105TH CONGRESS 1ST SESSION

S. 1097

To reduce acid deposition under the Clean Air Act, and for other purposes.

IN THE SENATE OF THE UNITED STATES

July 31, 1997

Mr. MOYNIHAN (for himself and Mr. D'AMATO) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To reduce acid deposition under the Clean Air Act, 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 "Acid Deposition Con-
- 5 trol Act".
- 6 SEC. 2. FINDINGS AND PURPOSES.
- 7 (a) FINDINGS.—Congress finds that—
- 8 (1) reductions of atmospheric nitrogen oxide
- 9 and sulfur dioxide from utility plants, in addition to
- the reductions required under the Clean Air Act (42)

- U.S.C. 7401 et seq.), are needed to reduce acid deposition and its serious adverse effects on public health, natural resources, building structures, sensitive ecosystems, and visibility;
 - (2) nitrogen oxide and sulfur dioxide contribute to the development of fine particulates, suspected of causing human mortality and morbidity to a significant extent;
 - (3) regional nitrogen oxide reductions of 50 percent in the Eastern United States, in addition to the reductions required under the Clean Air Act, may be necessary to protect sensitive watersheds from the effects of nitrogen deposition;
 - (4) without reductions in nitrogen oxide and sulfur dioxide, the number of acidic lakes in the Adirondacks in the State of New York is expected to increase by up to 40 percent by 2040; and
 - (5) nitrogen oxide is highly mobile and can lead to ozone formation hundreds of miles from the emitting source.
 - (b) Purposes.—The purposes of this Act are—
 - (1) to recognize the current scientific understanding that emissions of nitrogen oxide and sulfur dioxide, and the acid deposition resulting from emis-

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

1	sions of nitrogen oxide and sulfur dioxide, present a
2	substantial human health and environmental risk;
3	(2) to require reductions in nitrogen oxide and
4	sulfur dioxide emissions;
5	(3) to support the efforts of the Ozone Trans-
6	port Assessment Group to reduce ozone pollution;
7	(4) to reduce utility emissions of nitrogen oxide
8	by 70 percent from 1990 levels; and
9	(5) to reduce utility emissions of sulfur dioxide
10	by 50 percent after the implementation of phase I
11	sulfur dioxide requirements under section 405 of the
12	Clean Air Act (42 U.S.C. 7651d).
13	SEC. 3. DEFINITIONS.
13 14	SEC. 3. DEFINITIONS. In this Act:
14	In this Act:
14 15	In this Act: (1) ADMINISTRATOR.—The term "Administration of the term of the t
141516	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environ-
14151617	In this Act: (1) Administrator.—The term "Administrator" means the Administrator of the Environmental Protection Agency.
1415161718	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency. (2) AFFECTED FACILITY.—The term "affected"
141516171819	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency. (2) AFFECTED FACILITY.—The term "affected facility" means a facility with 1 or more combustion.
14 15 16 17 18 19 20	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency. (2) AFFECTED FACILITY.—The term "affected facility" means a facility with 1 or more combustion units that serve at least 1 electricity generator with
14 15 16 17 18 19 20 21	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency. (2) AFFECTED FACILITY.—The term "affected facility" means a facility with 1 or more combustion units that serve at least 1 electricity generator with a capacity equal to or greater than 25 megawatts

1	(A) 1 ton of nitrogen oxide during each of
2	the months of October, November, December,
3	January, February, March, and April of any
4	year; and
5	(B) ½ ton of nitrogen oxide during each of
6	the months of May, June, July, August, and
7	September of any year.
8	(4) MMBTU.—The term "mmBtu" means 1
9	million British thermal units.
10	(5) Program.—The term "Program" means
11	the Nitrogen Oxide Allowance Program established
12	under section 4.
13	(6) State.—The term "State" means the 48
14	contiguous States and the District of Columbia.
15	SEC. 4. NITROGEN OXIDE ALLOWANCE PROGRAM.
16	(a) In General.—
17	(1) Establishment.—Not later than 18
18	months after the date of enactment of this Act, the
19	Administrator shall establish a program to be known
20	as the "Nitrogen Oxide Allowance Program".
21	(2) Scope.—The Program shall be conducted
22	in the 48 contiguous States and the District of Co-
23	lumbia.
24	(3) NO _x Allowances.—The Administrator
25	shall allocate under paragraph (4)—

