Multiple Pollutant Reduction

This Act establishes caps for emissions of sulfur dioxide, oxides of nitrogen, and carbon dioxide by existing fossil fuel burning steam electric power plants. It permits the banking and trading of emissions reductions to achieve compliance with the caps. Compliance is not required of a plant that installs qualifying repowering technology or an eligible replacement unit.

Submitted as:
New Hampshire
Chapter 130 of 2002
Status: Enacted into law in 2002.

Suggested State Legislation

(Title, enacting clause, etc.)

Section 1. [Short Title.] This Act may be cited as “An Act Relative to Additional Emissions Reductions from Existing Fossil Fuel Burning Steam Electric Power Plants.”

Section 2. [Legislative Findings.]
I. The [Legislature] finds that the economic interests of ratepayers will be best served through the flexible implementation of an integrated, multi-pollutant emission reduction strategy as electric industry deregulation proceeds in this state. The advance knowledge of the requirements of this Act, and a flexible regulatory approach used to implement them, will reduce uncertainty and risk for prospective buyers of the state’s existing fossil fuel burning steam electric power plants, thus enhancing their value at divestiture. Providing prospective buyers a significant time period in which to recover their investment will also enhance the divestiture value of these facilities. Combined, these factors will maximize recovery from the divested power plant assets, correspondingly reduce the stranded costs that must be paid over time by ratepayers, and thus allow electric rates to decline further or faster than they would otherwise.

II. The [Legislature] finds that while air quality has improved in recent years, scientific advances have demonstrated that adequate protection of public health, environmental quality, and economic well-being, requires additional, concerted reductions in air pollutant emissions. The [Legislature] also finds that the state’s tradition of environmental leadership is also well served by additional emission reductions.

III. Recent studies and scientific evidence indicates that significant negative human health and ecosystem impacts continue to be caused by air pollution. The [Legislature] finds that the substantial quantities of several harmful air pollutants that continue to be emitted from existing fossil fuel burning steam electric power plants, despite recent reductions in the emission of certain air pollutants from some of these facilities, contribute to these harmful impacts and that additional emissions reductions from these sources are warranted.

IV. Specifically, the [Legislature] finds that aggressive further reductions in emissions of sulfur dioxide (SO2), oxides of nitrogen (NOx), mercury, and carbon dioxide (CO2) must be pursued. These pollutants are primarily responsible for human health and ecosystem impacts

V. The [Legislature] finds that a high quality-of-life environment has been, and will continue to be, essential to this state’s economic well-being. The [Legislature] further finds that protecting the state’s high quality-of-life environment by reducing air pollutant emissions

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returns substantial economic benefit to the state through avoided health care costs; greater
tourism resulting from healthier lakes and improved vistas; more visits by fishermen, hunters,
and wildlife viewers to wildlife ecosystems, and a more productive forest and agricultural
sector.

VI. For the above reasons and others, the [Legislature] finds that substantial additional
reductions in emissions of SO2, NOx, mercury, and CO2 must be required of existing fossil fuel
burning steam electric power plants in the state. Due to the collateral benefits and economies of
scale associated with reducing multiple pollutant emissions at the same time, the [Legislature]
finds that such aggressive emission reductions are both feasible and cost-effective if
implemented simultaneously through a comprehensive, integrated power plant strategy.

VII. The [Legislature] also finds that the environmental benefits of air pollutant
reductions can be most cost-effectively achieved if implemented in a fashion that allows for
regulatory and compliance flexibility under a strictly limited overall emissions cap. Specifically,
market-based approaches, such as trading and banking of emission reductions within a cap-and-
trade system, allow sources to choose the most cost-effective ways to comply with established
emission reduction requirements. This approach also provides sources with an incentive to
reduce air pollutant emissions sooner and by greater amounts, promotes the development and
use of innovative new emission control technologies, and specifies to the greatest extent
possible performance results regarding environmental improvement rather than dictating
expensive, facility-specific, command-and-control regulatory requirements. The [Legislature]
acknowledges that future federal regulations may mandate some facility-specific requirements
regarding mercury reductions.

VIII. The [Legislature] also finds that energy conservation results in direct reductions in
air pollutant emissions. Thus, incentives for energy conservation are an important component of
an overall clean power strategy. The [Legislature] recognizes that energy conservation
expenditures made by utilities using system benefits charge funds can benefit all citizens and
ratepayers.

