

TITLE IV-ACID DEPOSITION CONTROL

- Sec. 401. Acid deposition control.
- Sec. 402. Fossil fuel use.
- Sec. 403. Repeal of percent reduction.
- Sec. 404. Acid deposition standards.
- Sec. 405. National acid lakes registry.
- Sec. 406. Industrial SO2 Emissions.
- Sec. 407. Sense of the Congress on emission reductions costs.
- Sec. 408. Monitor acid rain program in Canada.
- Sec. 409. Report on clean coals technologies export programs.
- Sec. 410. Acid deposition research by the United States Fish and Wildlife Service.
- Sec. 411. Study of buffering and neutralizing agents.
- Sec. 412. Conforming amendment.
- Sec. 413. Special clean coal technology project.

SEC. 401. ACID DEPOSITION CONTROL.

The Clean Air Act is amended by adding the following new title after title III:

"TITLE IV-ACID DEPOSITION CONTROL

- "Sec. 401. Findings and purpose.
- "Sec. 402. Definitions.
- "Sec. 403. Sulfur dioxide allowance program for existing and new units.
- "Sec. 404. Phase I sulfur dioxide requirements.
- "Sec. 405. Phase II sulfur dioxide requirements.
- "Sec. 406. Allowances for States with emissions rates at or below 0.80 lbs/mmBtu.
- "Sec. 407. Nitrogen oxides emission reduction program.
- "Sec. 408. Permits and compliance plans.
- "Sec. 409. Repowered sources.
- "Sec. 410. Election for additional sources.
- "Sec. 411. Excess emissions penalty.
- "Sec. 412. Monitoring, reporting, and recordkeeping requirements.
- "Sec. 413. General compliance with other provisions.
- "Sec. 414. Enforcement.
- "Sec. 415. Clean coal technology regulatory incentives.
- "Sec. 416. Contingency guarantee; auctions, reserve.

"SEC. 401. FINDINGS AND PURPOSES.

"(a) FINDINGS.-The Congress finds that-

"(1) the presence of acidic compounds and their precursors in the atmosphere and in deposition from the

atmosphere represents a threat to natural resources, ecosystems, materials, visibility, and public health;

"(2) the principal sources of the acidic compounds and their precursors in the atmosphere are emissions of sulfur and nitrogen oxides from the combustion of fossil fuels;

"(3) the problem of acid deposition is of national and international significance;

"(4) strategies and technologies for the control of precursors to acid deposition exist now that are economically feasible, and improved methods are expected to become increasingly available over the next decade;

"(5) current and future generations of Americans will be adversely affected by delaying measures to remedy the problem;

"(6) reduction of total atmospheric loading of sulfur dioxide and nitrogen oxides will enhance protection of the public health and welfare and the environment; and

"(7) control measures to reduce precursor emissions from steam-electric generating units should be initiated without delay.

"(b) PURPOSES.-The purpose of this title is to reduce the adverse effects of acid deposition through reductions in annual emissions of sulfur dioxide of ten million tons from 1980 emission levels, and, in combination with other provisions of this Act, of nitrogen oxides emissions of approximately two million tons from 1980 emission levels, in the forty-eight contiguous States and the District of Columbia. It is the intent of this title to effectuate such reductions by requiring compliance by affected sources with prescribed emission limitations by specified deadlines, which limitations may be met through alternative methods of compliance provided by an emission allocation and transfer system. It is also the purpose of this title to encourage energy conservation, use of renewable and clean alternative technologies, and pollution prevention as a long-range strategy, consistent with the provisions of this title, for reducing air pollution and other adverse impacts of energy production and use.

"SEC. 402. DEFINITIONS.

"As used in this title:

"(1) The term 'affected source' means a source that includes one or more affected units.

"(2) The term 'affected unit' means a unit that is subject to emission reduction requirements or limitations under this title.

"(3) The term 'allowance' means an authorization, allocated to an affected unit by the Administrator under this title, to emit, during or after a specified calendar year, one ton of sulfur dioxide.

"(4) The term 'baseline' means the annual quantity of fossil fuel consumed by an affected unit, measured in millions of British Thermal Units ('mmBtus'), calculated as follows:

"(A) For each utility unit that was in commercial operation prior to January 1, 1985, the baseline shall be the annual average quantity of mmBtu's consumed in fuel during calendar years 1985, 1986, and 1987, as recorded by the Department of Energy pursuant to Form 767. For any utility unit for which such form was not filed, the baseline shall be the level specified for such unit in the 1985 National Acid Precipitation Assessment Program (NAPAP) Emissions Inventory, Version 2, National Utility Reference File (NURF) or in a corrected data base as established by the Administrator pursuant to paragraph (3). For non-utility units, the baseline is the NAPAP Emissions Inventory, Version 2. The Administrator, in the Administrator's sole discretion, may exclude periods during which a unit is shutdown for a continuous period of four calendar months or longer, and make appropriate adjustments under this paragraph. Upon petition of the owner or operator of any unit, the Administrator may make appropriate baseline adjustments for accidents that caused prolonged outages.

"(B) For any other nonutility unit that is not included in the NAPAP Emissions Inventory, Version 2, or a corrected data base as established by the Administrator pursuant to paragraph (3), the baseline shall be the annual average quantity, in mmBtu consumed in fuel by that unit, as calculated pursuant to a method which the administrator shall prescribe by regulation to be promulgated not later than eighteen months after enactment of the Clean Air Act Amendments of 1990.

"(C) The Administrator shall, upon application or on his own motion, by December 31, 1991, supplement data needed in support of this title and correct any factual errors in data from which affected Phase II units' baselines or actual 1985 emission rates have been calculated. Corrected data shall be used for purposes of issuing allowances under the title. Such corrections shall not be subject to judicial review, nor shall the failure of the Administrator to correct an alleged factual error in such reports be subject to judicial review.

"(5) The term 'capacity factor' means the ratio between the actual electric output from a unit and the potential electric output from that unit.

"(6) The term 'compliance plan' means, for purposes of the requirements of this title, either-

"(A) a statement that the source will comply with all applicable requirements under this title, or

"(B) where applicable, a schedule and description of the method or methods for compliance and certification by the owner or operator that the source is in compliance with the requirements of this title.

"(7) The term 'continuous emission monitoring system' (CEMS) means the equipment as required by section 412, used to sample, analyze, measure, and provide on a continuous basis a permanent record of emissions and flow (expressed in pounds per million British thermal units (lbs/mmBtu), pounds per hour (lbs/hr) or such other form as the Administrator may prescribe by regulations under section 412).

"(8) The term 'existing unit' means a unit (including units subject to section 111) that commenced commercial operation before the date of enactment of the Clean Air Act Amendments of 1990. Any unit that commenced commercial operation before the date of enactment of the Clean Air Act Amendments of 1990 which is modified, reconstructed, or repowered after the date of enactment of the Clean Air Act Amendments of 1990 shall continue to be an existing unit for the purposes of this title. For the purposes of this title, existing units shall not include simple combustion turbines, or units which serve a generator with a nameplate capacity of 25MWe or less.

"(9) The term 'generator' means a device that produces electricity and which is reported as a generating unit pursuant to Department of Energy Form 860.

"(10) The term 'new unit' means a unit that commences commercial operation on or after the date of enactment of the Clean Air Act Amendments of 1990.

"(11) The term 'permitting authority' means the Administrator, or the State or local air pollution control agency, with an approved permitting program under part B of title III of the Act.

"(12) The term 'repowering' means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of the date of enactment of the Clean Air Act Amendments of 1990. Notwithstanding the provisions of

section 409(a), for the purpose of this title, the term 'repowering' shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

"(13) The term 'reserve' means any bank of allowances established by the Administrator under this title.

"(14) The term 'State' means one of the 48 contiguous States and the District of Columbia.

"(15) The term 'unit' means a fossil fuel-fired combustion device.

"(16) The term 'actual 1985 emission rate', for electric utility units means the annual sulfur dioxide or nitrogen oxides emission rate in pounds per million Btu as reported in the NAPAP Emissions Inventory, Version 2, National Utility Reference File. For nonutility units, the term 'actual 1985 emission rate' means the annual sulfur dioxide or nitrogen oxides emission rate in pounds per million Btu as reported in the NAPAP Emission Inventory, Version 2.

"(17)(A) The term 'utility unit' means-

"(i) a unit that serves a generator in any State that produces electricity for sale, or

"(ii) a unit that, during 1985, served a generator in any State that produced electricity for sale.

"(B) Notwithstanding subparagraph (A), a unit described in subparagraph (A) that-

"(i) was in commercial operation during 1985, but

"(ii) did not, during 1985, serve a generator in any State that produced electricity for sale shall not be a utility unit for purposes of this title.

"(C) A unit that cogenerates steam and electricity is not a 'utility unit' for purposes of this title unless the unit is constructed for the purpose of supplying, or commences construction after the date of enactment of this title and supplies, more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale.

"(18) The term 'allowable 1985 emissions rate' means a federally enforceable emissions limitation for sulfur dioxide or oxides of nitrogen, applicable to the unit in 1985 or the limitation applicable in such other subsequent year as determined by the Administrator if such a limitation for 1985 does not exist. Where the emissions limitation for a unit is not expressed in pounds of emissions per million Btu, or the averaging period of that emissions limitation is not expressed on an annual basis, the Administrator shall calculate the annual equivalent of that emissions limitation in pounds per million Btu to establish the allowable 1985 emissions rate.

"(19) The term 'qualifying phase I technology' means a technological system of continuous emission reduction which

achieves a 90 percent reduction in emissions of sulfur dioxide from the emissions that would have resulted from the use of fuels which were not subject to treatment prior to combustion.

"(20) The term 'alternative method of compliance' means a method of compliance in accordance with one or more of the following authorities:

"(A) a substitution plan submitted and approved in accordance with subsections 404 (b) and (c);

"(B) a Phase I extension plan approved by the Administrator under section 404(d), using qualifying phase I technology as determined by the Administrator in accordance with that section; or

"(C) repowering with a qualifying clean coal technology under section 409.

"(21) The term 'commenced' as applied to construction of any new electric utility unit means that an owner or operator has undertaken a continuous program of construction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction.

"(22) The term 'commenced commercial operation' means to have begun to generate electricity for sale.

"(23) The term 'construction' means fabrication, erection, or installation of an affected unit.

"(24) The term 'industrial source' means a unit that does not serve a generator that produces electricity, a 'nonutility unit' as defined in this section, or a process source as defined in section 410(e).

"(25) The term 'nonutility unit' means a unit other than a utility unit.

"(26) The term 'designated representative' means a responsible person or official authorized by the owner or operator of a unit to represent the owner or operator in matters pertaining to the holding, transfer, or disposition of allowances allocated to a unit, and the submission of and compliance with permits, permit applications, and compliance plans for the unit.

"(27) The term 'life-of-the-unit, firm power contractual arrangement' means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of capacity and associated energy generated by a specified generating unit (or units) and pays its proportional amount of such unit's total costs, pursuant to a contract either-

"(A) for the life of the unit;

"(B) for a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or

"(C) for a period equal to or greater than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit was built, with option rights to purchase or re-lease some portion of the capacity and associated energy generated by the unit (or units) at the end of the period.

"(28) The term 'basic Phase II allowance allocations' means:

"(A) For calendar years 2000 through 2009 inclusive, allocations of allowances made by the Administrator pursuant to section 403 and subsections (b)(1), (3), and (4); (c)(1), (2), (3), and (5); (d)(1), (2), (4), and (5); (e); (f); (g)(1), (2), (3), (4), and (5); (h)(1); (i) and (j) of section 405.

"(B) For each calendar year beginning in 2010, allocations of allowances made by the Administrator pursuant to section 403 and subsections (b)(1), (3), and (4); (c)(1), (2), (3), and (5); (d)(1), (2), (4) and (5); (e); (f); (g)(1), (2), (3), (4), and (5); (h)(1) and (3); (i) and (j) of section 405.

"(29) The term 'Phase II bonus allowance allocations' means, for calendar year 2000 through 2009, inclusive, and only for such years, allocations made by the Administrator pursuant to section 403, subsections (a)(2), (b)(2), (c)(4), (d)(3) (except as otherwise provided therein), and (h)(2) of section 405, and section 406.

"SEC. 403. SULFUR DIOXIDE ALLOWANCE PROGRAM FOR EXISTING AND NEW UNITS.

"(a) ALLOCATIONS OF ANNUAL ALLOWANCES FOR EXISTING AND NEW UNITS.- (1) For the emission limitation programs under this title, the Administrator shall allocate annual allowances for the unit, to be held or distributed by the designated representative of the owner or operator of each affected unit at an affected source in accordance with this title, in an amount equal to the annual tonnage emission limitation calculated under section 404, 405, 406, 409, or 410 except as otherwise specifically provided elsewhere in this title. Except as provided in sections 405(a)(2), 405(a)(3), 409 and 410, beginning January 1, 2000, the Administrator shall not allocate annual allowances to emit sulfur dioxide pursuant to section 405 in such an amount as would result in total annual emissions of sulfur dioxide from utility units in excess of 8.90 million tons except that the Administrator shall not take into account unused allowances carried forward by owners and operators of affected units or by other persons holding such allowances, following the year for which they were allocated. If necessary to meeting the restrictions imposed in the preceding sentence, the

Administrator shall reduce, pro rata, the basic Phase II allowance allocations for each unit subject to the requirements of section 405. Subject to the provisions of section 416, the Administrator shall allocate allowances for each affected unit at an affected source annually, as provided in paragraphs (2) and (3) and section 408. Except as provided in sections 409 and 410, the removal of an existing affected unit or source from commercial operation at any time after the date of the enactment of the Clean Air Act Amendments of 1990 (whether before or after January 1, 1995, or January 1, 2000) shall not terminate or otherwise affect the allocation of allowances pursuant to section 404 or 405 to which the unit is entitled. Allowances shall be allocated by the Administrator without cost to the recipient, except for allowances sold by the Administrator pursuant to section 416. Not later than December 31, 1991, the Administrator shall publish a proposed list of the basic Phase II allowance allocations, the Phase II bonus allowance allocations and, if applicable, allocations pursuant to section 405(a)(3) for each unit subject to the emissions limitation requirements of section 405 for the year 2000 and the year 2010. After notice and opportunity for public comment, but not later than December 31, 1992, the Administrator shall publish a final list of such allocations, subject to the provisions of section 405(a)(2). Any owner or operator of an existing unit subject to the requirements of section 405(b) or (c) who is considering applying for an extension of the emission limitation requirement compliance deadline for that unit from January 1, 2000, until not later than December 31, 2000, pursuant to section 409, shall notify the Administrator no later than March 31, 1991. Such notification shall be used as the basis for estimating the basic Phase II allowances under this subsection. Prior to June 1, 1998, the Administrator shall publish a revised final statement of allowance allocations, subject to the provisions of section 405(a)(2) and taking into account the effect of any compliance date extensions granted pursuant to section 409 on such allocations. Any person who may make an election concerning the amount of allowances to be allocated to a unit or units shall make such election and so inform the Administrator not later than March 31, 1991, in the case of an election under section 405 (or June 30, 1991, in the case of an election under section 406). If such person fails to make such election, the Administrator shall set forth for each unit owned or operated by such person, the amount of allowances reflecting the election that would, in the judgment of the Administrator, provide the greatest benefit for the owner or operator of the unit. If such person is a Governor who may make an election under section 406 and the Governor fails to make an election, the Administrator shall set forth for each unit in the State the amount of allowances reflecting the election that would, in the judgment of the Administrator, provide the greatest benefit for units in the State.