1	(A) for each of calendar years 2000
2	through 2002, 5,400,000 NO_x allowances; and
3	(B) for calendar year 2003 and each cal-
4	endar year thereafter, $3,000,000$ NO _x allow-
5	ances.
6	(4) Allocation.—
7	(A) DEFINITION OF TOTAL ELECTRIC
8	POWER.—For purposes of this paragraph, the
9	term "total electric power" means all electric
10	power generated by utility and nonutility gen-
11	erators for distribution, including electricity
12	generated from solar wind, hydro power, nu-
13	clear power, and the combustion of fossil fuel.
14	(B) Allocation of allowances.—The
15	Administrator shall allocate annual NO_x allow-
16	ances to each of the States in proportion to the
17	State's share of the total electric power gen-
18	erated in the 48 contiguous States and the Dis-
19	trict of Columbia.
20	(C) Publication.—The Administrator
21	shall publish in the Federal Register a list of
22	each State's NO_x allowance allocation—
23	(i) by December 1, 1998, for calendar
24	years 2000 and 2002;

1	(ii) by December 1, 2000, for calendar
2	years 2003 through 2010; and
3	(iii) by December 1 of each calendar
4	year after 2000, for the calendar year 5
5	years previous.
6	(5) Intrastate distribution.—
7	(A) In general.—A State may submit a
8	report to the Administrator detailing the dis-
9	tribution of NO_x allowances of the State to af-
10	fected facilities in the State—
11	(i) not later than September 30,
12	1999, for calendar years 2000 through
13	2002;
14	(ii) not later than September 30,
15	2001, for calendar years 2003 through
16	2010; and
17	(iii) not later than September 30 of
18	each calendar year after 2011, for the cal-
19	endar year 5 years previous.
20	(B) ACTION BY THE ADMINISTRATOR.—If
21	a State submits a report under subparagraph
22	(A) not later than September 30 of the calendar
23	year specified in subparagraph (A), the Admin-
24	istrator shall distribute the NO _* allowances to

1	affected facilities in the State as detailed in the
2	report.
3	(C) Late submission of report.—A re-
4	port submitted by a State after September 30
5	of the specified year shall have no force or ef-
6	fect.
7	(D) DISTRIBUTION IN ABSENCE OF A RE-
8	PORT.—
9	(i) In general.—Subject to sub-
10	section (e), if a State does not submit a re-
11	port under subparagraph (A) not later
12	than September 30 of the calendar year
13	specified in subparagraph (A), the Admin-
14	istrator shall, not later than November 30
15	of that calendar year, distribute the $\mathrm{NO}_{\mathbf{x}}$
16	allowances for the calendar years specified
17	in subparagraph (A) to each affected facil-
18	ity in the State in proportion to the af-
19	fected facility's share of the total net elec-
20	tric power generated in the State.
21	(ii) Determination of facility's
22	SHARE.—In determining an affected facili-
23	ty's share of total net electric power gen-

erated in a State, the Administrator shall

1	consider the net electric power generated
2	by the facility and the State to be—
3	(I) for calendar years 2000
4	through 2002, the average annual
5	amount of net electric power gen-
6	erated, by the facility and the State,
7	respectively, in calendar years 1995
8	through 1997;
9	(II) for calendar years 2003
10	through 2010, the average annual
11	amount of net electric power gen-
12	erated, by the facility and the State,
13	respectively, in calendar years 1997
14	through 1999; and
15	(III) for calendar year 2011 and
16	each calendar year thereafter, the
17	amount of net electric power gen-
18	erated, by the facility and the State,
19	respectively, in the calendar year 5
20	years previous to the year for which
21	the determination is made.
22	(E) Judicial review.—A distribution of
23	NO_x allowances by the Administrator under
24	subparagraph (D) shall not be subject to judi-
25	cial review.