Section 3. [Definitions.] As used in this Act:
I. “Affected sources” means existing fossil fuel burning steam electric power plant units
in this state, excluding any units that may be repowered.
II. “Allowance” means a limited authorization to emit [one ton] of SO2, [one ton] of
NOx, [one pound] of mercury, or [one ton] of CO2 during a specified year.
III. “Commissioner” means the [commissioner of the department of environmental
services].
IV. “Department” means the [department of environmental services].
V. “Discrete emission reduction” or "DER" means an emission reduction generated over
a discrete period of time, and measured in weight (e.g., tons).
VI. “Ozone transport region” means an ozone transport region as established by section
184(a) of the Clean Air Act, 42 U.S.C. section 7511c.
VII. “Person” means any individual, partnership, firm or co-partnership, association,
company, trust, corporation, department, bureau, agency, private or municipal corporation, or
any political subdivision of the state, the United States or political subdivisions or agencies
thereof, or any other entity recognized by law as subject to rights and duties.
VIII. “Renewable energy” means energy derived from hydro, geothermal, wind, solar
thermal, photovoltaic, biomass, methane waste, tidal, or other source approved by the
[department].
IX. “Repowered unit” means an affected source that has installed qualifying repowering technology as defined by 40 C.F.R. part 72, or has replaced a unit by a new unit, provided the new replacement unit:

(a) Is on the same or contiguous property as the replaced unit, regardless of owner;

(b) Has a maximum power output rate equal to or greater than the maximum power output rate of the replaced unit; and

(c) Is designed to control, or is equipped with best available technology to control, emissions of multiple pollutants simultaneously, and in conformity with the emissions rates and reductions used to establish section 4 of this Act.

X. “System benefits charge funds” or “SBC funds” means revenues collected by [electric power company companies] located in the state to fund energy efficiency and conservation and load management programs approved by the [public utilities commission].

Section 4. [Integrated Power Plant Strategy.]

I. The [department] shall implement an integrated, multi-pollutant strategy to reduce air emissions from affected sources.

II. The integrated, multi-pollutant strategy shall be implemented in a market-based fashion that allows trading and banking of emission reductions to comply with the overall statewide annual emission caps established under this section.

III. Allowances, up to the amount of these caps, shall be allocated to each affected source based on the output of each affected source. The [department] shall make publicly available all allocations prior to the effective date of such allocations.

III. The strategy shall include implementation of the following statewide annual emissions caps:

(a) [7,289 tons] annually applicable to total sulfur dioxide (SO2) emissions from the affected sources;

(b) [3,644 tons] annually applicable to total oxides of nitrogen (NOx) emissions from the affected sources;

(c) An annual cap applicable to total mercury emissions from all affected sources burning coal as a fuel, to be recommended by the [department] not more than [60 days] following the U.S. Environmental Protection Agency's proposed regulation establishing a Maximum Achievable Control Technology (MACT) standard for mercury emissions from [electric power company] boilers, but in no case later than [March 31, 2004], with timely consideration by the [legislature] expected by [July 1, 2005]; and

(d) [5,425,866 tons] annually applicable to total carbon dioxide (CO2) emissions from the affected sources until [December 31, 2010], and after [December 31, 2010], a lower cap to be recommended by the [department] no later than [March 31, 2004], with timely consideration by the [Legislature] expected by [July 1, 2005].

Section 5. [Compliance.]

I. The owner or operator of each affected source shall file a compliance plan with the [department] describing the technologies, operational modifications, market-based approaches, or other methods that will be used to comply with the emission caps established under section 4 (III) of this Act. Compliance plans shall also include a report of the mercury content analysis program results required by this section and a report of the stack testing results for mercury emissions from the affected facilities as required by this Act. An initial compliance plan shall be filed no later than [one year] after the effective date of this section. Amended compliance plans
shall be submitted to the [department] [45 days] prior to the implementation of any change to
the plan.

II. The owner or operator of each affected source burning coal as fuel shall conduct a
mercury content analysis program. This program shall consist of monthly fuel samples and
analyses for at least [12 consecutive months] and the submittal of a final report to the
[department] no later than [one year] after the effective date of this section.

III. Stack testing for mercury emissions shall be completed using a [department]
approved test method no later than [one year] after the effective date of this section. The owner
or operator shall submit a test protocol to the [department] at least [45 days] prior to the
commencement of stack testing.