"(b) ALLOWANCE TRANSFER SYSTEM.-Allowances allocated under this title may be transferred among designated representatives of the owners or operators of affected sources under this title and any other person who holds such allowances, as provided by the allowance system regulations to be promulgated by the Administrator not later than eighteen months after the date of enactment of the Clean Air Act Amendments of 1990. Such regulations shall establish the allowance system prescribed under this section, including, but not limited to, requirements for the allocation, transfer, and use of allowances under this title. Such regulations shall prohibit the use of any allowance prior to the calendar year for which the allowance was allocated, and shall provide, consistent with the purposes of this title, for the identification of unused allowances, and for such unused allowances to be carried forward and added to allowances allocated in subsequent years, including allowances allocated to units subject to Phase I requirements (as described in section 404) which are applied to emissions limitations requirements in Phase II (as described in section 405). Transfers of allowances shall not be effective until written certification of the transfer, signed by a responsible official of each party to the transfer, is received and recorded by the Administrator. Such regulations shall permit the transfer of allowances prior to the issuance of such allowances. Recorded pre-allocation transfers shall be deducted by the Administrator from the number of allowances which would otherwise be allocated to the transferor, and added to those allowances allocated to the transferee. Pre-allocation transfers shall not affect the prohibition contained in this subsection against the use of allowances prior to the year for which they are allocated.

"(c) INTERPOLLUTANT TRADING.-Not later than January 1, 1994, the Administrator shall furnish to the Congress a study evaluating the environmental and economic consequences of amending this title to permit trading sulfur dioxide allowances for nitrogen oxides allowances.

"(d) ALLOWANCE TRACKING SYSTEM.-(1) The Administrator shall promulgate, not later than 18 months after the date of enactment of the Clean Air Act Amendments of 1990, a system for issuing, recording, and tracking allowances, which shall specify all necessary procedures and requirements for an orderly and competitive functioning of the allowance system. All allowance allocations and transfers shall, upon recordation by the Administrator, be deemed a part of each unit's permit requirements pursuant to section 408, without any further permit review and revision.

"(2) In order to ensure electric reliability, such regulations shall not prohibit or affect temporary increases and decreases in emissions within utility systems, power pools, or utilities entering into allowance pool agreements, that result from their operations, including emergencies and central dispatch, and such

temporary emissions increases and decreases shall not require transfer of allowances among units nor shall it require recordation. The owners or operators of such units shall act through a designated representative. Notwithstanding the preceding sentence, the total tonnage of emissions in any calendar year (calculated at the end thereof) from all units in such a utility system, power pool, or allowance pool agreements shall not exceed the total allowances for such units for the calendar year concerned.

"(e) NEW UTILITY UNITS.-After January 1, 2000, it shall be unlawful for a new utility unit to emit an annual tonnage of sulfur dioxide in excess of the number of allowances to emit held for the unit by the unit's owner or operator. Such new utility units shall not be eligible for an allocation of sulfur dioxide allowances under subsection (a)(1), unless the unit is subject to the provisions of subsection (g)(2) or (3) of section 405. New utility units may obtain allowances from any person, in accordance with this title. The owner or operator of any new utility unit in violation of this subsection shall be liable for fulfilling the obligations specified in section 411 of this title.

"(f) NATURE OF ALLOWANCES.-An allowance allocated under this title is a limited authorization to emit sulfur dioxide in accordance with the provisions of this title. Such allowance does not constitute a property right. Nothing in this title or in any other provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. Nothing in this section relating to allowances shall be construed as affecting the application of, or compliance with, any other provision of this Act to an affected unit or source, including the provisions related to applicable National Ambient Air Quality Standards and State implementation plans. Nothing in this section shall be construed as requiring a change of any kind in any State law regulating electric utility rates and charges or affecting any State law regarding such State regulation or as limiting State regulation (including any prudency review) under such a State law.

Nothing in this section shall be construed as modifying the Federal Power Act or as affecting the authority of the Federal Energy Regulatory Commission under that Act. Nothing in this title shall be construed to interfere with or impair any program for competitive bidding for power supply in a State in which such program is established. Allowances, once allocated to a person by the Administrator, may be received, held, and temporarily or permanently transferred in accordance with this title and the regulations of the Administrator without regard to whether or not a permit is in effect under title V or section 408 with respect to the unit for which such allowance was originally allocated and recorded. Each permit under this title and each permit issued under title V for any affected unit shall provide that the affected

unit may not emit an annual tonnage of sulfur dioxide in excess of the allowances held for that unit.

"(g) PROHIBITION.-It shall be unlawful for any person to hold, use, or transfer any allowance allocated under this title, except in accordance with regulations promulgated by the Administrator. It shall be unlawful for any affected unit to emit sulfur dioxide in excess of the number of allowances held for that unit for that year by the owner or operator of the unit. Upon the allocation of allowances under this title, the prohibition contained in the preceding sentence shall supersede any other emission limitation applicable under this title to the units for which such allowances are allocated. Allowances may not be used prior to the calendar year for which they are allocated. Nothing in this section or in the allowance system regulations shall relieve the Administrator of the Administrator's permitting, monitoring and enforcement obligations under this Act, nor relieve affected sources of their requirements and liabilities under this Act.

"(h) COMPETITIVE BIDDING FOR POWER SUPPLY.-Nothing in this title shall be construed to interfere with or impair any program for competitive bidding for power supply in a State in which such program is established.

"(i) APPLICABILITY OF THE ANTITRUST LAWS.-

"(1) Nothing in this section affects-

"(A) the applicability of the antitrust laws to the transfer, use, or sale of allowances, or

"(B) the authority of the Federal Energy Regulatory Commission under any provision of law respecting unfair methods of competition or anticompetitive acts or practices.

"(2) As used in this section, 'antitrust laws' means those Acts set forth in section 1 of the Clayton Act (15 U.S.C. 12), as amended.

"(j) PUBLIC UTILITY HOLDING COMPANY ACT.-The acquisition or disposition of allowances pursuant to this title including the issuance of securities or the undertaking of any other financing transaction in connection with such allowances shall not be subject to the provisions of the Public Utility Holding Company Act of 1935.

"SEC. 404. PHASE I SULFUR DIOXIDE REQUIREMENTS.

"(a) EMISSION LIMITATIONS.- (1) After January 1, 1995, each source that includes one or more affected units listed in table A is an affected source under this section. After January 1, 1995, it shall be unlawful for any affected unit (other than an eligible phase I unit under section 404(d)(2)) to emit sulfur dioxide in excess of the tonnage limitation stated as a total number of allowances in table A for phase I, unless (A) the emissions

reduction requirements applicable to such unit have been achieved pursuant to subsection (b) or (d), or (B) the owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions, except that, after January 1, 2000, the emissions limitations established in this section shall be superseded by those established in section 405. The owner or operator of any unit in violation of this section shall be fully liable for such violation including, but not limited to, liability for fulfilling the obligations specified in section 411.

"(2) Not later than December 31, 1991, the Administrator shall determine the total tonnage of reductions in the emissions of sulfur dioxide from all utility units in calendar year 1995 that will occur as a result of compliance with the emissions limitation requirements of this section, and shall establish a reserve of allowances equal in amount to the number of tons determined thereby not to exceed a total of 3.50 million tons. In making such a determination, the Administrator shall compute for each unit subject to the emissions limitation requirements of this section the difference between:

"(A) the product of its baseline multiplied by the lesser of each unit's allowable 1985 emissions rate and its actual 1985 emissions rate, divided by 2,000, and

"(B) the product of each unit's baseline multiplied by 2.50 lbs/mmBtu divided by 2,000,

and sum the computations. The Administrator shall adjust the foregoing calculation to reflect projected calendar year 1995 utilization of the units subject to the emissions limitations of this title that the Administrator finds would have occurred in the absence of the imposition of such requirements. Pursuant to subsection (d), the Administrator shall allocate allowances from the reserve established hereinunder until the earlier of such time as all such allowances in the reserve are allocated or December 31, 1999.

"(3) In addition to allowances allocated pursuant to paragraph (1), in each calendar year beginning in 1995 and ending in 1999, inclusive, the Administrator shall allocate for each unit on Table A that is located in the States of Illinois, Indiana, or Ohio (other than units at Kyger Creek, Clifty Creek and Joppa Steam), allowances in an amount equal to 200,000 multiplied by the unit's pro rata share of the total number of allowances allocated for all units on Table A in the 3 States (other than units at Kyger Creek, Clifty Creek, and Joppa Steam) pursuant to paragraph (1). Such allowances shall be excluded from the calculation of the reserve under paragraph (2).

"(b) SUBSTITUTIONS.-The owner or operator of an affected unit under subsection (a) may include in its section 408 permit application and proposed compliance plan a proposal to reassign, in whole or in part, the affected unit's sulfur dioxide reduction

requirements to any other unit(s) under the control of such owner or operator. Such proposal shall specify-

"(1) the designation of the substitute unit or units to which any part of the reduction obligations of subsection (a) shall be required, in addition to, or in lieu of, any original affected units designated under such subsection;

"(2) the original affected unit's baseline, the actual and allowable 1985 emissions rate for sulfur dioxide, and the authorized annual allowance allocation stated in table A;

"(3) calculation of the annual average tonnage for calendar years 1985, 1986, and 1987, emitted by the substitute unit or units, based on the baseline for each unit, as defined in section 402(d), multiplied by the lesser of the unit's actual or allowable 1985 emissions rate;

"(4) the emissions rates and tonnage limitations that would be applicable to the original and substitute affected units under the substitution proposal;

"(5) documentation, to the satisfaction of the Administrator, that the reassigned tonnage limits will, in total, achieve the same or greater emissions reduction than would have been achieved by the original affected unit and the substitute unit or units without such substitution; and

"(6) such other information as the Administrator may require.

"(c) ADMINISTRATOR'S ACTION ON SUBSTITUTION PROPOSALS.--(1) The Administrator shall take final action on such substitution proposal in accordance with section 408(c) if the substitution proposal fulfills the requirements of this subsection. The Administrator may approve a substitution proposal in whole or in part and with such modifications or conditions as may be consistent with the orderly functioning of the allowance system and which will ensure the emissions reductions contemplated by this title. If a proposal does not meet the requirements of subsection (b), the Administrator shall disapprove it. The owner or operator of a unit listed in table A shall not substitute another unit or units without the prior approval of the Administrator.

"(2) Upon approval of a substitution proposal, each substitute unit, and each source with such unit, shall be deemed affected under this title, and the Administrator shall issue a permit to the original and substitute affected source and unit in accordance with the approved substitution plan and section 408. The Administrator shall allocate allowances for the original and substitute affected units in accordance with the approved substitution proposal pursuant to section 403. It shall be unlawful for any source or unit that is allocated allowances pursuant to this section to emit sulfur dioxide in excess of the emissions limitation provided for in the approved substitution permit and plan unless the owner or operator of each unit governed by the permit and approved substitution plan holds allowances to emit not less than the units

total annual emissions. The owner or operator of any original or substitute affected unit operated in violation of this subsection shall be fully liable for such violation, including liability for fulfilling the obligations specified in section 411 of this title. If a substitution proposal is disapproved, the Administrator shall allocate allowances to the original affected unit or units in accordance with subsection (a).

"(d) ELIGIBLE PHASE I EXTENSION UNITS.-(1) The owner or operator of any affected unit subject to an emissions limitation requirement under this section may petition the Administrator in its permit application under section 408 for an extension of 2 years of the deadline for meeting such requirement, provided that the owner or operator of any such unit holds allowances to emit not less than the unit's total annual emissions for each of the 2 years of the period of extension. To qualify for such an extension, the affected unit must either employ a qualifying phase I technology, or transfer its phase I emissions reduction obligation to a unit employing a qualifying phase I technology. Such transfer shall be accomplished in accordance with a compliance plan, submitted and approved under section 408, that shall govern operations at all units included in the transfer, and that specifies the emissions reduction requirements imposed pursuant to this title.

"(2) Such extension proposal shall-

"(A) specify the unit or units proposed for designation as an eligible phase I extension unit;

"(B) provide a copy of an executed contract, which may be contingent upon the Administrator approving the proposal, for the design engineering, and construction of the qualifying phase I technology for the extension unit, or for the unit or units to which the extension unit's emission reduction obligation is to be transferred;

"(C) specify the unit's or units' baseline, actual 1985 emissions rate, allowable 1985 emissions rate, and projected utilization for calendar years 1995 through 1999;

"(D) require CEMS on both the eligible phase I extension unit or units and the transfer unit or units beginning no later than January 1, 1995; and

"(E) specify the emission limitation and number of allowances expected to be necessary for annual operation after the qualifying phase I technology has been installed.

"(3) The Administrator shall review and take final action on each extension proposal in order of receipt, consistent with section 408, and for an approved proposal shall designate the unit or units as an eligible phase I extension unit. The Administrator may approve an extension proposal in whole or in part, and with such modifications or conditions as may be necessary, consistent with the orderly functioning of the allowance system, and to ensure the emissions reductions contemplated by the title.

"(4) In order to determine the number of proposals eligible for allocations from the reserve under subsection (a)(2) and the number of allowances remaining available after each proposal is acted upon, the Administrator shall reduce the total number of allowances remaining available in the reserve by the number of allowances calculated according to subparagraphs (A), (B) and (C) until either no allowances remain available in the reserve for further allocation or all approved proposals have been acted upon. If no allowances remain available in the reserve for further allocation before all proposals have been acted upon by the Administrator, any pending proposals shall be disapproved. The Administrator shall calculate allowances equal to-

"(A) the difference between the lesser of the average annual emissions in calendar years 1988 and 1989 or the projected emissions tonnage for calendar year 1995 of each eligible phase I extension unit, as designated under paragraph (3), and the product of the unit's baseline multiplied by an emission rate of 2.50 lbs/mmBtu, divided by 2,000;

"(B) the difference between the lesser of the average annual emissions in calendar years 1988 and 1989 or the projected emissions tonnage for calendar year 1996 of each eligible phase I extension unit, as designated under paragraph (3), and the product of the unit's baseline multiplied by an emission rate of 2.50 lbs/mmBtu, divided by 2,000; and

"(C) the amount by which (i) the product of each unit's baseline multiplied by an emission rate of 1.20 lbs/mmBtu, divided by 2,000, exceeds (ii) the tonnage level specified under subparagraph (E) of paragraph (2) of this subsection multiplied by a factor of 3.

"(5) Each eligible Phase I extension unit shall receive allowances determined under subsection (a)(1) or (c) of this section. In addition, for calendar year 1995, the Administrator shall allocate to each eligible Phase I extension unit, from the allowance reserve created pursuant to subsection (a)(2), allowances equal to the difference between the lesser of the average annual emissions in calendar years 1988 and 1989 or its projected emissions tonnage for calendar year 1995 and the product of the unit's baseline multiplied by an emission rate of 2.50 lbs/mmBtu, divided by 2,000. In calendar year 1996, the Administrator shall allocate for each eligible unit, from the allowance reserve created pursuant to subsection (a)(2), allowances equal to the difference between the lesser of the average annual emissions in calendar years 1988 and 1989 or its projected emissions tonnage for calendar year 1996 and the product of the unit's baseline multiplied by an emission rate of 2.50 lbs/mmBtu, divided by 2,000. It shall be unlawful for any source or unit subject to an approved extension plan under this subsection to emit sulfur dioxide in excess of the emissions limitations provided for in the permit and approved extension plan, unless the owner or operator of each unit governed

by the permit and approved plan holds allowances to emit not less than the unit's total annual emissions.

"(6) In addition to allowances specified in paragraph (5), the Administrator shall allocate for each eligible Phase I extension unit employing qualifying Phase I technology, for calendar years 1997, 1998, and 1999, additional allowances, from any remaining allowances in the reserve created pursuant to subsection (a)(2), following the reduction in the reserve provided for in paragraph (4), not to exceed the amount by which (A) the product of each eligible unit's baseline times an emission rate of 1.20 lbs/mmBtu, divided by 2,000, exceeds (B) the tonnage level specified under subparagraph (E) of paragraph (2) of this subsection.

"(7) After January 1, 1997, in addition to any liability under this Act, including under section 411, if any eligible phase I extension unit employing qualifying phase I technology or any transfer unit under this subsection emits sulfur dioxide in excess of the annual tonnage limitation specified in the extension plan, as approved in paragraph (3) of this subsection, the Administrator shall, in the calendar year following such excess, deduct allowances equal to the amount of such excess from such unit's annual allowance allocation.