1	(b) $\mathrm{NO}_{\mathbf{x}}$ Allowance Transfer System.—
2	(1) In general.—Not later than 18 months
3	after the date of enactment of this Act, the Adminis-
4	trator shall promulgate $\mathrm{NO}_{\mathbf{x}}$ allowance system regu-
5	lations under which a $\mathrm{NO}_{\mathbf{x}}$ allowance allocated under
6	this Act may be transferred among affected facilities
7	and any other person.
8	(2) Establishment.—The regulations shall
9	establish the $\mathrm{NO}_{\mathbf{x}}$ allowance system under this sec-
10	tion, including requirements for the allocation,
11	transfer, and use of NO_{x} allowances under this Act.
12	(3) Use of $\text{No}_{\mathbf{x}}$ allowances.—The regula-
13	tions shall—
14	(A) prohibit the use (but not the transfer
15	in accordance with paragraph (5)) of any $\mathrm{NO}_{\mathbf{x}}$
16	allowance before the calendar year for which
17	the NO_x allowance is allocated; and
18	(B) provide that the unused NO_x allow-
19	ances shall be carried forward and added to
20	NO_{x} allowances allocated for subsequent years.
21	(4) Certification of Transfer.—A transfer
22	of a NO_x allowance shall not be effective until a

written certification of the transfer, signed by a re-

sponsible official of the person making the transfer,

is received and recorded by the Administrator.

23

24

1	(c) NO_x Allowance Tracking System.—Not later
2	than 18 months after the date of enactment of this Act,
3	the Administrator shall promulgate regulations for issu-
4	ing, recording, and tracking the use and transfer of NO_{x}
5	allowances that shall specify all necessary procedures and
6	requirements for an orderly and competitive functioning
7	of the NO_x allowance system.
8	(d) Permit Requirements.—A $\mathrm{NO}_{\mathbf{x}}$ allowance allo-
9	cation or transfer shall, on recordation by the Adminis-
10	trator, be considered to be a part of each affected facility's
11	operating permit requirements, without the requirement
12	for any further permit review and revision.
13	(e) New Source Reserve.—
14	(1) IN GENERAL.—For a State for which the
15	Administrator distributes NO_x allowances under
16	subsection (a)(5)(D), the Administrator shall place
17	10 percent of the total annual NO_{x} allowances of the
18	State in a new source reserve to be distributed by
19	the Administrator—
20	(A) for calendar years 2000 through 2003,
21	to sources that commence operation after 1995;
22	(B) for calendar years 2004 through 2009,
23	to sources that commence operation after 1997;
24	and

	11
1	(C) for calendar year 2010 and each cal-
2	endar year thereafter, to sources that com-
3	mence operation after the calendar year that is
4	5 years previous to the year for which the dis-
5	tribution is made.
6	(2) Share.—For a State for which the Admin-
7	istrator distributes $\mathrm{NO}_{\mathbf{x}}$ allowances under subsection
8	(a)(5)(D), the Administrator shall distribute to each
9	new source a number of NO_x allowances sufficient to
10	allow emissions by the source at a rate equal to the
11	lesser of the new source performance standard or
12	the permitted level for the full nameplate capacity of
13	the source, adjusted pro rata for the number of
14	months of the year during which the source oper-
15	ates.
16	(3) Unused No _x allowances.—
17	(A) In general.—During the period of
18	calendar years 2000 through 2005, the Admin-
19	istrator shall conduct auctions at which a NOx
20	allowance remaining in the new source reserve
21	that has not been distributed under paragraph
22	(2) shall be offered for sale.
23	(B) Open auctions.—An auction under
24	subparagraph (A) shall be open to any person.