IV. Compliance with the emission caps established under section 4 (III) of this Act may
be demonstrated by making emission reductions at the affected sources, using compliance
market-based approaches, or other methods acceptable to the [department].

(a) (1) Affected sources may use SO2 allowances from federal or regional
trading and banking programs and incentive programs established under this Act to comply with
the SO2 emission cap established under section 4 (III) of this Act. In addition, allowances or
credits from other programs may be acceptable as determined by the [department].

(2) Affected sources shall transfer to the [department] all annual
allocations provided under the federal Acid Rain Program. Affected sources shall receive from
the department SO2 allowances equivalent to the cap established in section 4 (III) of this Act.
Additionally, in order to promote local reductions, for each year after the compliance date that
combined SO2 emissions from affected sources are below the annual average emissions for the
previous [3 years], affected sources shall receive additional SO2 allowances in a combined
amount equal to the difference between the current year emissions and the average annual
emissions for the previous [3 years].

(3) Further, in order to encourage reductions in upwind emissions and
thereby provide greater benefit to air quality in this state, for each [0.80] allowance purchased
by an affected source under the federal Acid Rain Program and utilized for compliance with the
provisions of this Act which originates from within the ozone transport region, the affected
source shall receive an additional [0.20] allowance from the [department].

(4) The combined sum of all allowances received by the affected sources under
subparagraphs (a)(2) and (a)(3) shall not exceed [20,000] in any given year, and shall be
credited to the affected sources' accounts in the year following each annual compliance period.

(b) Affected sources may use NOx allowances from federal or regional trading
and banking programs, or other programs acceptable to the [department], and NOx
discrete emissions reductions from state trading and banking programs, to comply with
the NOx emission cap established under section 4 (III). NOx discrete emissions
reductions may only be used to comply with that portion of the NOx emission cap
established under section 4 (III), III which does not apply to emissions between [May 1
and September 30] of any calendar year.

(c) Affected sources may use CO2 allowances from federal or regional trading
and banking programs, or other programs acceptable to the [department] to comply with
the CO2 emission cap established under section 4 (III) of this Act. Early reductions of
CO2 may be banked for future use in regional or national trading programs or to meet
the emission caps established under section 4 (III).

(d) Future mercury allowances or other emissions reduction units or mechanisms
secured from other sources shall only be acceptable in meeting that portion of the
emission cap established under section 4 (III) (c) that is more stringent than federal
requirements. Early reductions of mercury may be banked for future use or to meet the mercury emission cap established under section 4 (III) of this Act.

V. The owner or operator of each affected source shall be allowed to recover all prudent costs associated with compliance in a manner consistent with [insert citation].


I. In order to encourage energy efficiency, energy conservation, renewable energy, and the reductions in local emissions that result, the integrated multi-pollutant strategy shall promote energy efficiency and conservation through conservation and load management programs.

II. [Electric power company] may utilize SBC funds equivalent to the unencumbered amount, if any, rolled over from the prior program year for energy efficiency projects at facilities owned and operated by [electric power company] provided that the company made a good faith effort in the prior program year to meet the goals approved by the [public utilities commission] for its core energy efficiency programs, and provided that the SBC funds used by [electric power company] shall not exceed [2 percent] of all SBC funds collected in the prior program year. [Electric power company] may utilize these funds to implement approved core energy efficiency initiatives or measures at [electric power company] facilities that are cost effective and which enhance the efficient use of energy at [electric power company] facilities. Any energy savings resulting from the use of these funds by [electric power company] at its facilities will not be included in the calculation of [electric power company]’s energy efficiency program goals, any shareholder incentive, or any other incentive program. In any year that [electric power company] utilizes SBC funds, the [electric power company] shall submit a report to the [public utilities commission] and the [department] detailing how these funds were utilized, and will make the report available to interested parties. Any party may request that the [public utilities commission] schedule a hearing to review these reports and the expenditure by [electric power company] of rolled over SBC funds at its facilities.

III. For expenditures made by [electric power company] independent of SBC funds for energy efficiency, new renewable energy projects, or conservation and load management, the department shall provide emissions allowances to [electric power company] equivalent to the amount of such allowances that could have been purchased at market prices by the same dollar amount as the expenditure made. Such expenditures shall be consistent with the core energy efficiency programs approved by the [public utilities commission] or other programs acceptable to the [department] and shall, to the greatest extent practicable, result in immediate, demonstrable energy improvements.

