emission al-  
 20 lowances allocated for the nonwestern region to  
 21 meet the obligations under this subsection of  
 22 electric generation facilities in the western re-  
 23 gion.

24 “(e) EMISSION VERIFICATION, MONITORING, AND  
 25 RECORDKEEPING.—

1           “(1) IN GENERAL.—The Administrator shall  
2       ensure that Federal regulations, in combination with  
3       any applicable State regulations, are adequate to  
4       verify, monitor, and document emissions of covered  
5       pollutants from electric generation facilities.

6           “(2) INVENTORY OF EMISSIONS FROM SMALL  
7       ELECTRIC GENERATION FACILITIES.—On or before  
8       July 1, 2008, the Administrator, in cooperation with  
9       State agencies, shall complete, and on an annual  
10      basis update, a comprehensive inventory of emissions  
11      of sulfur dioxide, nitrogen oxides, global warming  
12      pollutants, and particulate matter from small elec-  
13      tric generation facilities.

14          “(3) MONITORING INFORMATION.—

15               “(A) IN GENERAL.—Not later than 180  
16              days after the date of enactment of this title,  
17              the Administrator shall promulgate regulations  
18              to require each electric generation facility to  
19              submit to the Administrator—

20                       “(i) not later than April 1 of each  
21                      year, verifiable information on covered pol-  
22                      lutants emitted by the electric generation  
23                      facility in the preceding calendar year, ex-  
24                      pressed in—

1                   “(I) tons of covered pollutants;  
2                   and

3                   “(II) tons of covered pollutants  
4                   per megawatt hour of energy (or the  
5                   equivalent thermal energy) generated;  
6                   and

7                   “(ii) as part of the first submission  
8                   under clause (i), verifiable information on  
9                   covered pollutants emitted by the electric  
10                  generation facility in each of calendar  
11                  years 2002 through 2006 if the electric  
12                  generation facility was required to report  
13                  that information in those calendar years.

14                 “(B) SOURCE OF INFORMATION.—Infor-  
15                 mation submitted under subparagraph (A) shall  
16                 be obtained using a continuous emission moni-  
17                 toring system (as defined in section 402).

18                 “(C) AVAILABILITY TO THE PUBLIC.—The  
19                 information described in subparagraph (A) shall  
20                 be made available to the public—

21                   “(i) in the case of the first year in  
22                   which the information is required to be  
23                   submitted under that subparagraph, not  
24                   later than 18 months after the date of en-  
25                   actment of this title; and

1                   “(ii) in the case of each year there-  
2                   after, not later than April 1 of the year.

3                   “(4) AMBIENT AIR QUALITY MONITORING FOR  
4                   SULFUR DIOXIDE AND HAZARDOUS AIR POLLUT-  
5                   ANTS.—

6                   “(A) IN GENERAL.—Beginning January 1,  
7                   2008, each coal-fired electric generation facility  
8                   with an aggregate generating capacity of 50  
9                   megawatts or more shall, in accordance with  
10                  guidelines issued by the Administrator, com-  
11                  mence ambient air quality monitoring within a  
12                  30-mile radius of the coal-fired electric genera-  
13                  tion facility for the purpose of measuring max-  
14                  imum concentrations of sulfur dioxide and haz-  
15                  ardous air pollutants emitted by the coal-fired  
16                  electric generation facility.

17                  “(B) LOCATION OF MONITORING  
18                  POINTS.—Monitoring under subparagraph (A)  
19                  shall include monitoring at not fewer than 2  
20                  points—

21                         “(i) that are at ground level and with-  
22                         in 3 miles of the coal-fired electric genera-  
23                         tion facility;



1                   “(ii) at which the concentration of  
2                   pollutants being monitored is expected to  
3                   be the greatest; and

4                   “(iii) at which the monitoring shall be  
5                   the most frequent.

6                   “(C) FREQUENCY OF MONITORING OF SUL-  
7                   FUR DIOXIDE.—Monitoring of sulfur dioxide  
8                   under subparagraph (A) shall be carried out on  
9                   a continuous basis and averaged over 5-minute  
10                  periods.

11                  “(D) AVAILABILITY TO THE PUBLIC.—The  
12                  results of the monitoring under subparagraph  
13                  (A) shall be made available to the public.

14                  “(f) EXCESS EMISSION PENALTY.—

15                  “(1) IN GENERAL.—Subject to paragraph (2),  
16                  section 411 shall be applicable to an owner or oper-  
17                  ator of an electric generation facility.

18                  “(2) CALCULATION OF PENALTY.—

19                  “(A) IN GENERAL.—Except as provided in  
20                  subparagraph (B), the penalty for failure to  
21                  submit emission allowances for covered pollut-  
22                  ants as required under subsection (d) shall be  
23                  equal to 3 times the product obtained by multi-  
24                  plying—

25                  “(i) as applicable—

1 “(I) the number of tons emitted  
 2 in excess of the emission limitation re-  
 3 quirement applicable to the electric  
 4 generation facility; or

5 “(II) the number of emission al-  
 6 lowances that the owner or operator  
 7 failed to submit; and

8 “(ii) the average annual market price  
 9 of emission allowances (as determined by  
 10 the Administrator).

11 “(B) MERCURY.—In the case of mercury,  
 12 the penalty shall be equal to 3 times the prod-  
 13 uct obtained by multiplying—

14 “(i) the number of grams emitted in  
 15 excess of the emission limitation require-  
 16 ment for mercury applicable to the electric  
 17 generation facility; and

18 “(ii) the average cost of mercury con-  
 19 trols at electricity generating units that  
 20 have a nameplate capacity of 25  
 21 megawatts or more in all States (as deter-  
 22 mined by the Administrator).

23 “(g) SIGNIFICANT ADVERSE LOCAL IMPACTS.—

24 “(1) IN GENERAL.—If the Administrator deter-  
 25 mines that emissions of an electric generation facil-

1        ity may reasonably be anticipated to cause or con-  
2        tribute to a significant adverse impact on an area  
3        (including endangerment of public health, contribu-  
4        tion to acid deposition in a sensitive receptor area,  
5        and other degradation of the environment), the Ad-  
6        ministrator shall limit the emissions of the electric  
7        generation facility as necessary to avoid that impact.

8            “(2) VIOLATION.—Notwithstanding the avail-  
9        ability of emission allowances, it shall be a violation  
10       of this Act for any electric generation facility to ex-  
11       ceed any limitation on emissions established under  
12       paragraph (1).

13       “(h) ADDITIONAL REDUCTIONS.—

14            “(1) PROTECTION OF PUBLIC HEALTH OR WEL-  
15       FARE OR THE ENVIRONMENT.—If the Administrator  
16       determines that the emission levels necessary to  
17       achieve the national emission limitations established  
18       under section 705 are not reasonably anticipated to  
19       protect public health or welfare or the environment  
20       (including protection of children, pregnant women,  
21       minority or low-income communities, and other sen-  
22       sitive populations), the Administrator may require  
23       reductions in emissions from electric generation fa-  
24       cilities in addition to the reductions required under  
25       the other provisions of this title.

1 “(2) EMISSION ALLOWANCE TRADING.—

2 “(A) STUDIES.—

3 “(i) IN GENERAL.—In 2015 and at  
4 the end of each 3-year period thereafter,  
5 the Administrator shall complete a study  
6 of the impacts of the emission allowance  
7 trading authorized under this title.

8 “(ii) REQUIRED ASSESSMENT.—The  
9 study shall include an assessment of ambi-  
10 ent air quality in areas surrounding elec-  
11 tric generation facilities that participate in  
12 emission allowance trading, including a  
13 comparison between—

14 “(I) the ambient air quality in  
15 those areas; and

16 “(II) the national average ambi-  
17 ent air quality.

18 “(B) LIMITATION ON EMISSIONS.—If the  
19 Administrator determines, based on the results  
20 of a study under subparagraph (A), that ad-  
21 verse local impacts result from emission allow-  
22 ance trading, the Administrator may require re-  
23 ductions in emissions from electric generation  
24 facilities in addition to the reductions required  
25 under the other provisions of this title.