"(e)(1) In the case of a unit that receives authorization from the Governor of the State in which such unit is located to make reductions in the emissions of sulfur dioxide prior to calendar year 1995 and that is part of a utility system that meets the following requirements: (A) the total coal-fired generation within the utility system as a percentage of total system generation decreased by more than 20 percent between January 1, 1980, and December 31, 1985; and (B) the weighted capacity factor of all coal-fired units within the utility system averaged over the period from January 1, 1985, through December 31, 1987, was below 50 percent, the Administrator shall allocate allowances under this paragraph for the unit pursuant to this subsection. The Administrator shall allocate allowances for a unit that is an affected unit pursuant to section 405 (but is not also an affected unit under this section) and part of a utility system that includes 1 or more affected units under section 405 for reductions in the emissions of sulfur dioxide made during the period 1995-1999 if the unit meets the requirements of this subsection and the requirements of the preceding sentence, except that for the purposes of applying this subsection to any such unit, the prior year concerned as specified below, shall be any year after January 1, 1995 but prior to January 1, 2000.

"(2) In the case of an affected unit under this section described in subparagraph (A), the allowances allocated under this subsection for early reductions in any prior year may not exceed the amount which (A) the product of the unit's baseline multiplied by the unit's 1985 actual sulfur dioxide emission rate (in lbs. per mmBtu), divided by 2,000, exceeds (B) the allowances specified for

such unit in Table A. In the case of an affected unit under section 405 described in subparagraph (A), the allowances awarded under this subsection for early reductions in any prior year may not exceed the amount by which (i) the product of the quantity of fossil fuel consumed by the unit (in mmBtu) in the prior year multiplied by the lesser of 2.50 or the most stringent emission rate (in lbs. per mmBtu) applicable to the unit under the applicable implementation plan, divided by 2,000, exceeds (ii) the unit's actual tonnage of sulfur dioxide emission for the prior year concerned. Allowances allocated under this subsection for units referred to in subparagraph (A) may be allocated only for emission reductions achieved as a result of physical changes or changes in the method of operation made after the date of enactment of the Clean Air Act Amendments of 1990, including changes in the type or quality of fossil fuel consumed.

"(3) In no event shall the provisions of this paragraph be interpreted as an event of force majeure or a commercial impracticability or in any other way as a basis for excused nonperformance by a utility system under a coal sales contract in effect before the date of enactment of the Clean Air Act Amendments of 1990.

"TABLE A.-AFFECTED SOURCES AND UNITS IN PHASE I AND THEIR SULFUR DIOXIDE ALLOWANCES (TONS)

State	Plant Name	Generator	Phase I Allowances
Alabama	Colbert	1	13,570
		2	15,310
		3	
			15,400
		4	
		15,410	
		37,180	
		5	
		1	
		E.C. Gaston	
	18,100		
		2	18,540
		3	18,310
		4	19,280
		5	59,840
Florida	Big Bend	1	28,410

		2	27,100
		3	26,740
	Crist	6	19,200
		7	31,680
Georgia	Bowen	1	56,320
		2	54,770
		3	71,750
		4	71,740
	Hammond	1	8,780
		2	9,220
		3	8,910
		4	37,640
	J. McDonough	1	19,910
		2	20,600
	Wansley	1	70,770
		2	65,430
	Yates	1	7,210
		2	7,040
		3	6,950
		4	8,910
		5	9,410
		6	24,760
		7	21,480
Illinois	Baldwin	1	42,010
		2	44,420
		3	42,550
	Coffeen	1	11,790
		2	35,670
	Grand Tower	4	5,910
	Hennepin	2	18,410
	Joppa Steam	1	12,590
		2	10,770
		3	12,270
		4	11,360
		5	11,420
		6	10,620
	Kincaid	1	31,530
		2	33,810
	Meredosia	3	13,890
	Vermilion	2	8,880
Indiana	Bailly	7	11,180
		8	15,630
	Breed	1	18,500
	Cayuga	1	33,370
		2	34,130
	Clifty Creek	1	20,150
		2	19,810
		3	20,410
		4	20,080
		5	19,360
		6	20,380
	E. W. Stout	5	3,880
		6	4,770
		7	23,610
	F. B. Culley	2	4,290
		3	16,970
	F. E. Ratts	1	8,330
		2	8,480
	Gibson	1	40,400
		2	41,010
		3	41,080

		4	40,320
	H. T. Pritchard	6	5,770
	Michigan City	12	23,310
	Petersburg	1	16,430
		2	32,380
	R. Gallagher	1	6,490
		2	7,280
		3	6,530
		4	7,650
	Tanners Creek	4	24,820
	Wabash River	1	4,000
		2	2,860
		3	3,750
		5	3,670
		6	12,280
	Warrick	4	26,980
Iowa	Burlington	1	
	10,710		
	Des Moines	7	2,320
	George Neal	1	1,290
	M.L. Kapp	2	13,800
	Prairie Creek	4	8,180
	Riverside	5	3,990
Kansas	Quindaro	2	4,220
Kentucky	Coleman	1	11,250
		2	12,840
		3	12,340
	Cooper	1	7,450
		2	15,320
	E.W. Brown	1	7,110
		2	
	10,910		
		3	26,100
	Elmer Smith	1	6,520
		2	14,410
	Ghent	1	28,410
	Green River	4	7,820
	H.L. Spurlock	1	22,780
	Henderson II		
	13,340		
		2	
	12,310		
	Paradise	3	
	59,170		
	Shawnee	10	
	10,170		
Maryland	Chalk Point	1	
	21,910		
		2	
	24,330		
	C. P. Crane	1	
	10,330		

		2	9,230
	Morgantown	1	
	35,260		
		2	
	38,480		
Michigan	J. H. Campbell	1	
	19,280		
		2	
	23,060		
Minnesota	High Bridge	6	4,270
Mississippi	Jack Watson	4	
	17,910		
		5	
	36,700		
Missouri	Asbury	1	
	16,190		
	James River	5	4,850
	Labadie	1	
	40,110		
		2	
	37,710		
		3	
	40,310		
		4	
	35,940		
	Montrose	1	7,390
		2	8,200
		3	
	10,090		
	New Madrid	1	
	28,240		
		2	
	32,480		
	Sibley	3	
	15,580		

	Sioux 22,570	1	
	23,690	2	
	Thomas Hill 10,250	1	
	19,390	2	
New Hampshire	Merrimack 10,190	1	
		2	22,000
New Jersey	B.L. England	1	9,060
	211,720		
New York	Dunkirk 12,600	3	
	14,060	4	
	Greenidge	4	7,540
	Milliken 11,170	1	
	212,410		
	Northport 19,810	1	
	24,110	2	
	26,480	3	
	Port Jefferson 10,470	3	
		4	12,330
Ohio	Ashtabula 16,740	5	
	Avon Lake 11,650	8	
	30,480	9	
	Cardinal 34,270	1	

38,320	2	
Conesville	1	4,210
	2	4,890
	3	5,500
	4	
48,770		
Eastlake	1	7,800
	2	8,640
	3	
10,020		
	4	
14,510		
	5	
34,070		
Edgewater	4	5,050
Gen. J.M. Gavin	1	
79,080		
	2	
80,560		
Kyger Creek	1	
19,280		
	2	
18,560		
	3	
17,910		
	4	
18,710		
	5	
18,740		
Miami Fort	5	760
	6	
11,380		
	7	
38,510		
Muskingum River	1	
14,880		

	14,170	2	
	13,950	3	
	11,780	4	
	40,470	5	
	Niles	1	6,940
		2	9,100
	Picway	5	4,930
	R.E. Burger	3	6,150
	10,780	4	
	12,430	5	
	W.H. Sammis 24,170	5	
	39,930	6	
	43,220	7	
	W.C. Beckjord	5	8,950
		6	23,020
Pennsylvania	Armstrong 14,410	1	
	15,430	2	
	Brunner Island 127,760	1	
	31,100	2	
	53,820	3	

	Cheswick	1	
	39,170		
	Conemaugh	1	
	59,790		
	66,450	2	
	Hatfield's Ferry	1	
	37,830		
	37,320	2	
	40,270	3	
	Martins Creek	1	
	12,660		
	12,820	2	
	Portland	1	5,940
	10,230	2	
	Shawville	1	
	10,320		
	10,320	2	
	14,220	3	
	14,070	4	
	Sunbury	3	8,760
	11,450	4	
Tennessee	Allen	1	
	15,320		
	16,770	2	
	15,670	3	
	Cumberland	1	
	86,700		

		2	
	94,840		
	Gallatin	1	
	17,870		
		2	
	17,310		
		3	
	20,020		
		4	
	21,260		
	Johnsonville	1	7,790
		2	8,040
		3	8,410
		4	7,990
		5	8,240
		6	7,890
		7	8,980
		8	8,700
		9	7,080
		10	7,550
West Virginia	Albright	3	12,000
	Fort Martin	1	
	41,590		
		2	
	41,200		
	Harrison	1	
	48,620		
		2	
	46,150		

	41,500	3	
	Kammer 18,740	1	
	19,460	2	
	17,390	3	
	Mitchell 43,980	1	
	45,510	2	
	Mount Storm 43,720	1	
	35,580	2	
Wisconsin	Edgewater 24,750	3 4	42,430
	La Crosse/Genoa 22,700	3	
	Nelson Dewey	1	6,010
		2	6,680
	N. Oak Creek	1	5,220
		2	5,140
		3	5,370
		4	6,320
	Pulliam	8	7,510
	S. Oak Creek	5	9,670
	12,040	6	
		7	16,180
		8	15,790

"(f) ENERGY CONSERVATION AND RENEWABLE ENERGY.-

"(1) DEFINITIONS.-As used in this subsection:

"(A) QUALIFIED ENERGY CONSERVATION MEASURE.-The term 'qualified energy conservation measure' means a cost effective measure, as identified by the Administrator in consultation with the Secretary of Energy, that increases the efficiency of the use of electricity provided by an electric utility to its customers.

"(B) QUALIFIED RENEWABLE ENERGY.-The term 'qualified renewable energy' means energy derived from biomass, solar, geothermal, or wind as identified by the Administrator in consultation with the Secretary of Energy.

"(C) ELECTRIC UTILITY.-The term 'electric utility' means any person, State agency, or Federal agency, which sells electric energy.

"(2) ALLOWANCES FOR EMISSIONS AVOIDED THROUGH ENERGY CONSERVATION AND RENEWABLE ENERGY.-

"(A) IN GENERAL.-The regulations under paragraph (4) of this subsection shall provide that for each ton of sulfur dioxide emissions avoided by an electric utility, during the applicable period, through the use of qualified energy conservation measures or qualified renewable energy, the Administrator shall allocate a single allowance to such electric utility, on a first-come-first-served basis from the Conservation and Renewable Energy Reserve established under subsection (g), up to a total of 300,000 allowances for allocation from such Reserve.

"(B) REQUIREMENTS FOR ISSUANCE.-The Administrator shall allocate allowances to an electric utility under this subsection only if all of the following requirements are met:

"(i) Such electric utility is paying for the qualified energy conservation measures or qualified renewable energy directly or through purchase from another person.

"(ii) The emissions of sulfur dioxide avoided through the use of qualified energy conservation measures or qualified renewable energy are quantified in accordance with regulations promulgated by the Administrator under this subsection.

"(iii)(I) Such electric utility has adopted and is implementing a least cost energy conservation and electric power plan which evaluates a range of resources, including new power supplies, energy conservation, and renewable energy

resources, in order to meet expected future demand at the lowest system cost.

"(II) The qualified energy conservation measures or qualified renewable energy, or both, are consistent with that plan.

"(III) Electric utilities subject to the jurisdiction of a State regulatory authority must have such plan approved by such authority. For electric utilities not subject to the jurisdiction of a State regulatory authority such plan shall be approved by the entity with rate-making authority for such utility.

"(iv) In the case of qualified energy conservation measures undertaken by a State regulated electric utility, the Secretary of Energy certifies that the State regulatory authority with jurisdiction over the electric rates of such electric utility has established rates and charges which ensure that the net income of such electric utility after implementation of specific cost effective energy conservation measures is at least as high as such net income would have been if the energy conservation measures had not been implemented. Upon the date of any such certification by the Secretary of Energy, all allowances which, but for this paragraph, would have been allocated under subparagraph (A) before such date, shall be allocated to the electric utility. This clause is not a requirement for qualified renewable energy.

"(v) Such utility or any subsidiary of the utility's holding company owns or operates at least one affected unit.

"(C) PERIOD OF APPLICABILITY.-Allowances under this subsection shall be allocated only with respect to kilowatt hours of electric energy saved by qualified energy conservation measures or generated by qualified renewable energy after January 1, 1992 and before the earlier of (i) December 31, 2000, or (ii) the date on which any electric utility steam generating unit owned or operated by the electric utility to which the allowances are allocated becomes subject to this title (including those sources that elect to become affected by this title, pursuant to section 410).

"(D) DETERMINATION OF AVOIDED EMISSIONS.-

"(i) APPLICATION.-In order to receive allowances under this subsection, an electric utility shall make an application which-

"(I) designates the qualified energy conservation measures implemented and the qualified renewable energy sources used for purposes of avoiding emissions,

"(II) calculates, in accordance with subparagraphs (F) and (G), the number of tons of emissions avoided by reason of the implementation of such measures or the use of such renewable energy sources; and

"(III) demonstrates that the requirements of subparagraph (B) have been met.

Such application for allowances by a State-regulated electric utility shall require approval by the State regulatory authority with jurisdiction over such electric utility. The authority shall review the application for accuracy and compliance with this subsection and the rules under this subsection. Electric utilities whose retail rates are not subject to the jurisdiction of a State regulatory authority shall apply directly to the Administrator for such approval.

"(E) AVOIDED EMISSIONS FROM QUALIFIED ENERGY CONSERVATION MEASURES.-For the purposes of this subsection, the emission tonnage deemed avoided by reason of the implementation of qualified energy conservation measures for any calendar year shall be a tonnage equal to the product of multiplying-

"(i) the kilowatt hours that would otherwise have been supplied by the utility during such year in the absence of such qualified energy conservation measures, by

"(ii) 0.004, and dividing by 2,000.

"(F) AVOIDED EMISSIONS FROM THE USE OF QUALIFIED RENEWABLE ENERGY.-The emissions tonnage deemed avoided by reason of the use of qualified renewable energy by an electric utility for any calendar year shall be a tonnage equal to the product of multiplying-

"(i) the actual kilowatt hours generated by, or purchased from, qualified renewable energy, by

"(ii) 0.004, and dividing by 2,000.

"(G) PROHIBITIONS.- (i) No allowances shall be allocated under this subsection for the implementation of programs that are exclusively informational or educational in nature.

"(ii) No allowances shall be allocated for energy conservation measures or renewable energy that were operational before January 1, 1992.

"(3) SAVINGS PROVISION.-Nothing in this subsection precludes a State or State regulatory authority from providing additional incentives to utilities to encourage investment in demand-side resources.

"(4) REGULATIONS.-Not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990 and in conjunction with the regulations required to be promulgated under subsections (b) and (c), the Administrator shall, in consultation with the Secretary of Energy, promulgate regulations under this subsection. Such regulations shall list energy conservation measures and renewable energy sources which may be treated as qualified energy conservation measures and qualified renewable energy for purposes of this subsection. Allowances shall only be allocated if all requirements of this subsection and the rules promulgated to implement this subsection are complied with. The Administrator shall review the determinations of each State regulatory authority under this subsection to encourage consistency from electric utility to electric utility and from State to State in accordance with the Administrator's rules. The Administrator shall publish the findings of this review no less than annually.