Section 7. [Powers and Duties of the Commissioner.] The [commissioner] may:

I. Develop a trading and banking program to provide appropriate compliance flexibility in meeting the emission caps established under section 4 (III) of this Act, and to encourage earlier and greater emissions reductions and the development of new emission control technologies in order to maximize the cost-effectiveness with which the environmental benefits of this chapter are achieved.

II. Propose to the [Legislature] for legislative enactment a program to reduce emissions that impair visibility in mandatory Class I Federal Areas, if evaluation and assessment of the program established under this section reveals after its implementation that further reductions of emissions that impair visibility are necessary. Any program proposed under this paragraph shall be at least as stringent as that specified in the Clean Air Act, amendments thereto, and regulations promulgated thereunder.
III. Propose to the [Legislature] for legislative enactment appropriate processes to encourage pollution prevention, energy efficiency, and other methods to cost-effectively achieve emissions reductions.

Section 8. [Enforcement.]

I. Any violation of any provision of this Act, or of any rule adopted under this Act, shall be subject to enforcement by injunction, including mandatory injunction, issued by the [superior court] upon application of the [attorney general]. Any such violation shall also be subject to a [civil forfeiture] to the state of not more than [$25,000] for each violation, and for each day of a continuing violation.

II. Any person who knowingly violates any of the provisions of this Act, or any rule adopted under this Act, shall be guilty of a [misdemeanor if a natural person], or guilty of a [felony] if any other person.

III. The [commissioner], after notice and hearing pursuant to [insert citation], may impose an [administrative fine] not to exceed [$2,000] for each offense upon any person who violates any provision of this Act or any rule adopted pursuant to this Act. Rehearings and appeals from a decision of the [commissioner] under this paragraph shall be in accordance with [insert citation]. Any [administrative fine] imposed under this paragraph shall not preclude the imposition of further penalties under this Act. The proceeds of [administrative fines] imposed pursuant to this paragraph shall be deposited in the [general fund].

(a) Notice and hearing prior to the imposition of an [administrative fine] shall be in accordance with [insert citation] and procedural rules adopted by the [commissioner] pursuant to [insert citation].

(b) The [commissioner] shall determine fines based on the following:

(1) For a minor deviation from a requirement causing minor potential for harm, the fine shall be not less than [$100] and not more than [$1,000].

(2) For a minor deviation from a requirement causing moderate potential for harm, the fine shall be not less than [$601] and not more than [$1,250].

(3) For a minor deviation from a requirement causing major potential for harm, the fine shall be not less than [$851] and not more than [$1,500].

(4) For a moderate deviation from a requirement causing minor potential for harm, the fine shall be not less than [$601] and not more than [$1,250].

(5) For a moderate deviation from a requirement causing moderate potential for harm, the fine shall be not less than [$851] and not more than [$1,500].

(6) For a moderate deviation from a requirement causing major potential for harm, the fine shall be not less than [$1,251] and not more than [$1,750].

(7) For a major deviation from a requirement causing minor potential for harm, the fine shall be not less than [$851] and not more than [$1,500].

(8) For a major deviation from a requirement causing moderate potential for harm, the fine shall be not less than [$1,251] and not more than [$1,750].

(9) For a major deviation from a requirement causing major potential for harm, the fine shall be not less than [$1,501] and not more than [$2,000].

(c) The [commissioner] may assess additional fines for repeat violations.

Section 9. [Rulemaking Authority.] The [commissioner] shall adopt rules commencing no later than [180 days] after the effective date of this section, relative to:

I. The establishment of trading and banking programs as authorized by this Act.

II. The establishment of a method for allocating allowances and other emissions reduction units or mechanisms as authorized by this Act.
III. Emissions monitoring, record keeping, reporting, and other such actions as may be necessary to verify compliance with this Act.

Section 10. [Compliance Dates.] The owner or operator of each affected source shall comply with the provisions of this Act by [December 31, 2006].

Section 11. [Non-Severability.] No provision of this Act shall be implemented in a manner inconsistent with the integrated, multi-pollutant strategy or this Act in its entirety, and to this end, the provisions of this Act are not severable.

Section 12. [Repealer.] [Insert repealer clause.]

Section 13. [Effective Date.] [Insert effective date.]