1       “(i) USE OF CERTAIN OTHER EMISSION ALLOW-  
2   ANCES.—

3           “(1) IN GENERAL.—Subject to paragraph (2),  
4       emission allowances or other emission trading in-  
5       struments created under title I or IV for sulfur diox-  
6       ide or nitrogen oxides shall not be valid for submis-  
7       sion under subsection (d).

8           “(2) EMISSION ALLOWANCES PLACED IN RE-  
9       SERVE.—

10           “(A) IN GENERAL.—An emission allowance  
11       described in paragraph (1) that was placed in  
12       reserve under section 404(a)(2) or 405 or  
13       through regulations implementing controls on  
14       nitrogen oxides, because an affected unit emit-  
15       ted fewer tons of sulfur dioxide or nitrogen ox-  
16       ides than were permitted under an emission  
17       limitation imposed under title I or IV before the  
18       date of enactment of this title, shall be valid for  
19       submission under subsection (d).

20           “(B) EMISSION ALLOWANCES RESULTING  
21       FROM ACHIEVEMENT OF NEW SOURCE PER-  
22       FORMANCE STANDARDS.—If an emission allow-  
23       ance described in subparagraph (A) was created  
24       and placed in reserve during the period of 2001  
25       through 2009 by the owner or operator of an

1 electric generation facility through the applica-  
 2 tion of pollution control technology that re-  
 3 sulted in the achievement and maintenance by  
 4 the electric generation facility of the applicable  
 5 standards of performance required of new  
 6 sources under section 111, the emission allow-  
 7 ance shall be valid for submission under sub-  
 8 section (d).

9 **“SEC. 707. PERMITTING AND TRADING OF EMISSION AL-**  
 10 **LOWANCES.**

11 “Not later than 1 year after the date of enactment  
 12 of this title, the Administrator shall promulgate regula-  
 13 tions to establish a permitting and emission allowance  
 14 trading compliance program to implement the limitations  
 15 on emissions of covered pollutants from electric generation  
 16 facilities established under section 705.

17 **“SEC. 708. EMISSION ALLOWANCE ALLOCATION.**

18 “(a) SULFUR DIOXIDE AND NITROGEN OXIDES.—

19 “(1) INITIAL ALLOCATIONS.—For calendar  
 20 years 2010 through 2012, the Administrator shall  
 21 allocate emission allowances for sulfur dioxide and  
 22 nitrogen oxides, consistent with applicable law (in-  
 23 cluding regulations).

24 “(2) SUBSEQUENT ALLOCATIONS.—

1           “(A) IN GENERAL.—For calendar year  
 2           2013 and each calendar year thereafter, the Ad-  
 3           ministrators shall allocate emission allowances  
 4           for sulfur dioxide and nitrogen oxides as the  
 5           Administrator determines to be appropriate in  
 6           accordance with subparagraphs (B) and (C).

7           “(B) ALLOCATION FACTORS.—In allo-  
 8           cating emission allowances for sulfur dioxide  
 9           and nitrogen oxides under subparagraph (A),  
 10          the Administrator, in consultation with the Sec-  
 11          retary of Commerce, shall take into consider-  
 12          ation the factors described in subsection (c)(1).

13          “(b) GLOBAL WARMING POLLUTANTS.—

14          “(1) IN GENERAL.—For calendar year 2010,  
 15          the Administrator shall transfer to each trustee ap-  
 16          pointed pursuant to paragraph (4)(A) for auction  
 17          not less than 50 percent of the quantity of emission  
 18          allowances available for allocation for global warm-  
 19          ing pollutants for the calendar year for the purposes  
 20          described in paragraph (4).

21          “(2) INCREASE IN QUANTITY.—For calendar  
 22          year 2011 and each calendar year thereafter, taking  
 23          into consideration the factors described in paragraph  
 24          (3), the Administrator shall successively increase the  
 25          quantity of emission allowances transferred to trust-

1       ees for auction under paragraph (1) until, by not  
 2       later than 15 years after the date of enactment of  
 3       this title, 100 percent of emission allowances avail-  
 4       able for allocation for global warming pollutants for  
 5       a calendar year are available for auction.

6               “(3) ALLOCATION FACTORS.—In transferring  
 7       emission allowances to trustees for auction under  
 8       paragraph (1), the Administrator, in consultation  
 9       with the Secretary of Commerce, shall take into con-  
 10      sideration the factors described in subsection (c)(1).

11              “(4) REQUIREMENTS.—Regulations promul-  
 12      gated to carry out this subsection may provide for,  
 13      as the Administrator determines to be necessary, the  
 14      appointment of 1 or more trustees—

15                   “(A)(i) to receive emission allowances for  
 16                   the benefit of households, communities, and  
 17                   other entities;

18                   “(ii) to sell the emission allowances at fair  
 19                   market value; and

20                   “(iii) to distribute the proceeds of any sale  
 21                   of emission allowances to the appropriate bene-  
 22                   ficiaries; or

23                   “(B) to allocate emission allowances, in ac-  
 24                   cordance with applicable regulations, to—



1 “(i) communities, individuals, and  
2 companies that have experienced dis-  
3 proportionate adverse impacts as a result  
4 of—

5 “(I) the transition to a lower car-  
6 bon-emitting economy; or

7 “(II) global warming;

8 “(ii) owners and operators of highly  
9 energy-efficient buildings, including—

10 “(I) residential users;

11 “(II) producers of highly energy-  
12 efficient products; and

13 “(III) entities that carry out en-  
14 ergy-efficiency improvement projects  
15 that result in consumer-side reduc-  
16 tions in electricity use;

17 “(iii) entities that will use the emis-  
18 sion allowances for the purpose of carrying  
19 out geological sequestration of carbon diox-  
20 ide produced by an anthropogenic global  
21 warming pollution emission source in ac-  
22 cordance with requirements established by  
23 the Administrator;

24 “(iv) such individuals and entities as  
25 the Administrator determines to be appro-

1           priate, for use in carrying out projects to  
 2           reduce net carbon dioxide emissions  
 3           through above-ground and below-ground  
 4           biological carbon dioxide sequestration (in-  
 5           cluding sequestration in forests, forest  
 6           soils, agricultural soils, rangeland, or  
 7           grassland in the United States);

8           “(v) such individuals and entities (in-  
 9           cluding fish and wildlife agencies) as the  
 10          Administrator determines to be appro-  
 11          priate, for use in carrying out projects to  
 12          protect and restore ecosystems (including  
 13          fish and wildlife) affected by climate  
 14          change; and

15          “(vi) manufacturers producing con-  
 16          sumer products that result in substantially  
 17          reduced global warming pollution emis-  
 18          sions, for use in funding rebates for pur-  
 19          chasers of those products.

20          “(c) ADMINISTRATION.—

21               “(1) ALLOCATION FACTORS.—Before making  
 22          any allocation or transfer of emission allowances  
 23          under subsection (a) or (b), the Administrator, in  
 24          consultation with the Secretary of Commerce, shall  
 25          take into consideration—

1           “(A) the distributive effect of the alloca-  
 2           tions on household income and net worth of in-  
 3           dividuals;

4           “(B) the impact of the allocations on cor-  
 5           porate income, taxes, and asset value;

6           “(C) the impact of the allocations on in-  
 7           come levels and energy consumption of con-  
 8           sumers;

9           “(D) the effects of the allocations with re-  
 10          spect to economic efficiency;

11          “(E) the ability of electric generation fa-  
 12          cilities to pass through compliance costs to cus-  
 13          tomers of the electric generation facilities;

14          “(F) the degree to which the quantity of  
 15          allocations to the covered sectors should de-  
 16          crease over time; and

17          “(G) the need to maintain the inter-  
 18          national competitiveness of United States man-  
 19          ufacturing and avoid the additional loss of  
 20          United States manufacturing jobs.

21          “(2) ALLOCATION RECOMMENDATIONS AND IM-  
 22          PLEMENTATION.—

23                 “(A) IN GENERAL.—Not later than 2 years  
 24                 after the date of enactment of this title, and be-  
 25                 fore making any allocation or transfer of emis-

1           sion allowances under subsection (a) or (b), the  
 2           Administrator shall submit a description of any  
 3           determination of the Administrator relating to  
 4           the allocation or transfer under that subsection  
 5           to—

6                   “(i) the Committees on Environment  
 7                   and Public Works and Commerce, Science,  
 8                   and Transportation of the Senate; and

9                   “(ii) the Committees on Energy and  
 10                  Commerce and Science of the House of  
 11                  Representatives.