"(g) CONSERVATION AND RENEWABLE ENERGY RESERVE.-The Administrator shall establish a Conservation and Renewable Energy Reserve under this subsection. Beginning on January 1, 1995, the Administrator may allocate from the Conservation and Renewable Energy Reserve an amount equal to a total of 300,000 allowances for emissions of sulfur dioxide pursuant to section 403. In order to provide 300,000 allowances for such reserve, in each year beginning in calendar year 2000 and until calendar year 2009, inclusive, the Administrator shall reduce each unit's basic Phase II allowance allocation on the basis of its pro rata share of 30,000 allowances. If allowances remain in the reserve after January 2, 2010, the Administrator shall allocate such allowances for affected units under section 405 on a pro rata basis. For purposes of this subsection, for any unit subject to the emissions limitation requirements of section 405, the term 'pro rata basis' refers to the ratio which the reductions made in such unit's allowances in order to establish the reserve under this subsection bears to the total of such reductions for all such units.

"(h) ALTERNATIVE ALLOWANCE ALLOCATION FOR UNITS IN CERTAIN UTILITY SYSTEMS WITH OPTIONAL BASELINE.-

"(1) OPTIONAL BASELINE FOR UNITS IN CERTAIN SYSTEMS.-In the case of a unit subject to the emissions limitation requirements of this section which (as of the date of the enactment of the Clean Air Act Amendments of 1990)-

"(A) has an emission rate below 1.0 lbs/mmBtu,

"(B) has decreased its sulfur dioxide emissions rate by 60 percent or greater since 1980, and

"(C) is part of a utility system which has a weighted average sulfur dioxide emissions rate for all fossil fueled-fired units below 1.0 lbs/mmBtu, at the election of the owner or operator of such unit, the unit's baseline may be calculated (i) as provided under section 402(d), or (ii) by utilizing the unit's average annual fuel consumption at a 60 percent capacity factor. Such election shall be made no later than March 1, 1991.

"(2) ALLOWANCE ALLOCATION.-Whenever a unit referred to in paragraph (1) elects to calculate its baseline as provided in clause (ii) of paragraph (1), the Administrator shall allocate allowances for the unit pursuant to section 403(a)(1), this section, and section 405 (as basic Phase II allowance allocations) in an amount equal to the baseline selected multiplied by the lower of the average annual emission rate for such unit in 1989, or 1.0 lbs./mmBtu. Such allowance allocation shall be in lieu of any allocation of allowances under this section and section 405.

"SEC. 405. PHASE II SULFUR DIOXIDE REQUIREMENTS.

"(a) APPLICABILITY.- (1) After January 1, 2000, each existing utility unit as provided below is subject to the limitations or requirements of this section. Each utility unit subject to an annual sulfur dioxide tonnage emission limitation under this section is an affected unit under this title. Each source that includes one or more affected units is an affected source. In the case of an existing unit that was not in operation during calendar year 1985, the emission rate for a calendar year after 1985, as determined by the Administrator, shall be used in lieu of the 1985 rate. The owner or operator of any unit operated in violation of this section shall be fully liable under this Act for fulfilling the obligations specified in section 411 of this title.

"(2) In addition to basic Phase II allowance allocations, in each year beginning in calendar year 2000 and ending in calendar year 2009, inclusive, the Administrator shall allocate up to 530,000 Phase II bonus allowances pursuant to subsections (b)(2), (c)(4), (d)(3)(A) and (B), and (h)(2) of this section and section 406. Not later than June 1, 1998, the Administrator shall calculate, for each unit granted an extension pursuant to section 409 the difference between (A) the number of allowances allocated for the unit in calendar year 2000, and (B) the product of the unit's baseline multiplied by 1.20 lbs/mmBtu, divided by 2000, and sum the computations. In each year, beginning in calendar year 2000 and ending in calendar year 2009, inclusive, the Administrator shall deduct from each unit's basic Phase II allowance allocation its pro rata share of 10 percent of the sum calculated pursuant to the preceding sentence.

"(3) In addition to basic Phase II allowance allocations and Phase II bonus allowance allocations, beginning January 1, 2000, the Administrator shall allocate for each unit listed on Table A in section 404 (other than units at Kyger Creek, Clifty Creek, and Joppa Steam) and located in the States of Illinois, Indiana, Ohio, Georgia, Alabama, Missouri, Pennsylvania, West Virginia, Kentucky, or Tennessee allowances in an amount equal to 50,000 multiplied by the unit's pro rata share of the total number of basic allowances allocated for all units listed on Table A (other than units at Kyger Creek, Clifty Creek, and Joppa Steam). Allowances allocated pursuant to this paragraph shall not be subject to the 8,900,000 ton limitation in section 403(a).

"(b) UNITS EQUAL TO, OR ABOVE, 75 MWe AND 1.20 lbs/mmBtu.-(1) Except as otherwise provided in paragraph (3), after January 1, 2000, it shall be unlawful for any existing utility unit that serves a generator with nameplate capacity equal to, or greater, than 75 MWe and an actual 1985 emission rate equal to or greater than 1.20 lbs/mmBtu to exceed an annual sulfur dioxide tonnage emission limitation equal to the product of the unit's baseline multiplied by an emission rate equal to 1.20 lbs/mmBtu, divided by 2,000, unless the owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions.

"(2) In addition to allowances allocated pursuant to paragraph (1) and section 403(a)(1) as basic Phase II allowance allocations, beginning January 1, 2000, and for each calendar year thereafter until and including 2009, the Administrator shall allocate annually for each unit subject to the emissions limitation requirements of paragraph (1) with an actual 1985 emissions rate greater than 1.20 lbs/mmBtu and less than 2.50 lbs/mmBtu and a baseline capacity factor of less than 60 percent, allowances from the reserve created pursuant to subsection (a)(2) in an amount equal to 1.20 lbs/mmBtu multiplied by 50 percent of the difference, on a Btu basis, between the unit's baseline and the unit's fuel consumption at a 60 percent capacity factor.

"(3) After January 1, 2000, it shall be unlawful for any existing utility unit with an actual 1985 emissions rate equal to or greater than 1.20 lbs/mmBtu whose annual average fuel consumption during 1985, 1986, and 1987 on a Btu basis exceeded 90 percent in the form of lignite coal which is located in a State in which, as of July 1, 1989, no county or portion of a county was designated nonattainment under section 107 of this Act for any pollutant subject to the requirements of section 109 of this Act to exceed an annual sulfur dioxide tonnage limitation equal to the product of the unit's baseline multiplied by the lesser of the unit's actual 1985 emissions rate or its allowable 1985 emissions rate, divided by 2,000, unless the owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions.

"(4) After January 1, 2000, the Administrator shall allocate annually for each unit, subject to the emissions limitation requirements of paragraph (1), which is located in a State with an installed electrical generating capacity of more than 30,000,000 kw in 1988 and for which was issued a prohibition order or a proposed prohibition order (from burning oil), which unit subsequently converted to coal between January 1, 1980 and December 31, 1985, allowances equal to the difference between (A) the product of the unit's annual fuel consumption, on a Btu basis, at a 65 percent capacity factor multiplied by the lesser of its actual or allowable emissions rate during the first full calendar year after conversion, divided by 2,000, and (B) the number of allowances allocated for the unit pursuant to paragraph (1): *Provided*, That the number of allowances allocated pursuant to this paragraph shall not exceed an annual total of five thousand. If necessary to meeting the restriction imposed in the preceding sentence the Administrator shall reduce, pro rata, the annual allowances allocated for each unit under this paragraph.

"(c) COAL OR OIL-FIRED UNITS BELOW 75 MWe AND ABOVE 1.20 lbs/mmBtu.-(1) Except as otherwise provided in paragraph (3), after January 1, 2000, it shall be unlawful for a coal or oil-fired existing utility unit that serves a generator with nameplate capacity of less than 75 MWe and an actual 1985 emission rate equal to, or greater than, 1.20 lbs/mmBtu and which is a unit owned by a utility operating company whose aggregate nameplate fossil fuel steam-electric capacity is, as of December 31, 1989, equal to, or greater than, 250 MWe to exceed an annual sulfur dioxide emissions limitation equal to the product of the unit's baseline multiplied by an emission rate equal to 1.20 lbs/mmBtu, divided by 2,000, unless the owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions.

"(2) After January 1, 2000, it shall be unlawful for a coal or oil-fired existing utility unit that serves a generator with nameplate capacity of less than 75 MWe and an actual 1985 emission rate equal to, or greater than, 1.20 lbs/mmBtu (excluding units subject to section 111 of the Act or to a federally enforceable emissions limitation for sulfur dioxide equivalent to an annual rate of less than 1.20 lbs/mmBtu) and which is a unit owned by a utility operating company whose aggregate nameplate fossil fuel steam-electric capacity is, as of December 31, 1989, less than 250 MWe, to exceed an annual sulfur dioxide tonnage emissions limitation equal to the product of the unit's baseline multiplied by the lesser of its actual 1985 emissions rate or its allowable 1985 emissions rate, divided by 2,000, unless the owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions.

"(3) After January 1, 2000, it shall be unlawful for any existing utility unit with a nameplate capacity below 75 MWe and an

actual 1985 emissions rate equal to, or greater than, 1.20 lbs/mmBtu which became operational on or before December 31, 1965, which is owned by a utility operating company with, as of December 31, 1989, a total fossil fuel steam-electric generating capacity greater than 250 MWe, and less than 450 MWe which serves fewer than 78,000 electrical customers as of the date of enactment of the Clean Air Act Amendments of 1990 to exceed an annual sulfur dioxide emissions tonnage limitation equal to the product of its baseline multiplied by the lesser of its actual or allowable 1985 emission rate, divided by 2,000, unless the owner or operator holds allowances to emit not less than the units total annual emissions. After January 1, 2010, it shall be unlawful for each unit subject to the emissions limitation requirements of this paragraph to exceed an annual emissions tonnage limitation equal to the product of its baseline multiplied by an emissions rate of 1.20 lbs/mmBtu, divided by 2,000, unless the owner or operator holds allowances to emit not less than the unit's total annual emissions.

"(4) In addition to allowances allocated pursuant to paragraph (1) and section 403(a)(1) as basic Phase II allowance allocations, beginning January 1, 2000, and for each calendar year thereafter until and including 2009, inclusive, the Administrator shall allocate annually for each unit subject to the emissions limitation requirements of paragraph (1) with an actual 1985 emissions rate equal to, or greater than, 1.20 lbs/mmBtu and less than 2.50 lbs/mmBtu and a baseline capacity factor of less than 60 percent, allowances from the reserve created pursuant to subsection (a)(2) in an amount equal to 1.20 lbs/mmBtu multiplied by 50 percent of the difference, on a Btu basis, between the unit's baseline and the unit's fuel consumption at a 60 percent capacity factor.

"(5) After January 1, 2000, it shall be unlawful for any existing utility unit with a nameplate capacity below 75 MWe and an actual 1985 emissions rate equal to, or greater than, 1.20 lbs/mmBtu which is part of an electric utility system which, as of the date of the enactment of the Clean Air Act Amendments of 1990, (A) has at least 20 percent of its fossil-fuel capacity controlled by flue gas desulfurization devices, (B) has more than 10 percent of its fossil-fuel capacity consisting of coal-fired units of less than 75 MWe, and (C) has large units (greater than 400 MWe) all of which have difficult or very difficult FGD Retrofit Cost Factors (according to the Emissions and the FGD Retrofit Feasibility at the 200 Top Emitting Generating Stations, prepared for the United States Environmental Protection Agency on January 10, 1986) to exceed an annual sulfur dioxide emissions tonnage limitation equal to the product of its baseline multiplied by an emissions rate of 2.5 lbs/mmBtu, divided by 2,000, unless the owner or operator holds allowances to emit not less than the unit's total annual emissions. After January 1, 2010, it shall be unlawful for each unit subject to the emissions limitation requirements of this paragraph to exceed an annual emissions tonnage limitation equal to the product

of its baseline multiplied by an emissions rate of 1.20 lbs/mmBtu, divided by 2,000, unless the owner or operator holds for use allowances to emit not less than the unit's total annual emissions.

"(d) COAL-FIRED UNITS BELOW 1.20 lbs/mmBtu.--(1) After January 1, 2000, it shall be unlawful for any existing coal-fired utility unit the lesser of whose actual or allowable 1985 sulfur dioxide emissions rate is less than 0.60 lbs/mmBtu to exceed an annual sulfur dioxide tonnage emission limitation equal to the product of the unit's baseline multiplied by (A) the lesser of 0.60 lbs/mmBtu or the unit's allowable 1985 emissions rate, and (B) a numerical factor of 120 percent, divided by 2,000, unless the owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions.

"(2) After January 1, 2000, it shall be unlawful for any existing coal-fired utility unit the lesser of whose actual or allowable 1985 sulfur dioxide emissions rate is equal to, or greater than, 0.60 lbs/mmBtu and less than 1.20 lbs/mmBtu to exceed an annual sulfur dioxide tonnage emissions limitation equal to the product of the unit's baseline multiplied by (A) the lesser of its actual 1985 emissions rate or its allowable 1985 emissions rate, and (B) a numerical factor of 120 percent, divided by 2,000, unless the owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions.

"(3)(A) In addition to allowances allocated pursuant to paragraph (1) and section 403(a)(1) as basic Phase II allowance allocations, at the election of the designated representative of the operating company, beginning January 1, 2000, and for each calendar year thereafter until and including 2009, the Administrator shall allocate annually for each unit subject to the emissions limitation requirements of paragraph (1) allowances from the reserve created pursuant to subsection (a)(2) in an amount equal to the amount by which (i) the product of the lesser of 0.60 lbs/mmBtu or the unit's allowable 1985 emissions rate multiplied by the unit's baseline adjusted to reflect operation at a 60 percent capacity factor, divided by 2,000, exceeds (ii) the number of allowances allocated for the unit pursuant to paragraph (1) and section 403(a)(1) as basic Phase II allowance allocations.

"(B) In addition to allowances allocated pursuant to paragraph (2) and section 403(a)(1) as basic Phase II allowance allocations, at the election of the designated representative of the operating company, beginning January 1, 2000, and for each calendar year thereafter until and including 2009, the Administrator shall allocate annually for each unit subject to the emissions limitation requirements of paragraph (2) allowances from the reserve created pursuant to subsection (a)(2) in an amount equal to the amount by which (i) the product of the lesser of the unit's actual 1985 emissions rate or its allowable 1985 emissions rate multiplied by the unit's baseline adjusted to reflect operation at a 60 percent capacity factor, divided by 2,000, exceeds (ii) the number of

allowances allocated for the unit pursuant to paragraph (2) and section 403(a)(1) as basic Phase II allowance allocations.

"(C) An operating company with units subject to the emissions limitation requirements of this subsection may elect the allocation of allowances as provided under subparagraphs (A) and (B). Such election shall apply to the annual allowance allocation for each and every unit in the operating company subject to the emissions limitation requirements of this subsection. The Administrator shall allocate allowances pursuant to subparagraphs (A) and (B) only in accordance with this subparagraph.

"(4) Notwithstanding any other provision of this section, at the election of the owner or operator, after January 1, 2000, the Administrator shall allocate in lieu of allocation, pursuant to paragraph (1), (2), (3), (5), or (6), allowances for a unit subject to the emissions limitation requirements of this subsection which commenced commercial operation on or after January 1, 1981 and before December 31, 1985, which was subject to, and in compliance with, section 111 of the Act in an amount equal to the unit's annual fuel consumption, on a Btu basis, at a 65 percent capacity factor multiplied by the unit's allowable 1985 emissions rate, divided by 2,000.

"(5) For the purposes of this section, in the case of an oil- and gas-fired unit which has been awarded a clean coal technology demonstration grant as of January 1, 1991, by the United States Department of Energy, beginning January 1, 2000, the Administrator shall allocate for the unit allowances in an amount equal to the unit's baseline multiplied by 1.20 lbs/mmBtu, divided by 2,000.