(C) CONDUCT OF AUCTION.—

1	(i) Method of bidding.—A person
2	wishing to bid for a NO_x allowance at an
3	auction under subparagraph (A) shall sub-
4	mit (by a date set by the Administrator) to
5	the Administrator (on a sealed bid sched-
6	ule provided by the Administrator) an offer
7	to purchase a specified number of NO_x al-
8	lowances at a specified price.
9	(ii) Sale based on bid price.—A
10	$\mathrm{NO}_{\mathbf{x}}$ allowance auctioned under subpara-
11	graph (A) shall be sold on the basis of bid
12	price, starting with the highest priced bid
13	and continuing until all NO_x allowances
14	for sale at the auction have been sold.
15	(iii) No minimum price.—A mini-
16	mum price shall not be set for the pur-
17	chase of a NO_x allowance auctioned under
18	subparagraph (A).
19	(iv) REGULATIONS.—The Adminis-
20	trator, in consultation with the Secretary
21	of the Treasury, shall promulgate regula-
22	tions to carry out this paragraph.
23	(D) Use of $\text{NO}_{\mathbf{x}}$ allowances.—A $\text{NO}_{\mathbf{x}}$
24	allowance purchased at an auction under sub-
25	paragraph (A) may be used for any purpose

1	and at any time after the auction that is per-
2	mitted for use of a NO _x allowance under this
3	Act.
4	(E) PROCEEDS OF AUCTION.—The pro-
5	ceeds from an auction under this paragraph
6	shall be distributed to the owner of an affected
7	source in proportion to the number of allow-
8	ances that the owner would have received but
9	for this subsection.
10	(f) Nature of NO _x Allowances.—
11	(1) Not a property right.—A NO_x allow-
12	ance shall not be considered to be a property right.
13	(2) Limitation of No _x allowances.—Not-
14	withstanding any other provision of law, the Admin-
15	is trator may terminate or limit a $\mathrm{NO}_{\mathbf{x}}$ allowance.
16	(g) Prohibitions.—
17	(1) In general.—After January 1, 2000, it
18	shall be unlawful—
19	(i) for the owner or operator of an af-
20	fected facility to operate the affected facil-
21	ity in such a manner that the affected fa-
22	cility emits nitrogen oxides in excess of the
23	amount permitted by the quantity of NO_x
24	allowances held by the designated rep-
25	resentative of the affected facility; or

1	(ii) for any person to hold, use, or
2	transfer a NO_x allowance allocated under
3	this Act, except as provided under this Act.
4	(2) Other Emission Limitations.—Section
5	407 of the Clean Air Act (42 U.S.C. 7651f) is re-
6	pealed.
7	(3) Time of use.—A NO_x allowance may not
8	be used before the calendar year for which the $\mathrm{NO}_{\mathbf{x}}$
9	allowance is allocated.
10	(4) Permitting, monitoring, and enforce-
11	MENT.—Nothing in this section affects—
12	(A) the permitting, monitoring, and en-
13	forcement obligations of the Administrator
14	under the Clean Air Act (42 U.S.C. 7401 et
15	seq.); or
16	(B) the requirements and liabilities of an
17	affected facility under the Clean Air Act (42
18	U.S.C. 7401 et seq.).
19	(h) Savings Provisions.—Nothing in this section—
20	(1) affects the application of, or compliance
21	with, the Clean Air Act (42 U.S.C. 7401 et seq.) for
22	an affected facility, including the provisions related
23	to applicable national ambient air quality standards
24	and State implementation plans;

1	(2) requires a change in, affects, or limits any
2	State law regulating electric utility rates or charges,
3	including prudency review under State law;
4	(3) affects the application of the Federal Power
5	Act (16 U.S.C. 791a et seq.) or the authority of the
6	Federal Energy Regulatory Commission under that
7	Act; or
8	(4) interferes with or impairs any program for
9	competitive bidding for power supply in a State in
10	which the Program is established.
11	SEC. 5. INDUSTRIAL SOURCE MONITORING.
12	Section 412(a) of the Clean Air Act (42 U.S.C.
13	7651k(a)) is amended in the first sentence by inserting
14	", or of any industrial facility with a capacity of 100 or
15	more mmBtu's per hour," after "The owner and operator
16	of any source subject to this title".
17	SEC. 6. EXCESS EMISSIONS PENALTY.
18	(a) In General.—
19	(1) Liability.—The owner or operator of an
20	affected facility that emits nitrogen oxides in any
21	calendar year in excess of the $\mathrm{NO}_{\mathbf{x}}$ allowances the
22	owner or operator holds for use for the facility for
23	that year shall be liable for the payment of an excess

emissions penalty.