12               “(B) TREATMENT OF DETERMINATIONS.—

13           A determination of the Administrator described  
 14           in subparagraph (A), and any allocation or  
 15           transfer of emission allowances made pursuant  
 16           to such a determination, shall be—

17                   “(i) considered to be a major rule (as  
 18                   defined in section 804 of title 5, United  
 19                   States Code); and

20                   “(ii) subject to the requirements of  
 21                   chapter 8 of that title.

22           “(d) RATEPAYER PROTECTION.—

23           “(1) DEFINITIONS.—In this subsection:

1           “(A) AFFECTED FACILITY.—The term ‘af-  
 2           fected facility’ means an electric generation fa-  
 3           cility that uses a conventional coal technology.

4           “(B) AUTHORIZED RATE.—The term ‘au-  
 5           thorized rate’ means a rate charged for elec-  
 6           tricity generated by an affected facility that  
 7           is—

8                   “(i) authorized by an appropriate reg-  
 9                   ulatory agency; and

10                   “(ii) based on, or calculated to re-  
 11                   cover, the reasonable capital and operating  
 12                   costs of the generation.

13           “(C) CONVENTIONAL COAL TECH-  
 14           NOLOGY.—The term ‘conventional coal tech-  
 15           nology’ means a technology for the generation  
 16           of electricity that—

17                   “(i) involves the combustion of coal in  
 18                   a boiler; and

19                   “(ii) does not provide for the capture  
 20                   or sequestration of carbon.

21           “(2) PROTECTION.—

22                   “(A) IN GENERAL.—Subject to paragraph  
 23                   (3) and except as provided in subparagraph  
 24                   (B), no owner or lessor of an affected facility  
 25                   who sells, at wholesale or retail, any electricity

generated by the affected facility at an authorized rate shall recover through the authorized rate, in whole or in part, the cost of compliance with any Federal greenhouse gas reduction requirement relating to emissions from the affected facility.

“(B) EXCEPTION.—Subparagraph (A) shall not apply to an owner or lessor of an affected facility if the appropriate regulatory agency determines no feasible alternative exists to the use of conventional coal technology by the affected facility.

“(3) APPLICABILITY.—Paragraph (2)(A) shall apply to an owner or lessor described in that paragraph only if—

“(A) the affected facility enters operation after January 1, 2009; and

“(B) the cost of compliance described in paragraph (2) is incurred after the date of enactment of this title.

**“SEC. 709. MERCURY EMISSION LIMITATIONS.**

“(a) IN GENERAL.—

“(1) REGULATIONS.—

“(A) IN GENERAL.—Not later than 1 year after the date of enactment of this title, the Ad-

1           ministrator shall promulgate regulations to es-  
 2           tablish emission limitations for mercury emis-  
 3           sions by coal-fired electric generation facilities.

4           “(B) NO EXCEEDANCE OF NATIONAL LIM-  
 5           TATION.—The regulations shall ensure that the  
 6           national limitation for mercury emissions from  
 7           each coal-fired electric generation facility estab-  
 8           lished under section 705(a)(4)(A) (and, to the  
 9           maximum extent practicable, the goal described  
 10          in section 705(a)(4)(B)) is not exceeded.

11          “(C) EMISSION LIMITATIONS FOR 2012 AND  
 12          THEREAFTER.—In carrying out subparagraph  
 13          (A), for calendar year 2012 and each calendar  
 14          year thereafter, the Administrator shall not—

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

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

23          “(2) ANNUAL REVIEW AND DETERMINATION.—

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

1 “(i) review the total mercury emis-  
 2 sions during the 2 preceding calendar  
 3 years from electric generation facilities lo-  
 4 cated in all States; and

5 “(ii) determine whether, during the 2  
 6 preceding calendar years, the total mercury  
 7 emissions from facilities described in clause  
 8 (i) exceeded the national limitation for  
 9 mercury emissions established under sec-  
 10 tion 705(a)(4)(A).

11 “(B) EXCEEDANCE OF NATIONAL LIMITA-  
 12 TION.—If the Administrator determines under  
 13 subparagraph (A)(ii) that, during the 2 pre-  
 14 ceding calendar years, the total mercury emis-  
 15 sions from facilities described in subparagraph  
 16 (A)(i) exceeded the national limitation for mer-  
 17 cury emissions established under section  
 18 705(a)(4)(A), the Administrator shall, not later  
 19 than 1 year after the date of the determination,  
 20 revise the regulations promulgated under para-  
 21 graph (1) to reduce the emission rates specified  
 22 in the regulations as necessary to ensure that  
 23 the national limitation for mercury emissions is  
 24 not exceeded in any future year.

25 “(3) COMPLIANCE FLEXIBILITY.—



1           “(A) IN GENERAL.—Each coal-fired elec-  
2           tric generation facility subject to an emission  
3           limitation under this section shall be in compli-  
4           ance with that limitation if that limitation is  
5           greater than or equal to the quotient obtained  
6           by dividing—

7                   “(i) the total mercury emissions of the  
8                   coal-fired electric generation facility during  
9                   each 30-day period; by

10                   “(ii) the quantity of electricity gen-  
11                   erated by the coal-fired electric generation  
12                   facility during that period.

13           “(B) MORE THAN 1 UNIT AT A FACIL-  
14           ITY.—In any case in which more than 1 coal-  
15           fired electricity generating unit at a coal-fired  
16           electric generation facility subject to an emis-  
17           sion limitation under this section was operated  
18           in 1999 under common ownership or control,  
19           compliance with the emission limitation may be  
20           determined by averaging the emission rates of  
21           all coal-fired electricity generating units at the  
22           electric generation facility during each 30-day  
23           period.

24           “(b) PREVENTION OF RE-RELEASE.—

1           “(1) REGULATIONS.—Not later than July 1,  
2           2008, the Administrator shall promulgate regula-  
3           tions to ensure that any mercury captured or recov-  
4           ered by emission controls installed at an electric gen-  
5           eration facility is not re-released into the environ-  
6           ment.

7           “(2) REQUIRED ELEMENTS.—The regulations  
8           shall require—

9                   “(A) daily covers on all active waste dis-  
10                  posal units, and permanent covers on all inac-  
11                  tive waste disposal units, to prevent the release  
12                  of mercury into the air;

13                  “(B) monitoring of groundwater to ensure  
14                  that mercury or mercury compounds do not mi-  
15                  grate from the waste disposal unit;

16                  “(C) waste disposal siting requirements  
17                  and cleanup requirements to protect ground-  
18                  water and surface water resources;

19                  “(D) elimination of agricultural application  
20                  of coal combustion wastes; and

21                  “(E) appropriate limitations on mercury  
22                  emissions from sources or processes that re-  
23                  process or use coal combustion waste, including  
24                  manufacturers of wallboard and cement.

1       “(c) NEW AFFECTED UNIT LIMITATION.—An af-  
 2 fected unit that enters operation on or after the date of  
 3 enactment of this title shall achieve, on an annual average  
 4 basis, a mercury emission rate of not more than 2.48  
 5 grams of mercury per 1,000 megawatt hours, regardless  
 6 of the type of coal used at the affected unit.

7       **“SEC. 710. OTHER HAZARDOUS AIR POLLUTANTS.**

8       “(a) IN GENERAL.—Not later than January 1, 2008,  
 9 the Administrator shall issue to owners and operators of  
 10 coal-fired electric generation facilities requests for infor-  
 11 mation under section 114 that are of sufficient scope to  
 12 generate data sufficient to support issuance of standards  
 13 under section 112(d) for hazardous air pollutants other  
 14 than mercury emitted by coal-fired electric generation fa-  
 15 cilities.

16       “(b) DEADLINE FOR SUBMISSION OF REQUESTED  
 17 INFORMATION.—The Administrator shall require each re-  
 18 cipient of a request for information described in subsection  
 19 (a) to submit the requested data not later than 180 days  
 20 after the date of the request.