"(e) OIL AND GAS-FIRED UNITS EQUAL TO OR GREATER THAN 0.60 lbs/mmBtu AND LESS THAN 1.20 lbs/mmBtu.-After January 1, 2000, it shall be unlawful for any existing oil and gas-fired utility unit the lesser of whose actual or allowable 1985 sulfur dioxide emission rate is equal to, or greater than, 0.60 lbs/mmBtu, but less than 1.20 lbs/mmBtu to exceed an annual sulfur dioxide tonnage limitation equal to the product of the unit's baseline multiplied by (A) the lesser of the unit's allowable 1985 emissions rate or its actual 1985 emissions rate and (B) a numerical factor of 120 percent divided by 2,000, unless the owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions.

"(f) OIL AND GAS-FIRED UNITS LESS THAN 0.60 lbs/mmBtu.-(1) After January 1, 2000, it shall be unlawful for any oil and gas-fired existing utility unit the lesser of whose actual or allowable 1985 emission rate is less than 0.60 lbs/mmBtu and whose average annual fuel consumption during the period 1980 through 1989 on a Btu basis was 90 percent or less in the form of natural gas to exceed an annual sulfur dioxide tonnage emissions limitation equal to the product of the unit's baseline multiplied by (A) the lesser of 0.60 lbs/mmBtu or the unit's allowable 1985 emissions, and (B) a numerical factor of 120 percent, divided by 2,000, unless the

owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions.

"(2) In addition to allowances allocated pursuant to paragraph (1) as basic Phase II allowance allocations and section 403(a)(1), beginning January 1, 2000, the Administrator shall, in the case of any unit operated by a utility that furnishes electricity, electric energy, steam, and natural gas within an area consisting of a city and 1 contiguous county, and in the case of any unit owned by a State authority, the output of which unit is furnished within that same area consisting of a city and 1 contiguous county, the Administrator shall allocate for each unit in the utility its pro rata share of 7,000 allowances and for each unit in the State authority its pro rata share of 2,000 allowances.

"(g) UNITS THAT COMMENCE OPERATION BETWEEN 1986 AND DECEMBER 31, 1995.-(1) After January 1, 2000, it shall be unlawful for any utility unit that has commenced commercial operation on or after January 1, 1986, but not later than September 30, 1990 to exceed an annual tonnage emission limitation equal to the product of the unit's annual fuel consumption, on a Btu basis, at a 65 percent capacity factor multiplied by the unit's allowable 1985 sulfur dioxide emission rate (converted, if necessary, to pounds per mmBtu), divided by 2,000 unless the owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions.

"(2) After January 1, 2000, the Administrator shall allocate allowances pursuant to section 403 to each unit which is listed in table B of this paragraph in an annual amount equal to the amount specified in table B.

TABLE B

Unit	Allowances
Brandon Shores	8,907
Miller 4	9,197
TNP One 2	4,000
Zimmer 1	18,458
Spruce 1	7,647
Clover 1	2,796
Clover 2	2,796
Twin Oak 2	1,760
Twin Oak 1	9,158
Cross 1	6,401
Malakoff 1	1,759

Notwithstanding any other paragraph of this subsection, for units subject to this paragraph, the Administrator shall not allocate allowances pursuant to any other paragraph of this subsection, Provided that the owner or operator of a unit listed on Table B may

elect an allocation of allowances under another paragraph of this subsection in lieu of an allocation under this paragraph.

"(3) Beginning January 1, 2000, the Administrator shall allocate to the owner or operator of any utility unit that commences commercial operation, or has commenced commercial operation, on or after October 1, 1990, but not later than December 31, 1992 allowances in an amount equal to the product of the unit's annual fuel consumption, on a Btu basis, at a 65 percent capacity factor multiplied by the lesser of 0.30 lbs/mmBtu or the unit's allowable sulfur dioxide emission rate (converted, if necessary, to pounds per mmBtu), divided by 2,000.

"(4) Beginning January 1, 2000, the Administrator shall allocate to the owner or operator of any utility unit that has commenced construction before December 31, 1990 and that commences commercial operation between January 1, 1993 and December 31, 1995, allowances in an amount equal to the product of the unit's annual fuel consumption, on a Btu basis, at a 65 percent capacity factor multiplied by the lesser of 0.30 lbs/mmBtu or the unit's allowable sulfur dioxide emission rate (converted, if necessary, to pounds per mmBtu), divided by 2,000.

"(5) After January 1, 2000, it shall be unlawful for any existing utility unit that has completed conversion from predominantly gas fired existing operation to coal fired operation between January 1, 1985 and December 31, 1987, for which there has been allocated a proposed or final prohibition order pursuant to section 301(b) of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8301 et seq, repealed 1987) to exceed an annual sulfur dioxide tonnage emissions limitation equal to the product of the unit's annual fuel consumption, on a Btu basis, at a 65 percent capacity factor multiplied by the lesser of 1.20 lbs/mmBtu or the unit's allowable 1987 sulfur dioxide emissions rate, divided by 2,000, unless the owner or operator of such unit has obtained allowances equal to its actual emissions.

"(6)(A) Unless the Administrator has approved a designation of such facility under section 410, the provisions of this title shall not apply to a 'qualifying small power production facility' or 'qualifying cogeneration facility' (within the meaning of section 3(17)(C) or 3(18)(B) of the Federal Power Act) or to a 'new independent power production facility' as defined in section 416 except that clause (iii) of such definition in section 416 shall not apply for purposes of this paragraph if, as of the date of enactment,

"(i) an applicable power sales agreement has been executed; or

"(ii) the facility is the subject of a State regulatory authority order requiring an electric utility to enter into a power sales agreement with, purchase capacity from, or (for purposes of establishing terms and conditions of the electric

utility's purchase of power) enter into arbitration concerning, the facility;

"(iii) an electric utility has issued a letter of intent or similar instrument committing to purchase power from the facility at a previously offered or lower price and a power sales agreement is executed within a reasonable period of time; or

"(iv) the facility has been selected as a winning bidder in a utility competitive bid solicitation.

"(h) OIL AND GAS-FIRED UNITS LESS THAN 10 PERCENT OIL CONSUMED.-(1) After January 1, 2000, it shall be unlawful for any oil- and gas-fired utility unit whose average annual fuel consumption during the period 1980 through 1989 on a Btu basis exceeded 90 percent in the form of natural gas to exceed an annual sulfur dioxide tonnage limitation equal to the product of the unit's baseline multiplied by the unit's actual 1985 emissions rate divided by 2,000 unless the owner or operator of such unit holds allowances to emit not less than the unit's total annual emissions.

"(2) In addition to allowances allocated pursuant to paragraph (1) and section 403(a)(1) as basic Phase II allowance allocations, beginning January 1, 2000, and for each calendar year thereafter until and including 2009, the Administrator shall allocate annually for each unit subject to the emissions limitation requirements of paragraph (1) allowances from the reserve created pursuant to subsection (a)(2) in an amount equal to the unit's baseline multiplied by 0.050 lbs/mmBtu, divided by 2,000.

"(3) In addition to allowances allocated pursuant to paragraph (1) and section 403(a)(1), beginning January 1, 2010, the Administrator shall allocate annually for each unit subject to the emissions limitation requirements of paragraph (1) allowances in an amount equal to the unit's baseline multiplied by 0.050 lbs/mmBtu, divided by 2,000.

"(i) UNITS IN HIGH GROWTH STATES.-(1) In addition to allowances allocated pursuant to this section and section 403(a)(1) as basic Phase II allowance allocations, beginning January 1, 2000, the Administrator shall allocate annually allowances for each unit, subject to an emissions limitation requirement under this section, and located in a State that-

"(A) has experienced a growth in population in excess of 25 percent between 1980 and 1988 according to State Population and Household Estimates, With Age, Sex, and Components of Change: 1981-1988 allocated by the United States Department of Commerce, and

"(B) had an installed electrical generating capacity of more than 30,000,000 kw in 1988, in an amount equal to the difference between (A) the number of allowances that would be allocated for the unit pursuant to the emissions limitation requirements of this section applicable to the unit adjusted to reflect the unit's annual average fuel consumption

on a Btu basis of any three consecutive calendar years between 1980 and 1989 (inclusive) as elected by the owner or operator and (B) the number of allowances allocated for the unit pursuant to the emissions limitation requirements of this section: *Provided*, That the number of allowances allocated pursuant to this subsection shall not exceed an annual total of 40,000. If necessary to meeting the 40,000 allowance restriction imposed under this subsection the Administrator shall reduce, pro rata, the additional annual allowances allocated to each unit under this subsection.

"(2) Beginning January 1, 2000, in addition to allowances allocated pursuant to this section and section 403(a)(1) as basic Phase II allowance allocations, the Administrator shall allocate annually for each unit subject to the emissions limitation requirements of subsection (b)(1), (A) the lesser of whose actual or allowable 1980 emissions rate has declined by 50 percent or more as of the date of enactment of the Clean Air Act Amendments of 1990, (B) whose actual emissions rate is less than 1.2 lbs/mmBtu as of January 1, 2000, (C) which commenced operation after January 1, 1970, (D) which is owned by a utility company whose combined commercial and industrial kilowatt-hour sales have increased by more than 20 percent between calendar year 1980 and the date of enactment of the Clean Air Act Amendments of 1990, and (E) whose company-wide fossil-fuel sulfur dioxide emissions rate has declined 40 per centum or more from 1980 to 1988, allowances in an amount equal to the difference between (i) the number of allowances that would be allocated for the unit pursuant to the emissions limitation requirements of subsection (b)(1) adjusted to reflect the unit's annual average fuel consumption on a Btu basis for any three consecutive years between 1980 and 1989 (inclusive) as elected by the owner or operator and (ii) the number of allowances allocated for the unit pursuant to the emissions limitation requirements of subsection (b)(1): *Provided*, That the number of allowances allocated pursuant to this paragraph shall not exceed an annual total of 5,000. If necessary to meeting the 5,000-allowance restriction imposed in the last clause of the preceding sentence the Administrator shall reduce, pro rata, the additional allowances allocated to each unit pursuant to this paragraph.

"(j) CERTAIN MUNICIPALLY OWNED POWER PLANTS.-Beginning January 1, 2000, in addition to allowances allocated pursuant to this section and section 403(a)(1) as basic Phase II allowance allocations, the Administrator shall allocate annually for each existing municipally owned oil and gas-fired utility unit with nameplate capacity equal to, or less than, 40 MWe, the lesser of whose actual or allowable 1985 sulfur dioxide emission rate is less than 1.20 lbs/mmBtu, allowances in an amount equal to the product of the unit's annual fuel consumption on a Btu basis at a 60 percent capacity factor multiplied by the lesser of its

allowable 1985 emission rate or its actual 1985 emission rate, divided by 2,000.

"SEC. 406. ALLOWANCES FOR STATES WITH EMISSIONS RATES AT OR BELOW 0.80 LBS/MMBTU.

"(a) ELECTION OF GOVERNOR.-In addition to basic Phase II allowance allocations, upon the election of the Governor of any State, with a 1985 state-wide annual sulfur dioxide emissions rate equal to or less than, 0.80 lbs/mmBtu, averaged over all fossil fuel-fired utility steam generating units, beginning January 1, 2000, and for each calendar year thereafter until and including 2009, the Administrator shall allocate, in lieu of other Phase II bonus allowance allocations, allowances from the reserve created pursuant to section 405(a)(2) to all such units in the State in an amount equal to 125,000 multiplied by the unit's pro rata share of electricity generated in calendar year 1985 at fossil fuel-fired utility steam units in all States eligible for the election.

"(b) NOTIFICATION OF ADMINISTRATOR.-Pursuant to section 403(a)(1), each Governor of a State eligible to make an election under paragraph (a) shall notify the Administrator of such election. In the event that the Governor of any such State fails to notify the Administrator of the Governor's elections, the Administrator shall allocate allowances pursuant to section 405.

"(c) ALLOWANCES AFTER JANUARY 1, 2010.-After January 1, 2010, the Administrator shall allocate allowances to units subject to the provisions of this section pursuant to section 405.

"SEC. 407. NITROGEN OXIDES EMISSION REDUCTION PROGRAM.

"(a) APPLICABILITY.-On the date that a coal-fired utility unit becomes an affected unit pursuant to sections 404, 405, 409, or on the date a unit subject to the provisions of section 404(d) or 409(b), must meet the SO2 reduction requirements, each such unit shall become an affected unit for purposes of this section and shall be subject to the emission limitations for nitrogen oxides set forth herein.

"(b) EMISSION LIMITATIONS.- (1) Not later than eighteen months after enactment of the Clean Air Act Amendments of 1990, the Administrator shall by regulation establish annual allowable emission limitations for nitrogen oxides for the types of utility boilers listed below, which limitations shall not exceed the rates listed below: *Provided*, That the Administrator may set a rate higher than that listed for any type of utility boiler if the Administrator finds that the maximum listed rate for that boiler type cannot be achieved using low NOx burner technology. The maximum allowable emission rates are as follows:

"(A) for tangentially fired boilers, 0.45 lb/mmBtu;

"(B) for dry bottom wall-fired boilers (other than units applying cell burner technology), 0.50 lb/mmBtu. After January 1, 1995, it shall be unlawful for any unit that is an affected unit on that date and is of the type listed in this paragraph to emit nitrogen oxides in excess of the emission rates set by the Administrator pursuant to this paragraph.

"(2) Not later than January 1, 1997, the Administrator shall, by regulation, establish allowable emission limitations on a lb/mmBtu, annual average basis, for nitrogen oxides for the following types of utility boilers:

"(A) wet bottom wall-fired boilers;

"(B) cyclones;

"(C) units applying cell burner technology;

"(D) all other types of utility boilers.

The Administrator shall base such rates on the degree of reduction achievable through the retrofit application of the best system of continuous emission reduction, taking into account available technology, costs and energy and environmental impacts; and which is comparable to the costs of nitrogen oxides controls set pursuant to subsection (b)(1). Not later than January 1, 1997, the Administrator may revise the applicable emission limitations for tangentially fired and dry bottom, wall-fired boilers (other than cell burners) to be more stringent if the Administrator determines that more effective low NOx burner technology is available: Provided, That, no unit that is an affected unit pursuant to section 404 and that is subject to the requirements of subsection (b)(1), shall be subject to the revised emission limitations, if any.

"(c) REVISED PERFORMANCE STANDARDS.--(1) Not later than January 1, 1993, the Administrator shall propose revised standards of performance to section 111 for nitrogen oxides emissions from fossil-fuel fired steam generating units, including both electric utility and nonutility units. Not later than January 1, 1994, the Administrator shall promulgate such revised standards of performance. Such revised standards of performance shall reflect improvements in methods for the reduction of emissions of oxides of nitrogen.

"(d) ALTERNATIVE EMISSION LIMITATIONS.--The permitting authority shall, upon request of an owner or operator of a unit subject to this section, authorize an emission limitation less stringent than the applicable limitation established under subsection (b)(1) or (b)(2) upon a determination that--

"(1) a unit subject to subsection (b)(1) cannot meet the applicable limitation using low NOx burner technology; or

"(2) a unit subject to subsection (b)(2) cannot meet the applicable rate using the technology on which the Administrator based the applicable emission limitation.

The permitting authority shall base such determination upon a showing satisfactory to the permitting authority, in accordance

with regulations established by the Administrator not later than eighteen months after enactment of the Clean Air Act Amendments of 1990, that the owner or operator-

"(1) has properly installed appropriate control equipment designed to meet the applicable emission rate;

"(2) has properly operated such equipment for a period of fifteen months (or such other period of time as the Administrator determines through the regulations), and provides operating and monitoring data for such period demonstrating that the unit cannot meet the applicable emission rate; and

"(3) has specified an emission rate that such unit can meet on an annual average basis. The permitting authority shall issue an operating permit for the unit in question, in accordance with section 408 and part B of title III-

"(i) that permits the unit during the demonstration period referred to in subparagraph (2) above, to emit at a rate in excess of the applicable emission rate;

"(ii) at the conclusion of the demonstration period to revise the operating permit to reflect the alternative emission rate demonstrated in paragraphs (2) and (3) above.