1	(2) Calculation.—The excess emissions pen-
2	alty shall be calculated by multiplying \$6,000 by the
3	quantity that is equal to—
4	(A) the quantity of NO _x allowances that
5	would authorize the nitrogen oxides emitted by
6	the facility for the calendar year; minus
7	(B) the quantity of NO_x allowances that
8	the owner or operator holds for use for the fa-
9	cility for that year.
10	(3) Overlapping penalties.—A penalty
11	under this section shall not diminish the liability of
12	the owner or operator of an affected facility for any
13	fine, penalty, or assessment against the owner or op-
14	erator for the same violation under any other provi-
15	sion of law.
16	(b) Excess Emissions Offset.—
17	(1) In general.—The owner or operator of an
18	affected facility that emits nitrogen oxide during a
19	calendar year in excess of the NO_x allowances held
20	for the facility for the calendar year shall offset in
21	the following calendar year a quantity of $\mathrm{NO}_{\mathbf{x}}$ allow-
22	ances equal to the number of NO_x allowances that
23	would authorize the excess nitrogen oxides emitted.
24	(2) Proposed Plan.—Not later than 60 days

after the end of the year in which excess emissions

- 1 occur, the owner or operator of an affected facility
- 2 shall submit to the Administrator and the State in
- 3 which the affected facility is located a proposed plan
- 4 to achieve the offset required under paragraph (1).
- 5 (3) Condition of Permit.—On approval of
- 6 the proposed plan by the Administrator, as submit-
- 7 ted, modified, or conditioned by the Administrator,
- 8 the plan shall be considered a condition of the oper-
- 9 ating permit for the affected facility without further
- 10 review or revision of the permit.
- 11 (c) Penalty Adjustment.—The Administrator
- 12 shall annually adjust the penalty specified in subsection
- 13 (a) to reflect changes in the Consumer Price Index for
- 14 all urban consumers published by the Bureau of Labor
- 15 Statistics.
- 16 SEC. 7. SULFUR DIOXIDE ALLOWANCE PROGRAM REVI-
- 17 SIONS.
- Section 402(3) of the Clean Air Act (as added by sec-
- 19 tion 401 of Public Law 101–549 (104 Stat. 2584)) (42
- 20 U.S.C. 7651a(3)) is amended by inserting before the pe-
- 21 riod at the end the following: "for allowances allocated for
- 22 calendar years 1995 through 2002, and ½ ton of sulfur
- 23 dioxide for allowances allocated for calendar year 2003
- 24 and each calendar year thereafter.".

1 SEC. 8. REGIONAL ECOSYSTEMS.

2	(a) Report.—
3	(1) IN GENERAL.—Not later than December 31,
4	2002, the Administrator shall submit to Congress a
5	report identifying objectives for scientifically credible
6	environmental indicators, as determined by the Ad-
7	ministrator, that are sufficient to protect sensitive
8	ecosystems of the Adirondack Mountains, Mid-Appa-
9	lachian Mountains, and Southern Blue Ridge Moun-
10	tains and water bodies of the Great Lakes, Lake
11	Champlain, Long Island Sound, and the Chesapeake
12	Bay.
13	(2) ACID NEUTRALIZING CAPACITY.—The re-
14	port under paragraph (1) shall—
15	(A) include acid neutralizing capacity as
16	an indicator; and
17	(B) identify as an objective under para-
18	graph (1) the objective to increase the propor-
19	tion of water bodies in sensitive receptor areas
20	with an acid neutralizing capacity greater than
21	zero from the proportion identified in surveys
22	begun in 1984.
23	(3) UPDATED REPORT.—Not later than Decem-
24	ber 31, 2006, the Administrator shall submit to
25	Congress a report updating the report under para-
26	graph (1) and assessing the status and trends of