21       “(c) PROMULGATION OF EMISSION STANDARDS.—  
 22 The Administrator shall—

23               “(1) not later than January 1, 2008, propose  
 24 emission standards under section 112(d) for haz-  
 25 ardous air pollutants other than mercury; and

1           “(2) not later than January 1, 2009, promul-  
2           gate emission standards under section 112(d) for  
3           hazardous air pollutants other than mercury.

4           “(d) PROHIBITION ON EXCESS EMISSIONS.—It shall  
5           be unlawful for an electric generation facility subject to  
6           standards for hazardous air pollutants other than mercury  
7           promulgated under subsection (c) to emit, after December  
8           31, 2010, any such pollutant in excess of the standards.

9           “(e) EFFECT ON OTHER LAW.—Nothing in this sec-  
10          tion or section 709 affects any requirement of subsection  
11          (e), (f)(2), or (n)(1)(A) of section 112, except that the  
12          emission limitations established by regulations promul-  
13          gated under this section shall be deemed to represent the  
14          maximum achievable control technology for mercury emis-  
15          sions from electricity generating units under section  
16          112(d).

17       **“SEC. 711. EMISSION STANDARDS FOR AFFECTED UNITS.**

18           “(a) DEFINITION OF AFFECTED UNIT.—In this sub-  
19          section, the term ‘affected unit’ means a unit that—

20                   “(1) is designed and intended to provide elec-  
21                   tricity at a unit capacity factor of at least 60 per-  
22                   cent; and

23                   “(2) begins operation after December 31, 2011.

24           “(b) INITIAL STANDARD.—

1           “(1) IN GENERAL.—Not later than 2 years  
2           after the date of enactment of this title, the Admin-  
3           istrator shall promulgate regulations requiring each  
4           affected unit to meet the standard described in para-  
5           graph (2).

6           “(2) STANDARD.—Beginning on December 31,  
7           2015, an affected unit shall meet a global warming  
8           pollution emission standard that is not higher than  
9           the emission rate of a new combined cycle natural  
10          gas generating unit.

11          “(3) MORE STRINGENT REQUIREMENTS.—For  
12          the period beginning on January 1 of the calendar  
13          year following the effective date of the regulations  
14          promulgated pursuant to paragraph (1) and ending  
15          on December 31, 2029, the Administrator may in-  
16          crease the stringency of the global warming pollution  
17          emission standard described in paragraph (2) with  
18          respect to affected units as the Administrator deter-  
19          mines to be appropriate to ensure a reduction in the  
20          emission rate of global warming pollutants of at  
21          least 90 percent from each affected unit.

22          “(c) FINAL STANDARD.—Not later than December  
23          31, 2030, the Administrator shall require each unit that  
24          is designed and intended to provide electricity at a unit  
25          capacity factor of at least 60 percent, regardless of the

1 date on which the unit entered operation, to meet the ap-  
 2 plicable emission standard under subsection (b).

3 “(d) ADJUSTMENT OF REQUIREMENTS.—If the  
 4 Academy determines, pursuant to section 705(e), that a  
 5 requirement of this section is or will be technologically in-  
 6 feasible at the time at which the requirement becomes ef-  
 7 fective, the Administrator, by regulation, may adjust or  
 8 delay the effective date of the requirement as the Adminis-  
 9 trator determines to be necessary, taking into consider-  
 10 ation the determination of the Academy.

11 **“SEC. 712. LOW-CARBON GENERATION REQUIREMENT.**

12 “(a) DEFINITIONS.—In this section:

13 “(1) BASE QUANTITY OF ELECTRICITY.—The  
 14 term ‘base quantity of electricity’ means the total  
 15 quantity of electricity produced for sale by a covered  
 16 generator during the calendar year immediately pre-  
 17 ceding a compliance year from—

18 “(A) coal;

19 “(B) petroleum coke;

20 “(C) lignite; or

21 “(D) any combination of the fuels de-  
 22 scribed in subparagraphs (A) through (C).

23 “(2) COVERED GENERATOR.—The term ‘cov-  
 24 ered generator’ means an electric generation facility  
 25 that—

1                   “(A) has a rated capacity of 25 megawatts  
2                   or more; and

3                   “(B) has an annual fuel input at least 50  
4                   percent of which is provided by—

5                           “(i) coal;

6                           “(ii) petroleum coke;

7                           “(iii) lignite; or

8                           “(iv) any combination of the fuels de-  
9                   scribed in clauses (i) through (iii).

10                   “(3) LOW-CARBON GENERATION.—The term  
11                   ‘low-carbon generation’ means electric energy gen-  
12                   erated from an electric generation facility at least 50  
13                   percent of the annual fuel input of which, in any  
14                   year—

15                           “(A) is provided by—

16                                   “(i) coal;

17                                   “(ii) petroleum coke;

18                                   “(iii) lignite; or

19                                   “(iv) any combination of the fuels de-  
20                   scribed in clauses (i) through (iii); and

21                           “(B) results in an emission rate into the  
22                   atmosphere of not more than 250 pounds of  
23                   carbon dioxide per megawatt-hour (after adjust-  
24                   ment for any carbon dioxide emitted from the  
25                   electric generation facility that is geologically

1 sequestered in a geological repository approved  
 2 by the Administrator pursuant to section 713).

3 “(4) PROGRAM.—The term ‘program’ means  
 4 the low-carbon generation credit trading program es-  
 5 tablished under subsection (d)(1).

6 “(b) REQUIREMENT.—

7 “(1) CALENDAR YEARS 2015 THROUGH 2020.—  
 8 Of the base quantity of electricity produced for sale  
 9 by a covered generator for a calendar year, the cov-  
 10 ered generator shall provide a minimum percentage  
 11 of that base quantity of electricity for the calendar  
 12 year from low-carbon generation, as specified in the  
 13 following table:

“Calendar year:	Minimum annual percentage:
2015 .....	0.5
2016 .....	1.0
2017 .....	2.0
2018 .....	3.0
2019 .....	4.0
2020 .....	5.0

14 “(2) CALENDAR YEARS 2021 THROUGH 2025.—  
 15 For each of calendar years 2021 through 2025, the  
 16 Administrator may increase the minimum percent-  
 17 age of the base quantity of electricity from low-car-  
 18 bon generation described in paragraph (1) by not  
 19 more than 2 percentage points from the preceding  
 20 year, as the Administrator determines to be nec-



1        necessary to achieve the emission reduction goal de-  
2        scribed in section 705(a)(3).

3                “(3) CALENDAR YEARS 2026 THROUGH 2030.—

4        For each of calendar years 2026 through 2030, the  
5        Administrator may increase the minimum percent-  
6        age of the base quantity of electricity from low-car-  
7        bon generation described in paragraph (1) by not  
8        more than 3 percentage points from the preceding  
9        year, as the Administrator determines to be nec-  
10       essary to achieve the emission reduction goal de-  
11       scribed in section 705(a)(3).

12       “(c) MEANS OF COMPLIANCE.—An owner or operator  
13 of a covered generator shall comply with subsection (b)  
14 by—

15               “(1) generating electric energy using low-carbon  
16       generation;

17               “(2) purchasing electric energy generated by  
18       low-carbon generation;

19               “(3) purchasing low-carbon generation credits  
20       issued under the program; or

21               “(4) any combination of the actions described  
22       in paragraphs (1) through (3).

23       “(d) LOW-CARBON GENERATION CREDIT TRADING  
24 PROGRAM.—

1           “(1) IN GENERAL.—Not later than January 1,  
2           2008, the Administrator shall establish, by regula-  
3           tion, after notice and opportunity for comment, a  
4           low-carbon generation trading program to permit an  
5           owner or operator of a covered generator that does  
6           not generate or purchase enough electric energy  
7           from low-carbon generation to comply with sub-  
8           section (b) to achieve that compliance by purchasing  
9           sufficient low-carbon generation credits.