Units subject to subsection (b)(1) for which an alternative emission limitation is established shall not be required to install any additional control technology beyond low NOx burners. Nothing in this section shall preclude an owner or operator from installing and operating an alternative NOx control technology capable of achieving the applicable emission limitation. If the owner or operator of a unit subject to the emissions limitation requirements of subsection (b)(1) demonstrates to the satisfaction of the Administrator that the technology necessary to meet such requirements is not in adequate supply to enable its installation and operation at the unit, consistent with system reliability, by January 1, 1995, then the Administrator shall extend the deadline for compliance for the unit by a period of 15 months. Any owner or operator may petition the Administrator to make a determination under the previous sentence. The Administrator shall grant or deny such petition within 3 months of submittal.

"(e) EMISSIONS AVERAGING.-In lieu of complying with the applicable emission limitations under subsection (b) (1), (2), or (d), the owner or operator of two or more units subject to one or more of the applicable emission limitations set pursuant to these sections, may petition the permitting authority for alternative contemporaneous annual emission limitations for such units that ensure that (1) the actual annual emission rate in pounds of nitrogen oxides per million Btu averaged over the units in question is a rate that is less than or equal to (2) the Btu-weighted average annual emission rate for the same units if they had been operated, during the same period of time, in compliance with

limitations set in accordance with the applicable emission rates set pursuant to subsections (b) (1) and (2).

"If the permitting authority determines, in accordance with regulations issued by the Administrator not later than eighteen months after enactment of the Clean Air Act Amendments of 1990; that the conditions in the paragraph above can be met, the permitting authority shall issue operating permits for such units, in accordance with section 408 and part B of title III, that allow alternative contemporaneous annual emission limitations. Such emission limitations shall only remain in effect while both units continue operation under the conditions specified in their respective operating permits.

"SEC. 408. PERMITS AND COMPLIANCE PLANS.

"(a) PERMIT PROGRAM.-The provisions of this title shall be implemented, subject to section 403, by permits issued to units subject to this title (and enforced) in accordance with the provisions of title V, as modified by this title. Any such permit issued by the Administrator, or by a State with an approved permit program, shall prohibit-

"(1) annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide the owner or operator, or the designated representative of the owners or operators, of the unit hold for the unit,

"(2) exceedances of applicable emissions rates,

"(3) the use of any allowance prior to the year for which it was allocated, and

"(4) contravention of any other provision of the permit. Permits issued to implement this title shall be issued for a period of 5 years, notwithstanding title V. No permit shall be issued that is inconsistent with the requirements of this title, and title V as applicable.

"(b) COMPLIANCE PLAN.-Each initial permit application shall be accompanied by a compliance plan for the source to comply with its requirements under this title. Where an affected source consists of more than one affected unit, such plan shall cover all such units, and for purposes of section 502(c), such source shall be considered a 'facility'. Nothing in this section regarding compliance plans or in title V shall be construed as affecting allowances. Except as provided under subsection (c)(1)(B), submission of a statement by the owner or operator, or the designated representative of the owners and operators, of a unit subject to the emissions limitation requirements of sections 404, 405, and 407, that the unit will meet the applicable emissions limitation requirements of such sections in a timely manner or that, in the case of the emissions limitation requirements of sections 404 and 405, the owners and operators will hold allowances to emit not less than the total annual emissions of

the unit, shall be deemed to meet the proposed and approved compliance planning requirements of this section and title V, except that, for any unit that will meet the requirements of this title by means of an alternative method of compliance authorized under section 404 (b), (c), (d), or (f) section 407 (d) or (e), section 409 and section 410, the proposed and approved compliance plan, permit application and permit shall include, pursuant to regulations promulgated by the Administrator, for each alternative method of compliance a comprehensive description of the schedule and means by which the unit will rely on one or more alternative methods of compliance in the manner and time authorized under this title. Recordation by the Administrator of transfers of allowances shall amend automatically all applicable proposed or approved permit applications, compliance plans and permits. The Administrator may also require-

"(1) for a source, a demonstration of attainment of national ambient air quality standards, and

"(2) from the owner or operator of two or more affected sources, an integrated compliance plan providing an overall plan for achieving compliance at the affected sources.

"(c) FIRST PHASE PERMITS.-The Administrator shall issue permits to affected sources under sections 404 and 407.

"(1) PERMIT APPLICATION AND COMPLIANCE PLAN.- (A) Not later than 27 months after the date of the enactment of the Clean Air Act Amendments of 1990, the designated representative of the owners or operators, or the owner and operator, of each affected source under sections 404 and 407 shall submit a permit application and compliance plan for that source in accordance with regulations issued by the Administrator under paragraph (3). The permit application and the compliance plan shall be binding on the owner or operator or the designated representative of owners and operators for purposes of this title and section 402(a), and shall be enforceable in lieu of a permit until a permit is issued by the Administrator for the source.

"(B) In the case of a compliance plan for an affected source under sections 404 and 407 for which the owner or operator proposes to meet the requirements of that section by reducing utilization of the unit as compared with its baseline or by shutting down the unit, the owner or operator shall include in the proposed compliance plan a specification of the unit or units that will provide electrical generation to compensate for the reduced output at the affected source, or a demonstration that such reduced utilization will be accomplished through energy conservation or improved unit efficiency. The unit to be used for such compensating generation, which is not otherwise an affected unit under sections 404 and 407, shall be deemed an affected unit under section 404, subject to all of the requirements for such units

under this title, except that allowances shall be allocated to such compensating unit in the amount of an annual limitation equal to the product of the unit's baseline multiplied by the lesser of the unit's actual 1985 emissions rate or its allowable 1985 emissions rate, divided by 2,000.

"(2) EPA ACTION ON COMPLIANCE PLANS.-The Administrator shall review each proposed compliance plan to determine whether it satisfies the requirements of this title, and shall approve or disapprove such plan within 6 months after receipt of a complete submission. If a plan is disapproved, it may be resubmitted for approval with such changes as the Administrator shall require consistent with the requirements of this title and within such period as the Administrator prescribes as part of such disapproval.

"(3) REGULATIONS; ISSUANCE OF PERMITS.-Not later than 18 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations, in accordance with title V, to implement a Federal permit program to issue permits for affected sources under this title. Following promulgation, the Administrator shall issue a permit to implement the requirements of section 404 and the allowances provided under section 403 to the owner or operator of each affected source under section 404. Such a permit shall supersede any permit application and compliance plan submitted under paragraph (1).

"(4) FEES.-During the years 1995 through 1999 inclusive, no fee shall be required to be paid under section 502(b)(3) or under section 110(a)(2)(L) with respect to emissions from any unit which is an affected unit under section 404.

"(d) SECOND PHASE PERMITS.- (1) To provide for permits for (A) new electric utility steam generating units required under section 403(e) to have allowances, (B) affected units or sources under section 405, and (C) existing units subject to nitrogen oxide emission reductions under section 407, each State in which one or more such units or sources are located shall submit in accordance with title V, a permit program for approval as provided by that title. Upon approval of such program, for the units or sources subject to such approved program the Administrator shall suspend the issuance of permits as provided in title V.

"(2) The owner or operator or the designated representative of each affected source under section 405 shall submit a permit application and compliance plan for that source to the permitting authority, not later than January 1, 1996.

"(3) Not later than December 31, 1997, each State with an approved permit program shall issue permits to the owner or operator, or the designated representative of the owners and operators, of affected sources under section 405 that satisfy the requirements of title V and this title and that submitted to such State a permit application and compliance plan pursuant to

paragraph (2). In the case of a State without an approved permit program by July 1, 1996, the Administrator shall, not later than January 1, 1998, issue a permit to the owner or operator or the designated representative of each such affected source. In the case of affected sources for which applications and plans are timely received under paragraph (2), the permit application and the compliance plan, including amendments thereto, shall be binding on the owner or operator or the designated representative of the owners or operators and shall be enforceable as a permit for purposes of this title and title V until a permit is issued by the permitting authority for the affected source. The provisions of section 558(c) of title V of the United States Code (relating to renewals) shall apply to permits issued by a permitting authority under this title and title V.

"(4) The permit issued in accordance with this subsection for an affected source shall provide that the affected units at the affected source may not emit an annual tonnage of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide the owner or operator or designated representative hold for the unit.

"(e) NEW UNITS.-The owner or operator of each source that includes a new electric utility steam generating unit shall submit a permit application and compliance plan to the permitting authority not later than 24 months before the later of (1) January 1, 2000, or (2) the date on which the unit commences operation. The permitting authority shall issue a permit to the owner or operator, or the designated representative thereof, of the unit that satisfies the requirements of title V and this title.

"(f) UNITS SUBJECT TO CERTAIN OTHER LIMITS.-The owner or operator, or designated representative thereof, of any unit subject to an emission rate requirement under section 407 shall submit a permit application and compliance plan for such unit to the permitting authority, not later than January 1, 1998. The permitting authority shall issue a permit to the owner or operator that satisfies the requirements of title V and this title, including any appropriate monitoring and reporting requirements.

"(g) AMENDMENT OF APPLICATION AND COMPLIANCE PLAN.-At any time after the submission of an application and compliance plan under this section, the applicant may submit a revised application and compliance plan, in accordance with the requirements of this section. In considering any permit application and compliance plan under this title, the permitting authority shall ensure coordination with the applicable electric ratemaking authority, in the case of regulated utilities, and with unregulated public utilities.

"(h) PROHIBITION.- (1) It shall be unlawful for an owner or operator, or designated representative, required to submit a permit application or compliance plan under this title to fail to submit such application or plan in accordance with the deadlines specified

in this section or to otherwise fail to comply with regulations implementing this section.

"(2) It shall be unlawful for any person to operate any source subject to this title except in compliance with the terms and requirements of a permit application and compliance plan (including amendments thereto) or permit issued by the Administrator or a State with an approved permit program. For purposes of this subsection, compliance, as provided in section 504(f), with a permit issued under title V which complies with this title for sources subject to this title shall be deemed compliance with this subsection as well as section 502(a).

"(3) In order to ensure reliability of electric power, nothing in this title or title V shall be construed as requiring termination of operations of an electric utility steam generating unit for failure to have an approved permit or compliance plan, except that any such unit may be subject to the applicable enforcement provisions of section 113.

"(i) MULTIPLE OWNERS.-No permit shall be issued under this section to an affected unit until the designated representative of the owners or operators has filed a certificate of representation with regard to matters under this title, including the holding and distribution of allowances and the proceeds of transactions involving allowances. Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, such a unit, or where a utility or industrial customer purchases power from an affected unit (or units) under life-of-the-unit, firm power contractual arrangements, the certificate shall state (1) that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, or (2) if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract. A passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the affected unit shall not be deemed to be a holder of a legal, equitable, leasehold, or contractual interest for the purpose of holding or distributing allowances as provided in this subsection, during either the term of such leasehold or thereafter, unless expressly provided for in the leasehold agreement. Except as otherwise provided in this subsection, where all legal or equitable title to or interest in an affected unit is held by a single person, the certification shall state that all allowances received by the unit are deemed to be held for that person.

"SEC. 409. REPOWERED SOURCES.

"(a) AVAILABILITY.-Not later than December 31, 1997, the owner or operator of an existing unit subject to the emissions limitation requirements of section 405 (b) and (c) may demonstrate to the permitting authority that one or more units will be repowered with a qualifying clean coal technology to comply with the requirements under section 405. The owner or operator shall, as part of any such demonstration, provide, not later than January 1, 2000, satisfactory documentation of a preliminary design and engineering effort for such repowering and an executed and binding contract for the majority of the equipment to repower such unit and such other information as the Administrator may require by regulation. The replacement of an existing utility unit with a new utility unit using a repowering technology referred to in section 402(2) which is located at a different site, shall be treated as repowering of the existing unit for purposes of this title, if-

"(1) the replacement unit is designated by the owner or operator to replace such existing unit, and

"(2) the existing unit is retired from service on or before the date on which the designated replacement unit enters commercial operation.

"(b) EXTENSION.- (1) An owner or operator satisfying the requirements of subsection (a) shall be granted an extension of the emission limitation requirement compliance date for that unit from January 1, 2000, to December 31, 2003. The extension shall be specified in the permit issued to the source under section 408, together with any compliance schedule and other requirements necessary to meet second phase requirements by the extended date. Any unit that is granted an extension under this section shall not be eligible for a waiver under section 111(j) of this Act, and shall continue to be subject to requirements under this title as if it were a unit subject to section 405.

"(2) If (A) the owner or operator of an existing unit has been granted an extension under paragraph (1) in order to repower such unit with a clean coal unit, and (B) such owner or operator demonstrates to the satisfaction of the Administrator that the repowering technology to be utilized by such unit has been properly constructed and tested on such unit, but nevertheless has been unable to achieve the emission reduction limitations and is economically or technologically infeasible, such existing unit may be retrofitted or repowered with equipment or facilities utilizing another clean coal technology or other available control technology.

"(c) ALLOWANCES.- (1) For the period of the extension under this section, the Administrator shall allocate to the owner or operator of the affected unit, annual allowances for sulfur dioxide equal to the affected unit's baseline multiplied by the lesser of the unit's federally approved State Implementation Plan emissions limitation or its actual emission rate for 1995 in lieu of any

other allocation. Such allowances may not be transferred or used by any other source to meet emission requirements under this title. The source owner or operator shall notify the Administrator sixty days in advance of the date on which the affected unit for which the extension has been granted is to be removed from operation to install the repowering technology.

"(2) Effective on that date, the unit shall be subject to the requirements of section 405. Allowances for the year in which the unit is removed from operation to install the repowering technology shall be calculated as the product of the unit's baseline multiplied by 1.20 lbs/mmBtu, divided by 2,000, and prorated accordingly, and are transferable.

"(3) Allowances for such existing utility units for calendar years after the year the repowering is complete shall be calculated as the product of the existing unit's baseline multiplied by 1.20 lbs/mmBtu, divided by 2,000.

"(4) Notwithstanding the provisions of section 403 (a) and (e), allowances shall be allocated under this section for a designated replacement unit which replaces an existing unit (as provided in the last sentence of subsection (a)) in lieu of any further allocations of allowances for the existing unit.

"(5) For the purpose of meeting the aggregate emissions limitation requirement set forth in section 403(a)(1), the units with an extension under this subsection shall be treated in each calendar year during the extension period as holding allowances allocated under paragraph (3).

"(d) CONTROL REQUIREMENTS.-Any unit qualifying for an extension under this section that does not increase actual hourly emissions for any pollutant regulated under the Act shall not be subject to any standard of performance under section 111 of this Act. Notwithstanding the provisions of this subsection, no new unit (1) designated as a replacement for an existing unit, (2) qualifying for the extension under subsection (b), and (3) located at a different site than the existing unit shall receive an exemption from the requirements imposed under section 111.

"(e) EXPEDITED PERMITTING.-State permitting authorities and, where applicable, the Administrator, are encouraged to give expedited consideration to permit applications under parts C and D of title I of this Act for any source qualifying for an extension under this section.

"(f) PROHIBITION.-It shall be unlawful for the owner or operator of a repowered source to fail to comply with the requirement of this section, or any regulations of permit requirements to implement this section, including the prohibition against emitting sulfur dioxide in excess of allowances held.

"SEC. 410. ELECTION FOR ADDITIONAL SOURCES.

(a) APPLICABILITY.-The owner or operator of any unit that is not, nor will become, an affected unit under section 403(e), 404, or 405, or that is a process source under subsection (d), that emits sulfur dioxide, may elect to designate that unit or source to become an affected unit and to receive allowances under this title. An election shall be submitted to the Administrator for approval, along with a permit application and proposed compliance plan in accordance with section 408. The Administrator shall approve a designation that meets the requirements of this section, and such designated unit, or source, shall be allocated allowances, and be an affected unit for purposes of this title.