- various environmental indicators for the regional ecosystems referred to in paragraph (1).
- (4) Reports under the national acid pre-4 CIPITATION ASSESSMENT PROGRAM.—The reports 5 under this subsection shall satisfy the report require-6 ments set forth in section 103(j)(3)(E) of the Clean 7 Air Act (42 U.S.C. 7403(j)(3)(E)) for the years 8 2002 and 2006.

(b) Regulations.—

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

- (1) Determination.—Not later than December 31, 2006, the Administrator shall determine whether emissions reductions under section 4 are sufficient to ensure achievement of the objectives identified in subsection (a)(1).
- (2) PROMULGATION.—If the Administrator determines under paragraph (1) that emissions reductions under section 4 are not sufficient to ensure achievement of the objectives identified in subsection (a)(1), the Administrator shall promulgate, not later than 2 years after making the finding, such regulations, including modification of nitrogen oxide and sulfur dioxide allowance allocations or any such measure, as the Administrator determines are necessary to protect the sensitive ecosystems described in subsection (a)(1).

1 SEC. 9. GENERAL COMPLIANCE WITH OTHER PROVISIONS.

- 2 Except as expressly provided in this Act, compliance
- 3 with this Act shall not exempt or exclude the owner or
- 4 operator of an affected facility from compliance with any
- 5 other law.

6 SEC. 10. MERCURY EMISSION STUDY AND CONTROL.

- 7 (a) STUDY AND REPORT.—The Administrator
- 8 shall—
- 9 (1) study the practicality of monitoring mercury
- emissions from all combustion units that have a ca-
- pacity equal to or greater than 250 mmBtu's per
- hour; and
- 13 (2) not later than 2 years after the date of en-
- actment of this Act, submit to Congress a report on
- the results of the study.
- 16 (b) Regulations Concerning Monitoring.—Not
- 17 later than 1 year after the date of submission of the report
- 18 under subsection (a), the Administrator shall promulgate
- 19 regulations requiring the reporting of mercury emissions
- 20 from units that have a capacity equal to or greater than
- 21 250 mmBtu's per hour.
- (c) Emission Controls.—
- 23 (1) IN GENERAL.—Not later than 1 year after
- the commencement of monitoring activities under
- subsection (b), the Administrator shall promulgate

- regulations controlling electric utility and industrial source emissions of mercury.
- 3 (2) Factors.—The regulations shall take into 4 account technological feasibility, cost, and the pro-5 jected levels of mercury emissions that will result
- 6 from implementation of this Act.

7 SEC. 11. DEPOSITION RESEARCH BY THE ENVIRONMENTAL

- 8 PROTECTION AGENCY.
- 9 (a) In General.—The Administrator shall establish
- 10 a competitive grant program to fund research related to
- 11 the effects of nitrogen deposition on sensitive watersheds
- 12 and coastal estuaries in the Eastern United States.
- 13 (b) Chemistry of Lakes and Streams.—Not later
- 14 than September 30, 1999, and September 30, 2006, the
- 15 Administrator shall submit to the Committee on Environ-
- 16 ment and Public Works of the Senate and the Committee
- 17 on Resources of the House of Representatives a report on
- 18 the health and chemistry of lakes and streams of the Adi-
- 19 rondacks that were subjects of the report transmitted
- 20 under section 404 of Public Law 101–549 (commonly
- 21 known as the "Clean Air Act Amendments of 1990") (104
- 22 Stat. 2632).
- (c) Authorization of Appropriations.—There
- 24 are authorized to be appropriated—

1	(1) to carry out subsection (a) , $$1,000,000$ for
2	each of fiscal years 1998 through 2003; and
3	(2) to carry out subsection (b) , $$1,000,000$ for
4	each of fiscal years 1998, 1999, 2005, and 2006.

 \bigcirc