10           “(2) REQUIREMENTS.—In carrying out the pro-  
11           gram, the Administrator shall—

12                   “(A) issue to producers of low-carbon gen-  
13                   eration, on a quarterly basis, a single low-car-  
14                   bon generation credit for each kilowatt hour of  
15                   low-carbon generation sold during the preceding  
16                   quarter; and

17                   “(B) ensure that a kilowatt hour, including  
18                   the associated low-carbon generation credit,  
19                   shall be used only once for purposes of compli-  
20                   ance with subsection (b).

21           “(e) ENFORCEMENT.—An owner or operator of a cov-  
22           ered generator that fails to comply with subsection (b)  
23           shall be subject to a civil penalty in an amount equal to  
24           the product obtained by multiplying—

1           “(1) the number of kilowatt-hours of electric  
2           energy sold to electric consumers in violation of sub-  
3           section (b); and

4           “(2) the greater of—

5                   “(A) 2.5 cents (as adjusted under sub-  
6                   section (g)); or

7                   “(B) 200 percent of the average market  
8                   value of those low-carbon generation credits  
9                   during the year in which the violation occurred.

10          “(f) EXEMPTION.—This section shall not apply, for  
11          any calendar year, to an owner or operator of a covered  
12          generator that sold less than 40,000 megawatt-hours of  
13          electric energy produced from covered generators during  
14          the preceding calendar year.

15          “(g) INFLATION ADJUSTMENT.—Not later than De-  
16          cember 31, 2008, and annually thereafter, the Adminis-  
17          trator shall adjust the amount of the civil penalty for each  
18          kilowatt-hour calculated under subsection (e)(2) to reflect  
19          changes for the 12-month period ending on the preceding  
20          November 30 in the Consumer Price Index for All Urban  
21          Consumers published by the Bureau of Labor Statistics  
22          of the Department of Labor.

23          “(h) TECHNOLOGICAL INFEASIBILITY.—If the Acad-  
24          emy determines, pursuant to section 705(e), that the  
25          schedule for compliance described in subsection (b) is or

1 will be technologically infeasible for covered generators to  
 2 meet, the Administrator, by regulation, may adjust the  
 3 schedule as the Administrator determines to be necessary,  
 4 taking into consideration the determination of the Acad-  
 5 emy.

6 “(i) TERMINATION OF AUTHORITY.—This section  
 7 and the authority provided by this section shall terminate  
 8 on December 31, 2030.

9 **“SEC. 713. GEOLOGICAL DISPOSAL OF GLOBAL WARMING**  
 10 **POLLUTANTS.**

11 “(a) GEOLOGICAL CARBON DIOXIDE DISPOSAL DE-  
 12 PLOYMENT PROJECTS.—

13 “(1) IN GENERAL.—The Administrator shall es-  
 14 tablish a competitive grant program to provide  
 15 grants to 5 entities for the deployment of projects to  
 16 geologically dispose of carbon dioxide (referred to in  
 17 this subsection as ‘geological disposal deployment  
 18 projects’).

19 “(2) LOCATION.—Each geological disposal de-  
 20 ployment project shall be conducted in a geologically  
 21 distinct location in order to demonstrate the suit-  
 22 ability of a variety of geological structures for car-  
 23 bon dioxide disposal.

24 “(3) COMPONENTS.—Each geological disposal  
 25 deployment project shall include an analysis of—

1           “(A) mechanisms for trapping the carbon  
2 dioxide to be geologically disposed;

3           “(B) techniques for monitoring the geologi-  
4 cally disposed carbon dioxide;

5           “(C) public response to the geological dis-  
6 posal deployment project; and

7           “(D) the permanency of carbon dioxide  
8 storage in geological reservoirs.

9           “(4) REQUIREMENTS.—

10           “(A) IN GENERAL.—Not later than 2 years  
11 after the date of enactment of this title, the Ad-  
12 ministrator shall establish—

13           “(i) appropriate conditions for envi-  
14 ronmental protection with respect to geo-  
15 logical disposal deployment projects to pro-  
16 tect public health and the environment, in-  
17 cluding—

18           “(I) site characterization and se-  
19 lection;

20           “(II) geomechanical, geochemical,  
21 and hydrogeological simulation;

22           “(III) risk assessment;

23           “(IV) mitigation and remediation  
24 protocols;

1 “(V) the issuance of permits for  
2 test, injection, and monitoring wells;

3 “(VI) specifications for the drill-  
4 ing, construction, and maintenance of  
5 wells;

6 “(VII) ownership of subsurface  
7 rights and pore space;

8 “(VIII) transportation pipeline  
9 specifications;

10 “(IX) the allowed composition of  
11 injected matter;

12 “(X) testing, monitoring, meas-  
13 urement, and verification for the en-  
14 tire chain of operations, beginning  
15 with the point of capture of carbon di-  
16 oxide to a storage site;

17 “(XI) closure and decommis-  
18 sioning procedures;

19 “(XII) transportation pipeline  
20 siting; and

21 “(XIII) short- and long-term  
22 legal responsibility and indemnifica-  
23 tion procedures for storage sites; and

24 “(ii) requirements relating to applica-  
25 tions for grants under this subsection.

1           “(B) RULEMAKING.—The establishment of  
2 requirements under subparagraph (A) shall not  
3 require a rulemaking.

4           “(C) MINIMUM REQUIREMENTS.—At a  
5 minimum, each application for a grant under  
6 this subsection shall include—

7               “(i) a description of the geological dis-  
8 posal deployment project proposed in the  
9 application;

10              “(ii) an estimate of the quantity of  
11 carbon dioxide to be geologically disposed  
12 over the life of the geological disposal de-  
13 ployment project; and

14              “(iii) a plan to collect and disseminate  
15 data relating to each geological disposal  
16 deployment project to be funded by the  
17 grant.

18           “(5) PARTNERS.—An applicant for a grant  
19 under this subsection may carry out a geological dis-  
20 posal deployment project under a pilot program in  
21 partnership with 1 or more public or private entities.

22           “(6) SELECTION CRITERIA.—In evaluating ap-  
23 plications under this subsection, the Administrator  
24 shall—

1           “(A) consider the previous experience of  
2 each applicant with similar projects; and

3           “(B) give priority consideration to applica-  
4 tions for geological disposal deployment projects  
5 that—

6               “(i) offer the greatest geological diver-  
7 sity, as compared to other geological dis-  
8 posal deployment projects that received  
9 grants under this subsection;

10              “(ii) are located in closest proximity  
11 to a source of carbon dioxide;

12              “(iii) make use of the most affordable  
13 source of carbon dioxide;

14              “(iv) are expected to geologically dis-  
15 pose of—

16                   “(I) the largest quantity of car-  
17 bon dioxide; and

18                   “(II) a minimum quantity of  
19 1,000,000 tons of carbon dioxide for  
20 each project carried out as part of the  
21 demonstration project;

22              “(v) are combined with demonstra-  
23 tions of advanced coal electricity genera-  
24 tion technologies;



1 “(vi) demonstrate the greatest com-  
 2 mitment on the part of the applicant to en-  
 3 sure funding for the proposed demonstra-  
 4 tion project and the greatest likelihood  
 5 that the demonstration project will be  
 6 maintained or expanded after Federal as-  
 7 sistance under this subsection is com-  
 8 pleted; and

9 “(vii) minimize any adverse environ-  
 10 mental effects from the project.

11 “(7) PERIOD OF GRANTS.—

12 “(A) IN GENERAL.—A geological disposal  
 13 deployment project funded by a grant under  
 14 this subsection shall begin construction not  
 15 later than 3 years after the date on which the  
 16 grant is provided.

17 “(B) TERM.—The Administrator shall not  
 18 provide grant funds to any applicant under this  
 19 subsection for a period of more than 5 years.

20 “(8) TRANSFER OF INFORMATION AND KNOWL-  
 21 EDGE.—The Administrator shall establish mecha-  
 22 nisms to ensure that the information and knowledge  
 23 gained by participants in the program are published  
 24 and disseminated, including to other applicants that

1 submitted applications for a grant under this sub-  
2 section.

3 “(9) SCHEDULE.—

4 “(A) PUBLICATION.—Not later than 180  
5 days after the date of enactment of this title,  
6 the Administrator shall publish in the Federal  
7 Register, and elsewhere as appropriate, a re-  
8 quest for applications to carry out geological  
9 disposal deployment projects.