"(b) ESTABLISHMENT OF BASELINE.-The baseline for a unit designated under this section shall be established by the Administrator by regulation, based on fuel consumption and operating data for the unit for calendar years 1985, 1986, and 1987, or if such data is not available, the Administrator may prescribe a baseline based on alternative representative data.

"(c) EMISSION LIMITATIONS.-Annual emissions limitations for sulfur dioxide shall be equal to the product of the baseline multiplied by the lesser of the unit's 1985 actual or allowable emission rate in lbs/mmBtu, or, if the unit did not operate in 1985, by the lesser of the unit's actual or allowable emission rate for a calendar year after 1985 (as determined by the Administrator), divided by 2,000.

"(d) PROCESS SOURCES.-Not later than 18 months after enactment of the Clean Air Act Amendments of 1990, the Administrator shall establish a program under which the owner or operator of a process source that emits sulfur dioxide may elect to designate that source as an affected unit for the purpose of receiving allowances under this title. The Administrator shall, by regulation, define the sources that may be designated; specify the emissions limitation; specify the operating, emission baseline, and other data requirements; prescribe CEMS or other monitoring requirements; and promulgate permit, reporting, and any other requirements necessary to implement such a program.

"(e) ALLOWANCES AND PERMITS.-The Administrator shall issue allowances to an affected unit under this section in an amount equal to the emissions limitation calculated under subsection (c) or (d), in accordance with section 403. Such allowance may be used in accordance with, and shall be subject to, the provisions of section 403. Affected sources under this section shall be subject to the requirements of sections 403, 408, 411, 412, 413, and 414.

"(f) LIMITATION.-Any unit designated under this section shall not transfer or bank allowances produced as a result of reduced utilization or shutdown, except that, such allowances may be transferred or carried forward for use in subsequent years to the extent that the reduced utilization or shutdown results from the replacement of thermal energy from the unit designated under this section, with thermal energy generated by any other unit or units

subject to the requirements of this title, and the designated unit's allowances are transferred or carried forward for use at such other replacement unit or units. In no case may the Administrator allocate to a source designated under this section allowances in an amount greater than the emissions resulting from operation of the source in full compliance with the requirements of this Act. No such allowances shall authorize operation of a unit in violation of any other requirements of this Act.

"(g) IMPLEMENTATION.-The Administrator shall issue regulations to implement this section not later than eighteen months after enactment of the Clean Air Act Amendments of 1990.

"(h) SMALL DIESEL REFINERIES.-The Administrator shall issue allowances to owners or operators of small diesel refineries who produce diesel fuel after October 1, 1993, meeting the requirements of subsection 211(i) of this Act.

"(1) ALLOWANCE PERIOD.-Allowances may be allocated under this subsection only for the period from October 1, 1993, through December 31, 1999.

"(2) ALLOWANCE DETERMINATION.-The number of allowances allocated pursuant to this paragraph shall equal the annual number of pounds of sulfur dioxide reduction attributable to desulfurization by a small refinery divided by 2,000. For the purposes of this calculation, the concentration of sulfur removed from diesel fuel shall be the difference between 0.274 percent (by weight) and 0.050 percent (by weight).

"(3) REFINERY ELIGIBILITY.-As used in this subsection, the term 'small refinery' shall mean a refinery or portion of a refinery-

"(A) which, as of the date of enactment of the Clean Air Act Amendments of 1990, has bona fide crude oil throughput of less than 18,250,000 barrels per year, as reported to the Department of Energy, and

"(B) which, as of the date of enactment of the Clean Air Act Amendments of 1990, is owned or controlled by a refiner with a total combined bona fide crude oil throughput of less than 50,187,500 barrels per year, as reported to the Department of Energy.

"(4) LIMITATION PER REFINERY.-The maximum number of allowances that can be annually allocated to a small refinery pursuant to this subsection is one thousand and five hundred.

"(5) LIMITATION ON TOTAL.-In any given year, the total number of allowances allocated pursuant to this subsection shall not exceed thirty-five thousand.

"(6) REQUIRED CERTIFICATION.-The Administrator shall not allocate any allowances pursuant to this subsection unless the owner or operator of a small diesel refinery shall have certified, at a time and in a manner prescribed by the Administrator, that all motor diesel fuel produced by the refinery for which allowances are claimed, including motor

diesel fuel for off-highway use, shall have met the requirements of subsection 211(i) of this Act.

"SEC. 411. EXCESS EMISSIONS PENALTY.

"(a) EXCESS EMISSIONS PENALTY.-The owner or operator of any unit or process source subject to the requirements of sections 403, 404, 405, 406, 407 or 409, or designated under section 410, that emits sulfur dioxide or nitrogen oxides for any calendar year in excess of the unit's emissions limitation requirement or, in the case of sulfur dioxide, of the allowances the owner or operator holds for use for the unit for that calendar year shall be liable for the payment of an excess emissions penalty, except where such emissions were authorized pursuant to section 110(f). That penalty shall be calculated on the basis of the number of tons emitted in excess of the unit's emissions limitation requirement or, in the case of sulfur dioxide, of the allowances the operator holds for use for the unit for that year, multiplied by \$2,000. Any such penalty shall be due and payable without demand to the Administrator as provided in regulations to be issued by the Administrator by no later than eighteen months after the date of enactment of the Clean Air Act Amendments of 1990. Any such payment shall be deposited in the United States Treasury pursuant to the Miscellaneous Receipts Act. Any penalty due and payable under this section shall not diminish the liability of the unit's owner or operator for any fine, penalty or assessment against the unit for the same violation under any other section of this Act.

"(b) EXCESS EMISSIONS OFFSET.-The owner or operator of any affected source that emits sulfur dioxide during any calendar year in excess of the unit's emissions limitation requirement or of the allowances held for the unit for the calendar year, shall be liable to offset the excess emissions by an equal tonnage amount in the following calendar year, or such longer period as the Administrator may prescribe. The owner or operator of the source shall, within sixty days after the end of the year in which the excess emissions occurred, submit to the Administrator, and to the State in which the source is located, a proposed plan to achieve the required offsets. Upon approval of the proposed plan by the Administrator, as submitted, modified or conditioned, the plan shall be deemed a condition of the operating permit for the unit without further review or revision of the permit. The Administrator shall also deduct allowances equal to the excess tonnage from those allocated for the source for the calendar year, or succeeding years during which offsets are required, following the year in which the excess emissions occurred.

"(c) PENALTY ADJUSTMENT.-The Administrator shall, by regulation, adjust the penalty specified in subsection (a) for

inflation, based on the Consumer Price Index, on the date of enactment and annually thereafter.

"(d) PROHIBITION.-It shall be unlawful for the owner or operator of any source liable for a penalty and offset under this section to fail (1) to pay the penalty under subsection (a), (2) to provide, and thereafter comply with, a compliance plan as required by subsection (b), or (3) to offset excess emissions as required by subsection (b).

"(e) SAVINGS PROVISION.-Nothing in this title shall limit or otherwise affect the application of section 113, 114, 120, or 304 except as otherwise explicitly provided in this title.

"SEC. 412. MONITORING, REPORTING, AND RECORDKEEPING REQUIREMENTS.

"(a) APPLICABILITY.-The owner and operator of any source subject to this title shall be required to install and operate CEMS on each affected unit at the source, and to quality assure the data for sulfur dioxide, nitrogen oxides, opacity and volumetric flow at each such unit. The Administrator shall, by regulations issued not later than eighteen months after enactment of the Clean Air Act Amendments of 1990, specify the requirements for CEMS, for any alternative monitoring system that is demonstrated as providing information with the same precision, reliability, accessibility, and timeliness as that provided by CEMS, and for recordkeeping and reporting of information from such systems. Such regulations may include limitations or the use of alternative compliance methods by units equipped with an alternative monitoring system as may be necessary to preserve the orderly functioning of the allowance system, and which will ensure the emissions reductions contemplated by this title. Where 2 or more units utilize a single stack, a separate CEMS shall not be required for each unit, and for such units the regulations shall require that the owner or operator collect sufficient information to permit reliable compliance determinations for each such unit.

"(b) FIRST PHASE REQUIREMENTS.-Not later than thirty-six months after enactment of the Clean Air Act Amendments of 1990, the owner or operator of each affected unit under section 404, including, but not limited to, units that become affected units pursuant to subsections (b) and (c) and eligible units under subsection (d), shall install and operate CEMS, quality assure the data, and keep records and reports in accordance with the regulations issued under subsection (a).

"(c) SECOND PHASE REQUIREMENTS.-Not later than January 1, 1995, the owner or operator of each affected unit that has not previously met the requirements of subsections (a) and (b) shall install and operate CEMS, quality assure the data, and keep records and reports in accordance with the regulations issued under subsection (a). Upon commencement of commercial operation of each

new utility unit, the unit shall comply with the requirements of subsection (a).

"(d) UNAVAILABILITY OF EMISSIONS DATA.-If CEMS data or data from an alternative monitoring system approved by the Administrator under subsection (a) is not available for any affected unit during any period of a calendar year in which such data is required under this title, and the owner or operator cannot provide information, satisfactory to the Administrator, on emissions during that period, the Administrator shall deem the unit to be operating in an uncontrolled manner during the entire period for which the data was not available and shall, by regulation which shall be issued not later than eighteen months after enactment of the Clean Air Act Amendments of 1990, prescribe means to calculate emissions for that period. The owner or operator shall be liable for excess emissions fees and offsets under section 411 in accordance with such regulations. Any fee due and payable under this subsection shall not diminish the liability of the unit's owner or operator for any fine, penalty, fee or assessment against the unit for the same violation under any other section of this Act.

"(e) PROHIBITION.-It shall be unlawful for the owner or operator of any source subject to this title to operate a source without complying with the requirements of this section, and any regulations implementing this section.

"SEC. 413. GENERAL COMPLIANCE WITH OTHER PROVISIONS.

"Except as expressly provided, compliance with the requirements of this title shall not exempt or exclude the owner or operator of any source subject to this title from compliance with any other applicable requirements of this Act.

"SEC. 414. ENFORCEMENT.

"It shall be unlawful for any person subject to this title to violate any prohibition of, requirement of, or regulation promulgated pursuant to this title shall be a violation of this Act. In addition to the other requirements and prohibitions provided for in this title, the operation of any affected unit to emit sulfur dioxide in excess of allowances held for such unit shall be deemed a violation, with each ton emitted in excess of allowances held constituting a separate violation.

"SEC. 415. CLEAN COAL TECHNOLOGY REGULATORY INCENTIVES.

"(a) DEFINITION.-For purposes of this section, 'clean coal technology' means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in

air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, process steam, or industrial products, which is not in widespread use as of the date of enactment of this title.

"(b) REVISED REGULATIONS FOR CLEAN COAL TECHNOLOGY DEMONSTRATIONS.-

"(1) APPLICABILITY.-This subsection applies to physical or operational changes to existing facilities for the sole purpose of installation, operation, cessation, or removal of a temporary or permanent clean coal technology demonstration project. For the purposes of this section, a clean coal technology demonstration project shall mean a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

"(2) TEMPORARY PROJECTS.-Installation, operation, cessation, or removal of a temporary clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the State implementation plans for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during and after the project is terminated, shall not subject such facility to the requirements of section 111 or part C or D of title I.

"(3) PERMANENT PROJECTS.-For permanent clean coal technology demonstration projects that constitute repowering as defined in section 402(1) of this title, any qualifying project shall not be subject to standards of performance under section 111 or to the review and permitting requirements of part C for any pollutant the potential emissions of which will not increase as a result of the demonstration project.

"(4) EPA REGULATIONS.-Not later than 12 months after the date of enactment, the Administrator shall promulgate regulations or interpretive rulings to revise requirements under section 111 and parts C and D, as appropriate, to facilitate projects consistent in this subsection. With respect to parts C and D, such regulations or rulings shall apply to all areas in which EPA is the permitting authority. In those instances in which the State is the permitting authority under part C or D, any State may adopt and submit to the Administrator for approval revisions to its implementation plan to apply the regulations or rulings promulgated under this subsection.

"(c) EXEMPTION FOR REACTIVATION OF VERY CLEAN UNITS.-Physical changes or changes in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation shall not subject the unit to the requirements of section 111 or part C of the Act where the unit (1) has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment, (2) was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent, (3) is equipped with low-NOx burners prior to the time of commencement, and (4) is otherwise in compliance with the requirements of this Act.

"SEC. 416. CONTINGENCY GUARANTEE; AUCTIONS, RESERVE.

"(a) DEFINITIONS.-For purposes of this section-

"(1) The term 'independent power producer' means any person who owns or operates, in whole or in part, one or more new independent power production facilities.

"(2) The term 'new independent power production facility' means a facility that-

"(A) is used for the generation of electric energy, 80 percent or more of which is sold at wholesale;

"(B) is nonrecourse project-financed (as such term is defined by the Secretary of Energy within 3 months of the date of the enactment of the Clean Air Act Amendments of 1990);

"(C) does not generate electric energy sold to any affiliate (as defined in section 2(a)(11) of the Public Utility Holding Company Act of 1935) of the facility's owner or operator unless the owner or operator of the facility demonstrates that it cannot obtain allowances from the affiliate; and

"(D) is a new unit required to hold allowances under this title.

"(3) The term 'required allowances' means the allowances required to operate such unit for so much of the unit's useful life as occurs after January 1, 2000.

"(b) SPECIAL RESERVE OF ALLOWANCES.-Within 36 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations establishing a Special Allowance Reserve containing allowances to be sold under this section. For purposes of establishing the Special Allowance Reserve, the Administrator shall withhold-

"(1) 2.8 percent of the allocation of allowances for each year from 1995 through 1999 inclusive; and

"(2) 2.8 percent of the basic Phase II allowance allocation of allowances for each year beginning in the year 2000

which would (but for this subsection) be issued for each affected unit at an affected source. The Administrator shall record such withholding for purposes of transferring the proceeds of the allowance sales under this subsection. The allowances so withheld shall be deposited in the Reserve under this section.

"(c) DIRECT SALE AT \$1,500 PER TON.-

"(1) SUBACCOUNT FOR DIRECT SALES.-In accordance with regulations under this section, the Administrator shall establish a Direct Sale Subaccount in the Special Allowance Reserve established under this section. The Direct Sale Subaccount shall contain allowances in the amount of 50,000 tons per year for each year beginning in the year 2000.

"(2) SALES.-Allowances in the subaccount shall be offered for direct sale to any person at the times and in the amounts specified in table 1 at a price of \$1,500 per allowance, adjusted by the Consumer Price Index in the same manner as provided in paragraph (3). Requests to purchase allowances from the Direct Sale Subaccount established under paragraph (1) shall be approved in the order of receipt until no allowances remain in such subaccount, except that an opportunity to purchase such allowances shall be provided to the independent power producers referred to in this subsection before such allowances are offered to any other person. Each applicant shall be required to pay 50 percent of the total purchase price of the allowances within 6 months after the approval of the request to purchase. The remainder shall be paid on or before the transfer of the allowances.

"TABLE 1-NUMBER OF ALLOWANCES AVAILABLE FOR SALE
AT \$1,500 PER TON

Year of Sale	Spot Sale (same year)	Advance Sale
1993-1999		25,000
2000 and after	25,000.....	25,000

Allowances sold in the spot sale in any year are allowances which may only be used in that year (unless banked for use in a later year). Allowances sold in the advance sale in any year are allowances which may only be used in the 7th year after the year in which they are first offered for sale (unless banked for use in a later year).