10 “(B) DATE FOR APPLICATIONS.—An appli-  
11 cation for a grant under this subsection shall be  
12 submitted not later than 180 days after the  
13 date of publication of the request under sub-  
14 paragraph (A).

15 “(C) SELECTION.—After the date by which  
16 applications for grants are required to be sub-  
17 mitted under subparagraph (B), the Adminis-  
18 trator, in a timely manner, shall select, after  
19 peer review and based on the criteria under  
20 paragraph (6), those geological disposal deploy-  
21 ment projects to be provided a grant under this  
22 subsection.

23 “(b) INTERIM STANDARDS.—Not later than 3 years  
24 after the date of enactment of this title, the Administrator,  
25 in consultation with the Secretary of Energy, shall, by reg-

1 ulation, establish interim geological carbon dioxide dis-  
2 posal standards that address—

3 “(1) site selection;

4 “(2) permitting processes;

5 “(3) monitoring requirements;

6 “(4) public participation; and

7 “(5) such other issues as the Administrator and  
8 the Secretary of Energy determine to be appro-  
9 priate.

10 “(c) FINAL STANDARDS.—Not later than 6 years  
11 after the date of enactment of this title, taking into consid-  
12 eration the results of geological disposal deployment  
13 projects carried out under subsection (a), the Adminis-  
14 trator, by regulation, shall establish final geological carbon  
15 dioxide disposal standards.

16 “(d) CONSIDERATIONS.—In developing standards  
17 under subsections (b) and (c), the Administrator shall con-  
18 sider the experience in the United States in regulating—

19 “(1) underground injection of waste;

20 “(2) enhanced oil recovery;

21 “(3) short-term storage of natural gas; and

22 “(4) long-term waste storage.

23 “(e) TERMINATION OF AUTHORITY.—This section  
24 and the authority provided by this section shall terminate  
25 on December 31, 2030.

1 **“SEC. 714. ENERGY EFFICIENCY PERFORMANCE STAND-**  
2 **ARD.**

3 “(a) DEFINITIONS.—In this section:

4 “(1) ELECTRICITY SAVINGS.—

5 “(A) IN GENERAL.—The term ‘electricity  
6 savings’ means reductions in end-use electricity  
7 consumption relative to consumption by the  
8 same customer or at the same new or existing  
9 facility in a given year, as defined in regula-  
10 tions promulgated by the Administrator under  
11 subsection (e).

12 “(B) INCLUSIONS.—The term ‘electricity  
13 savings’ includes savings achieved as a result  
14 of—

15 “(i) installation of energy-saving tech-  
16 nologies and devices; and

17 “(ii) the use of combined heat and  
18 power systems, fuel cells, or any other  
19 technology identified by the Administrator  
20 that recaptures or generates energy solely  
21 for onsite customer use.

22 “(C) EXCLUSION.—The term ‘electricity  
23 savings’ does not include savings from measures  
24 that would likely be adopted in the absence of  
25 energy-efficiency programs, as determined by  
26 the Administrator.

1           “(2) RETAIL ELECTRICITY SALES.—The term  
 2           ‘retail electricity sales’ means the total quantity of  
 3           electric energy sold by a retail electricity supplier to  
 4           retail customers during the most recent calendar  
 5           year for which that information is available.

6           “(3) RETAIL ELECTRICITY SUPPLIER.—The  
 7           term ‘retail electricity supplier’ means a distribution  
 8           or integrated utility, or an independent company or  
 9           entity, that sells electric energy to consumers.

10          “(b) ENERGY EFFICIENCY PERFORMANCE STAND-  
 11          ARD.—Each retail electricity supplier shall implement pro-  
 12          grams and measures to achieve improvements in energy  
 13          efficiency and peak load reduction, as verified by the Ad-  
 14          ministrators.

15          “(c) TARGETS.—For calendar year 2008 and each  
 16          calendar year thereafter, the Administrator shall ensure  
 17          that retail electric suppliers annually achieve electricity  
 18          savings and reduce peak power demand and electricity use  
 19          by retail customers by a percentage that is not less than  
 20          the applicable target percentage specified in the following  
 21          table:

Calendar Year	Reduction in peak de- mand	Reduction in electricity use
2008 .....	.25 percent .....	.25 percent
2009 .....	.75 percent .....	.75 percent
2010 .....	1.75 percent .....	1.5 percent
2011 .....	2.75 percent .....	2.25 percent
2012 .....	3.75 percent .....	3.0 percent
2013 .....	4.75 percent .....	3.75 percent
2014 .....	5.75 percent .....	4.5 percent

Calendar Year	Reduction in peak demand	Reduction in electricity use
2015 .....	6.75 percent .....	5.25 percent
2016 .....	7.75 percent .....	6.0 percent
2017 .....	8.75 percent .....	6.75 percent
2018 .....	9.75 percent .....	7.5 percent
2019 .....	10.75 percent .....	8.25 percent
2020 and each calendar year thereafter.	11.75 percent .....	9.0 percent

1       “(d) BEGINNING DATE.—For the purpose of meeting  
2 the targets established under subsection (c), electricity  
3 savings shall be calculated based on the sum of—

4               “(1) electricity savings realized as a result of  
5 actions taken by the retail electric supplier during  
6 the specified calendar year; and

7               “(2) cumulative electricity savings realized as a  
8 result of electricity savings achieved in all preceding  
9 calendar years (beginning with calendar year 2006).

10       “(e) IMPLEMENTING REGULATIONS.—

11               “(1) IN GENERAL.—Not later than 1 year after  
12 the date of enactment of this title, the Administrator  
13 shall promulgate regulations to implement the tar-  
14 gets established under subsection (c).

15               “(2) REQUIREMENTS.—The regulations shall  
16 establish—

17                       “(A) a national credit system permitting  
18 credits to be awarded, bought, sold, or traded  
19 by and among retail electricity suppliers;

20                       “(B) a fee equivalent to not less than 4  
21 cents per kilowatt hour for retail energy sup-

1           pliers that do not meet the targets established  
2           under subsection (c); and

3           “(C) standards for monitoring and  
4           verification of electricity use and demand sav-  
5           ings reported by the retail electricity suppliers.

6           “(3) CONSIDERATION OF TRANSMISSION AND  
7           DISTRIBUTION EFFICIENCY.—In developing regula-  
8           tions under this subsection, the Administrator shall  
9           consider whether electricity savings, in whole or  
10          part, achieved by retail electricity suppliers by im-  
11          proving the efficiency of electric distribution and use  
12          should be eligible for credits established under this  
13          section.

14          “(f) COMPLIANCE WITH STATE LAW.—Nothing in  
15          this section supersedes or otherwise affects any State or  
16          local law requiring, or otherwise relating to, reductions in  
17          total annual electricity consumption or peak power con-  
18          sumption by electric consumers to the extent that the  
19          State or local law requires more stringent reductions than  
20          the reductions required under this section.

21          “(g) VOLUNTARY PARTICIPATION.—The Adminis-  
22          trator may—

23                 “(1) pursuant to the regulations promulgated  
24                 under subsection (e)(1), issue a credit to any entity

1       that is not a retail electric supplier if the entity im-  
 2       plements electricity savings; and

3               “(2) in a case in which an entity described in  
 4       paragraph (1) is a nonprofit or educational organi-  
 5       zation, provide to the entity 1 or more grants in lieu  
 6       of a credit.

7   **“SEC. 715. RENEWABLE PORTFOLIO STANDARD.**

8       “(a) RENEWABLE ENERGY.—

9               “(1) IN GENERAL.—The Administrator, in con-  
 10      sultation with the Secretary of Energy, shall promul-  
 11      gate regulations defining the types and sources of  
 12      renewable energy generation that may be carried out  
 13      in accordance with this section.

14              “(2) INCLUSIONS.—In promulgating regulations  
 15      under paragraph (1), the Administrator shall include  
 16      of all types of renewable energy (as defined in sec-  
 17      tion 203(b) of the Energy Policy Act of 2005 (42  
 18      U.S.C. 15852(b))) other than energy generated  
 19      from—

20                      “(A) municipal solid waste;

21                      “(B) wood contaminated with plastics or  
 22                      metals; or

23                      “(C) tires.

24       “(b) RENEWABLE ENERGY REQUIREMENT.—Of the  
 25      base quantity of electricity sold by each retail electric sup-



plier to electric consumers during a calendar year, the quantity generated by renewable energy sources shall be not less than the following percentages:

<b>“Calendar year:</b>	<b>Minimum annual percentage:</b>
2008 through 2009 .....	5
2010 through 2014 .....	10
2015 through 2019 .....	15
2020 and subsequent years .....	20

“(c) RENEWABLE ENERGY CREDIT PROGRAM.—Not later than 1 year after the date of enactment of this title, the Administrator shall establish—

“(1) a program to issue, establish the value of, monitor the sale or exchange of, and track renewable energy credits; and

“(2) penalties for any retail electric supplier that does not comply with this section.

“(d) PROHIBITION ON DOUBLE COUNTING.—A renewable energy credit issued under subsection (c)—

“(1) may be counted toward meeting the requirements of subsection (b) only once; and

“(2) shall vest with the owner of the system or facility that generates the renewable energy that is covered by the renewable energy credit, unless the owner explicitly transfers the renewable energy credit.

“(e) SALE UNDER PURPA CONTRACT.—If the Administrator, after consultation with the Secretary of En-

1 ergy, determines that a renewable energy generator is sell-  
 2 ing electricity to comply with this section to a retail elec-  
 3 tric supplier under a contract subject to section 210 of  
 4 the Public Utilities Regulatory Policies Act of 1978 (16  
 5 U.S.C. 824a-3), the retail electric supplier shall be treated  
 6 as the generator of the electric energy for the purposes  
 7 of this title for the duration of the contract.

8       “(f) STATE PROGRAMS.—Nothing in this section pre-  
 9 cludes any State from requiring additional renewable en-  
 10 ergy generation under any State renewable energy pro-  
 11 gram.

12       “(g) VOLUNTARY PARTICIPATION.—The Adminis-  
 13 trator may issue a renewable energy credit pursuant to  
 14 subsection (c) to any entity that is not subject to this sec-  
 15 tion only if the entity applying for the renewable energy  
 16 credit meets the terms and conditions of this section to  
 17 the same extent as retail electric suppliers subject to this  
 18 section.

19 **“SEC. 716. STANDARDS TO ACCOUNT FOR BIOLOGICAL SE-**  
 20 **QUESTRATION OF CARBON.**

21       “(a) IN GENERAL.—Not later than 2 years after the  
 22 date of enactment of title, the Secretary of Agriculture,  
 23 with the concurrence of the Administrator, shall establish  
 24 standards for accrediting certified reductions in the emis-

1 sion of carbon dioxide through above-ground and below-  
 2 ground biological sequestration activities.

3 “(b) REQUIREMENTS.—The standards shall in-  
 4 clude—

5 “(1) a national biological carbon storage base-  
 6 line or inventory; and

7 “(2) measurement, monitoring, and verification  
 8 guidelines based on—

9 “(A) measurement of increases in carbon  
 10 storage in excess of the carbon storage that  
 11 would have occurred in the absence of a new  
 12 management practice designed to achieve bio-  
 13 logical sequestration of carbon;

14 “(B) comprehensive carbon accounting  
 15 that—

16 “(i) reflects sustained net increases in  
 17 carbon reservoirs; and

18 “(ii) takes into account any carbon  
 19 emissions resulting from disturbance of  
 20 carbon reservoirs in existence as of the  
 21 date of commencement of any new man-  
 22 agement practice designed to achieve bio-  
 23 logical sequestration of carbon;

24 “(C) adjustments to account for—

1 “(i) emissions of carbon that may re-  
 2 sult at other locations as a result of the  
 3 impact of the new biological sequestration  
 4 management practice on timber supplies;  
 5 or

6 “(ii) potential displacement of carbon  
 7 emissions to other land owned by the enti-  
 8 ty that carries out the new biological se-  
 9 questration management practice; and

10 “(D) adjustments to reflect the expected  
 11 carbon storage over various time periods, taking  
 12 into account the likely duration of the storage  
 13 of carbon in a biological reservoir.

14 “(c) UPDATING OF STANDARDS.—Not later than 3  
 15 years after the date of establishment of the standards  
 16 under subsection (a), and every 3 years thereafter, the  
 17 Secretary of Agriculture shall update the standards to  
 18 take into consideration the most recent scientific informa-  
 19 tion.

20 **“SEC. 717. EFFECT OF FAILURE TO PROMULGATE REGULA-**  
 21 **TIONS.**

22 “If the Administrator fails to promulgate regulations  
 23 to implement and enforce the limitations specified in sec-  
 24 tion 705—

1           “(1)(A) each electric generation facility shall  
2 achieve, not later than January 1, 2010, an annual  
3 quantity of emissions that is less than or equal to—

4           “(i) in the case of nitrogen oxides, 15 per-  
5 cent of the annual emissions by a similar elec-  
6 tric generation facility that has no controls for  
7 emissions of nitrogen oxides; and

8           “(ii) in the case of global warming pollut-  
9 ants, 75 percent of the annual emissions by a  
10 similar electric generation facility that has no  
11 controls for emissions of global warming pollut-  
12 ants; and

13          “(B) each electric generation facility that does  
14 not use natural gas as the primary combustion fuel  
15 shall achieve, not later than January 1, 2010, an an-  
16 nual quantity of emissions that is less than or equal  
17 to—

18          “(i) in the case of sulfur dioxide, 5 percent  
19 of the annual emissions by a similar electric  
20 generation facility that has no controls for  
21 emissions of sulfur dioxide; and

22          “(ii) in the case of mercury, 10 percent of  
23 the annual emissions by a similar electric gen-  
24 eration facility that has no controls included

1 specifically for the purpose of controlling emis-  
2 sions of mercury; and

3 “(2) the applicable permit under this Act for  
4 each electric generation facility shall be deemed to  
5 incorporate a requirement for achievement of the re-  
6 duced levels of emissions specified in paragraph (1).

7 **“SEC. 718. PROHIBITIONS.**

8 “It shall be unlawful—

9 “(1) for the owner or operator of any electric  
10 generation facility—

11 “(A) to operate the electric generation fa-  
12 cility in noncompliance with the requirements of  
13 this title (including any regulations imple-  
14 menting this title);

15 “(B) to fail to submit by the required date  
16 any emission allowances, or pay any penalty, for  
17 which the owner or operator is liable under sec-  
18 tion 706;

19 “(C) to fail to provide and comply with any  
20 plan to offset excess emissions required under  
21 section 706(f); or

22 “(D) to emit mercury in excess of the  
23 emission limitations established under section  
24 709; or

1           “(2) for any person to hold, use, or transfer  
2           any emission allowance allocated under this title ex-  
3           cept in accordance with regulations promulgated by  
4           the Administrator.

5   **“SEC. 719. MODERNIZATION OF ELECTRIC GENERATION FA-**  
6                           **CILITIES.**

7           “(a) IN GENERAL.—Beginning on the later of Janu-  
8           ary 1, 2015, or the date that is 40 years after the date  
9           on which the electric generation facility commences oper-  
10          ation, each electric generation facility shall be subject to  
11          emission limitations reflecting the application of best  
12          available control technology on a new major source of a  
13          similar size and type (as determined by the Administrator)  
14          as determined in accordance with the procedures specified  
15          in part C of title I.

16          “(b) ADDITIONAL REQUIREMENTS.—The require-  
17          ments of this section shall be in addition to the other re-  
18          quirements of this title.

19   **“SEC. 720. PARAMOUNT INTEREST WAIVER.**

20          “(a) IN GENERAL.—If the President determines that  
21          a national security emergency exists and, in light of infor-  
22          mation that was not available as of the date of enactment  
23          of this title, that it is in the paramount interest of the  
24          United States to modify any requirement under this title  
25          to minimize the effects of the emergency, the President,

1 after opportunity for notice and public comment, may tem-  
 2 porarily adjust, suspend, or waive any regulation promul-  
 3 gated pursuant to this title to achieve that minimization.