"(3) ENTITLEMENT TO WRITTEN GUARANTEE.-Any independent power producer that submits an application to the Administrator establishing that such independent power producer-

"(A) proposes to construct a new independent power production facility for which allowances are required under this title;

"(B) will apply for financing to construct such facility after January 1, 1990, and before the date of the first auction under this section;

"(C) has submitted to each owner or operator of an affected unit listed in table A (in section 404) a written offer to purchase the required allowances for \$750 per ton; and

"(D) has not received (within 180 days after submitting offers to purchase under subparagraph (C)) an acceptance of the offer to purchase the required allowances,

shall, within 30 days after submission of such application, be entitled to receive the Administrator's written guarantee (subject to the eligibility requirements set forth in paragraph (4)) that such required allowances will be made available for purchase from the Direct Sale Subaccount established under this subsection and at a guaranteed price. The guaranteed price at which such allowances shall be made available for purchase shall be \$1,500 per ton, adjusted by the percentage, if any, by which the Consumer Price Index (as determined under section 502(b)(3)(B)(v)) for the year in which the allowance is purchased exceeds the Consumer Price Index for the calendar year 1990.

"(4) ELIGIBILITY REQUIREMENTS.-The guarantee issued by the Administrator under paragraph (3) shall be subject to a

demonstration by the independent power producer, satisfactory to the Administrator, that-

"(A) the independent power producer has-

"(i) made good faith efforts to purchase the required allowances from the owners or operators of affected units to which allowances will be allocated, including efforts to purchase at annual auctions under this section, and from industrial sources that have elected to become affected units pursuant to section 410; and

"(ii) such bids and efforts were unsuccessful in obtaining the required allowances; and

"(B) the independent power producer will continue to make good faith efforts to purchase the required allowances from the owners or operators of affected units and from industrial sources.

"(5) ISSUANCE OF GUARANTEED ALLOWANCES FROM DIRECT SALE SUBACCOUNT UNDER THIS SECTION.-From the allowances available in the Direct Sale Subaccount established under this subsection, upon payment of the guaranteed price, the Administrator shall issue to any person exercising the right to purchase allowances pursuant to a guarantee under this subsection the allowances covered by such guarantee. Persons to which guarantees under this subsection have been issued shall have the opportunity to purchase allowances pursuant to such guarantee from such subaccount before the allowances in such reserve are offered for sale to any other person.

"(6) PROCEEDS.-Notwithstanding section 3302 of title 31 of the United States Code or any other provision of law, the Administrator shall require that the proceeds of any sale under this subsection be transferred, within 90 days after the sale, without charge, on a pro rata basis to the owners or operators of the affected units from whom the allowances were withheld under subsection (b) and that any unsold allowances be transferred to the Subaccount for Auction Sales established under subsection (d). No proceeds of any sale under this subsection shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or to the Administrator.

"(7) TERMINATION OF SUBACCOUNT.-If the Administrator determines that, during any period of 2 consecutive calendar years, less than 20 percent of the allowances available in the subaccount for direct sales established under this subsection have been purchased under this paragraph, the Administrator shall terminate the subaccount and transfer such allowances to the Auction Subaccount under subsection (d).

"(d) AUCTION SALES.-

"(1) SUBACCOUNT FOR AUCTIONS.-The Administrator shall establish an Auction Subaccount in the Special Reserve

established under this section. The Auction Subaccount shall contain allowances to be sold at auction under this section in the amount of 150,000 tons per year for each year from 1995 through 1999, inclusive and 250,000 tons per year for each year beginning in the calendar year 2000.

"(2) ANNUAL AUCTIONS.-Commencing in 1993 and in each year thereafter, the Administrator shall conduct auctions at which the allowances referred to in paragraph (1) shall be offered for sale in accordance with regulations promulgated by the Administrator, in consultation with the Secretary of the Treasury, within 12 months of enactment of the Clean Air Act Amendments of 1990. The allowances referred to in paragraph (1) shall be offered for sale at auction in the amounts specified in table 2. The auction shall be open to any person. A person wishing to bid for such allowances shall submit (by a date set by the Administrator) to the Administrator (on a sealed bid schedule provided by the Administrator) offers to purchase specified numbers of allowances at specified prices. Such regulations shall specify that the auctioned allowances shall be allocated and sold on the basis of bid price, starting with the highest-priced bid and continuing until all allowances for sale at such auction have been allocated. The regulations shall not permit that a minimum price be set for the purchase of withheld allowances. Allowances purchased at the auction may be used for any purpose and at any time after the auction, subject to the provisions of this title.

"Table 2-Number of Allowances Available for Auction

Year of Sale	Spot Auction (same year)	Advance Auction
1993	50,000*	100,000
1994	50,000*	100,000
1995	50,000*	100,000
1996	150,000	100,000
1997	150,000	100,000
1998	150,000	100,000
1999	150,000	100,000
2000 and after...	100,000	100,000

Allowances sold in the spot sale in any year are allowances which may only be used in that year (unless banked for use in a later year), except as otherwise noted. Allowances sold in the advance auction in any year are allowances which may only be used in the 7th year after the year in which they are first offered for sale (unless banked for use in a later year).

*Available for use only in 1995 (unless banked for use in a later year).

"(3) PROCEEDS.--(A) Notwithstanding section 3302 of title 31 of the United States Code or any other provision of law, within 90 days of receipt, the Administrator shall transfer the proceeds from the auction under this section, on a pro rata basis, to the owners or operators of the affected units at an affected source from whom allowances were withheld under subsection (b). No funds transferred from a purchaser to a seller of allowances under this paragraph shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or the Administrator.

"(B) At the end of each year, any allowances offered for sale but not sold at the auction shall be returned without charge, on a pro rata basis, to the owner or operator of the affected units from whose allocation the allowances were withheld.

"(4) ADDITIONAL AUCTION PARTICIPANTS.--Any person holding allowances or to whom allowances are allocated by the Administrator may submit those allowances to the Administrator to be offered for sale at auction under this subsection. The proceeds of any such sale shall be transferred at the time of sale by the purchaser to the person submitting such allowances for sale. The holder of allowances offered for sale under this paragraph may specify a minimum sale price. Any person may purchase allowances offered for auction under this paragraph. Such allowances shall be allocated and sold to purchasers on the basis of bid price after the auction under paragraph (2) is complete. No funds transferred from a purchaser to a seller of allowances under this paragraph shall be held by any officer or employee of the United States or treated for any purpose as revenue to the United States or the Administrator.

"(5) RECORDING BY EPA.--The Administrator shall record and publicly report the nature, prices and results of each auction under this subsection, including the prices of successful bids, and shall record the transfers of allowances as a result of each auction in accordance with the requirements of this section. The transfer of allowances at such auction shall be recorded in accordance with the regulations promulgated by the Administrator under this title.

"(e) CHANGES IN SALES, AUCTIONS, AND WITHHOLDING.--Pursuant to rulemaking after public notice and comment the Administrator may at any time after the year 1998 (in the case of advance sales or advance auctions) and 2005 (in the case of spot sales or spot auctions) decrease the number of allowances withheld and sold under this section.

"(f) TERMINATION OF AUCTIONS.--The Administrator may terminate the withholding of allowances and the auction sales under this section if the Administrator determines that, during any period of 3 consecutive calendar years after 2002, less than 20 percent of the allowances available in the auction subaccount have been

purchased. Pursuant to regulations under this section, the Administrator may by delegation or contract provide for the conduct of sales or auctions under the Administrator's supervision by other departments or agencies of the United States Government or by nongovernmental agencies, groups, or organizations."

SEC. 402. FOSSIL FUEL USE.

(a) **CONTRACTS FOR HYDROELECTRIC ENERGY.**-Any person who, after the date of the enactment of the Clean Air Act Amendments of 1990, enters into a contract under which such person receives hydroelectric energy in return for the provision of electric energy by such person shall use allowances held by such person as necessary to satisfy such person's obligations under such contract.

(b) **FEDERAL POWER MARKETING ADMINISTRATION.**-A Federal Power Marketing Administration shall not be subject to the provisions and requirements of this title with respect to electric energy generated by hydroelectric facilities and marketed by such Power Marketing Administration. Any person who sells or provides electric energy to a Federal Power Marketing Administration shall comply with the provisions and requirements of this title.

SEC. 403. REPEAL OF PERCENT REDUCTION.

(a) **REPEAL.**-Section 111(a)(1) of the Clean Air Act is amended to read as follows:

"(1) The term 'standard of performance' means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated."

(b) **REVISED REGULATIONS.**-Not later than three years after the date of enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate revised regulations for standards of performance for new fossil fuel fired electric utility units commencing construction after the date on which such regulations are proposed that, at a minimum, require any source subject to such revised standards to emit sulfur dioxide at a rate not greater than would have resulted from compliance by such source with the applicable standards of performance under this section prior to such revision.

(c) **APPLICABILITY.**-The provisions of subsections (a) and (b) apply only so long as the provisions of section 403(e) of the Clean Air Act remain in effect.

(d) BACT DETERMINATIONS.-Section 169(3) of the Clean Air Act is amended by inserting: ", clean fuels," after "including fuel cleaning," and by adding the following at the end thereof: "Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under this paragraph as it existed prior to enactment of the Clean Air Act Amendments of 1990."

SEC. 404. ACID DEPOSITION STANDARDS.

Not later than 36 months after the date of enactment of this Act, the Administrator of the Environmental Protection Agency shall transmit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on the feasibility and effectiveness of an acid deposition standard or standards to protect sensitive and critically sensitive aquatic and terrestrial resources. The study required by this section shall include, but not be limited to, consideration of the following matters:

(1) identification of the sensitive and critically sensitive aquatic and terrestrial resources in the United States and Canada which may be affected by the deposition of acidic compounds;

(2) description of the nature and numerical value of a deposition standard or standards that would be sufficient to protect such resources;

(3) description of the use of such standard or standards in other Nations or by any of the several States in acid deposition control programs;

(4) description of the measures that would need to be taken to integrate such standard or standards with the control program required by title IV of the Clean Air Act;

(5) description of the state of knowledge with respect to source-receptor relationships necessary to develop a control program on such standard or standards and the additional research that is on-going or would be needed to make such a control program feasible; and

(6) description of the impediments to implementation of such control program and the cost-effectiveness of deposition standards compared to other control strategies including ambient air quality standards, new source performance standards and the requirements of title IV of the Clean Air Act.

SEC. 405. NATIONAL ACID LAKES REGISTRY.

The Administrator of the Environmental Protection Agency shall create a National Acid Lakes Registry that shall list, to the extent practical, all lakes that are known to be acidified due to acid deposition, and shall publish such list within one year of the enactment of this Act. Lakes shall be added to the registry as they become acidic or as data becomes available to show they are acidic. Lakes shall be deleted from the registry as they become nonacidic.

SEC. 406. INDUSTRIAL SO₂ EMISSIONS

(a) REPORT.-Not later than January 1, 1995 and every 5 years thereafter, the Administrator of the Environmental Protection Agency shall transmit to the Congress a report containing an inventory of national annual sulfur dioxide emissions from industrial sources (as defined in title IV of the Act), including units subject to section 405(g)(6) of the Clean Air Act, for all years for which data are available, as well as the likely trend in such emissions over the following twenty-year period. The reports shall also contain estimates of the actual emission reduction in each year resulting from promulgation of the diesel fuel desulfurization regulations under section 214.

(b) 5.60 MILLION TON CAP.-Whenever the inventory required by this section indicates that sulfur dioxide emissions from industrial sources, including units subject to section 405(g)(5) of the Clean Air Act, may reasonably be expected to reach levels greater than 5.60 million tons per year, the Administrator of the Environmental Protection Agency shall take such actions under the Clean Air Act as may be appropriate to ensure that such emissions do not exceed 5.60 million tons per year. Such actions may include the promulgation of new and revised standards of performance for new sources, including units subject to section 405(g)(5) of the Clean Air Act, under section 111(b) of the Clean Air Act, as well as promulgation of standards of performance for existing sources, including units subject to section 405(g)(5) of the Clean Air Act, under authority of this section. For an existing source regulated under this section, "standard of performance" means a standard which the Administrator determines is applicable to that source and which reflects the degree of emission reduction achievable through the application of the best system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated for that category of sources.

(c) ELECTION.-Regulations promulgated under section 405(b) of the Clean Air Act shall not prohibit a source from electing to become an affected unit under section 410 of the Clean Air Act.

SEC. 407. SENSE OF THE CONGRESS ON EMISSION REDUCTIONS COSTS.

It is the sense of the Congress that the Clean Air Act Amendments of 1990, through the allowance program, allocates the costs of achieving the required reductions in emissions of sulfur dioxide and oxides of nitrogen among sources in the United States. Broad based taxes and emissions fees that would provide for payment of the costs of achieving required emissions reductions by any party or parties other than the sources required to achieve the reductions are undesirable.

SEC. 408. MONITOR ACID RAIN PROGRAM IN CANADA.

(a) REPORTS TO CONGRESS.-The Administrator of the Environmental Protection Agency, in consultation with the Secretary of State, the Secretary of Energy, and other persons the Administrator deems appropriate, shall prepare and submit a report to Congress on January 1, 1994, January 1, 1999, and January 1, 2005.

(b) CONTENTS.-The report to Congress shall analyze the current emission levels of sulfur dioxide and nitrogen oxides in each of the provinces participating in Canada's acid rain control program, the amount of emission reductions of sulfur dioxide and oxides of nitrogen achieved by each province, the methods utilized by each province in making those reductions, the costs to each province and the employment impacts in each province of making and maintaining those reductions.

(c) COMPLIANCE.-Beginning on January 1, 1999, the reports shall also assess the degree to which each province is complying with its stated emissions cap.

SEC. 409. REPORT ON CLEAN COAL TECHNOLOGIES EXPORT PROGRAMS.

The Secretary of Energy in consultation with the Secretary of Commerce shall provide a report to the Congress within one year of enactment of this legislation which will identify, inventory and analyze clean coal technologies export programs within United States Government agencies including the Departments of State, Commerce, and Energy and at the Export-Import Bank and the Overseas Private Investment Corporation. The study shall address the effectiveness of interagency coordination of export promotion and determine the feasibility of establishing an interagency commission for the purpose of promoting the export and use of clean coal technologies.

SEC. 410. ACID DEPOSITION RESEARCH BY THE UNITED STATES FISH AND WILDLIFE SERVICE.

There are authorized to be appropriated to the United States Fish and Wildlife Service of the Department of the Interior an amount equal to \$500,000 to fund research related to acid deposition and the monitoring of high altitude mountain lakes in the Wind River Reservation, Wyoming, to be conducted through the Management Assistance Office of the United States Fish and Wildlife Service located in Lander, Wyoming and the University of Wyoming.

SEC. 411. STUDY OF BUFFERING AND NEUTRALIZING AGENTS.

There are authorized to be appropriated to the United States Fish and Wildlife Service of the Department of the Interior an amount equal to \$250,000 to fund a study to be conducted in conjunction with the University of Wyoming of the effectiveness of various buffering and neutralizing agents used to restore lakes and streams damaged by acid deposition.

SEC. 412. CONFORMING AMENDMENT.

Section 110(f)(1) of the Clean Air Act is amended by inserting "or of any requirement under section 411 (concerning excess emissions penalties or offsets) of title IV of the Act" after "implementation plan".

SEC. 413. SPECIAL CLEAN COAL TECHNOLOGY PROJECT.

(a) DEMONSTRATION PROJECT.-The Secretary of Energy shall, subject to appropriation, as part of the Secretary's activities with respect to fossil energy research and development under the Department of Energy Organization Act (Public Law 95-91) consider funding at least 50 percent of the cost of a demonstration project to design, construct, and test a technology system for a cyclone boiler that will serve as a model for sulfur dioxide and nitrogen oxide reduction technology at a combustion unit required to meet the emissions reductions prescribed in this bill. The Secretary shall expedite approval and funding to enable such project to be completed no later than January 1, 1995. The unit selected for this project shall be in a utility plant that (1) is among the top 10 emitters of sulfur dioxide as identified on Table A of section 404; (2) has 3 or more units, 2 of which are cyclone boiler units; and (3) has no existing scrubbers.

(b) AUTHORIZATION.-There are authorized to be appropriated such sums as may be necessary to carry out this section, to remain available until expended.