4 “(b) CONSULTATION.—In making an emergency de-  
 5 termination under subsection (a), the President, to the  
 6 maximum extent practicable, shall consult with and take  
 7 into consideration any advice received from—

8 “(1) the Academy;

9 “(2) the Secretary of Energy; or

10 “(3) the Administrator.

11 “(c) JUDICIAL REVIEW.—An emergency determina-  
 12 tion under subsection (a) shall be subject to judicial review  
 13 under section 307.

14 **“SEC. 721. RELATIONSHIP TO OTHER LAW.**

15 “(a) IN GENERAL.—Except as expressly provided in  
 16 this title, nothing in this title—

17 “(1) limits or otherwise affects the application  
 18 of any other provision of this Act; or

19 “(2) precludes a State from adopting and en-  
 20 forcing any requirement for the control of emissions  
 21 of air pollutants that is more stringent than the re-  
 22 quirements imposed under this title.

23 “(b) REGIONAL SEASONAL EMISSION CONTROLS.—  
 24 Nothing in this title affects any regional seasonal emission



1 control for nitrogen oxides established by the Adminis-  
 2 trator or a State under title I.”.

3 (b) CONFORMING AMENDMENT.—Section 412(a) of  
 4 the Clean Air Act (42 U.S.C. 7651k(a)) is amended in  
 5 the first sentence by striking “opacity” and inserting  
 6 “mercury, opacity,”.

7 **SEC. 3. SAVINGS CLAUSE.**

8 Section 193 of the Clean Air Act (42 U.S.C. 7515)  
 9 is amended by striking “date of the enactment of the  
 10 Clean Air Act Amendments of 1990” each place it appears  
 11 and inserting “date of enactment of the Clean Power Act  
 12 of 2007”.

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

14 Section 103(j) of the Clean Air Act (42 U.S.C.  
 15 7403(j)) is amended—

16 (1) in paragraph (3)—

17 (A) in subparagraph (F)(i), by striking  
 18 “effects; and” and inserting “effects, including  
 19 an assessment of—

20 “(I) acid-neutralizing capacity;

21 and

22 “(II) changes in the number of  
 23 water bodies in the sensitive eco-  
 24 systems referred to in subparagraph

1 (G)(ii) with an acid-neutralizing ca-  
 2 pacity greater than zero; and”;

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

4 “(G) SENSITIVE ECOSYSTEMS.—

5 “(i) IN GENERAL.—Beginning in  
 6 2008, and every 4 years thereafter, the re-  
 7 port under subparagraph (E) shall in-  
 8 clude—

9 “(I) an identification of environ-  
 10 mental objectives necessary to be  
 11 achieved (and related indicators to be  
 12 used in measuring achievement of the  
 13 objectives) to adequately protect and  
 14 restore sensitive ecosystems; and

15 “(II) an assessment of the status  
 16 and trends of the environmental objec-  
 17 tives and indicators identified in pre-  
 18 ceding reports under this paragraph.

19 “(ii) SENSITIVE ECOSYSTEMS TO BE  
 20 ADDRESSED.—Sensitive ecosystems to be  
 21 addressed under clause (i) include—

22 “(I) the Adirondack Mountains,  
 23 mid-Appalachian Mountains, Rocky  
 24 Mountains, and southern Blue Ridge  
 25 Mountains;

1                   “(II) the Great Lakes, Lake  
2                   Champlain, Long Island Sound, and  
3                   the Chesapeake Bay; and

4                   “(III) other sensitive ecosystems,  
5                   as determined by the Administrator.

6                   “(H) ACID DEPOSITION STANDARDS.—Be-  
7                   ginning in 2008, and every 4 years thereafter,  
8                   the report under subparagraph (E) shall include  
9                   a revision of the report under section 404 of  
10                  Public Law 101–549 (42 U.S.C. 7651 note)  
11                  that includes a reassessment of the health and  
12                  chemistry of the lakes and streams that were  
13                  subjects of the original report under that sec-  
14                  tion.”; and

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

16                  “(4) PROTECTION OF SENSITIVE ECO-  
17                  SYSTEMS.—

18                  “(A) DETERMINATION.—Not later than  
19                  December 31, 2014, the Administrator, taking  
20                  into consideration the findings and rec-  
21                  ommendations of the report revisions under  
22                  paragraph (3)(H), shall determine whether  
23                  emission reductions under titles IV and VII are  
24                  sufficient to—

1 “(i) achieve the necessary reductions  
2 identified under paragraph (3)(F); and

3 “(ii) ensure achievement of the envi-  
4 ronmental objectives identified under para-  
5 graph (3)(G).

6 “(B) REGULATIONS.—

7 “(i) IN GENERAL.—Not later than 2  
8 years after the Administrator makes a de-  
9 termination under subparagraph (A) that  
10 emission reductions are not sufficient, the  
11 Administrator shall promulgate regulations  
12 to protect the sensitive ecosystems referred  
13 to in paragraph (3)(G)(ii).

14 “(ii) CONTENTS.—Regulations under  
15 clause (i) shall include modifications to—

16 “(I) provisions relating to nitro-  
17 gen oxide and sulfur dioxide emission  
18 reductions;

19 “(II) provisions relating to allo-  
20 cations of nitrogen oxide and sulfur  
21 dioxide allowances; and

22 “(III) such other provisions as  
23 the Administrator determines to be  
24 necessary.”.

1 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS FOR DEPOSI-**  
2 **TION MONITORING.**

3 (a) OPERATIONAL SUPPORT.—In addition to  
4 amounts made available under any other law, there are  
5 authorized to be appropriated for each of fiscal years 2008  
6 through 2017—

7 (1) for operational support of the National At-  
8 mospheric Deposition Program National Trends  
9 Network—

10 (A) \$2,000,000 to the United States Geo-  
11 logical Survey;

12 (B) \$600,000 to the Environmental Pro-  
13 tection Agency;

14 (C) \$600,000 to the National Park Serv-  
15 ice; and

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

17 (2) for operational support of the National At-  
18 mospheric Deposition Program Mercury Deposition  
19 Network—

20 (A) \$400,000 to the Environmental Pro-  
21 tection Agency;

22 (B) \$400,000 to the United States Geo-  
23 logical Survey;

24 (C) \$100,000 to the National Oceanic and  
25 Atmospheric Administration; and

1 (D) \$100,000 to the National Park Serv-  
2 ice;

3 (3) for the National Atmospheric Deposition  
4 Program Atmospheric Integrated Research Moni-  
5 toring Network \$1,500,000 to the National Oceanic  
6 and Atmospheric Administration;

7 (4) for the Clean Air Status and Trends Net-  
8 work \$5,000,000 to the Environmental Protection  
9 Agency; and

10 (5) for the Temporally Integrated Monitoring of  
11 Ecosystems and Long-Term Monitoring Program  
12 \$2,500,000 to the Environmental Protection Agency.

13 (b) MODERNIZATION.—In addition to amounts made  
14 available under any other law, there are authorized to be  
15 appropriated—

16 (1) for equipment and site modernization of the  
17 National Atmospheric Deposition Program National  
18 Trends Network \$6,000,000 to the Environmental  
19 Protection Agency;

20 (2) for equipment and site modernization and  
21 network expansion of the National Atmospheric  
22 Deposition Program Mercury Deposition Network  
23 \$2,000,000 to the Environmental Protection Agency;

24 (3) for equipment and site modernization and  
25 network expansion of the National Atmospheric

1       Deposition Program Atmospheric Integrated Re-  
 2       search Monitoring Network \$1,000,000 to the Na-  
 3       tional Oceanic and Atmospheric Administration; and  
 4               (4) for equipment and site modernization and  
 5       network expansion of the Clean Air Status and  
 6       Trends Network \$4,600,000 to the Environmental  
 7       Protection Agency.

8       (c) AVAILABILITY OF AMOUNTS.—Each of the  
 9       amounts appropriated under subsection (b) shall remain  
 10      available until expended.

11   **SEC. 6. TECHNICAL AMENDMENTS.**

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

14               (1) is amended by redesignating sections 401  
 15      through 403 as sections 801 through 803, respec-  
 16      tively; and

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

○