

# House Research Act Summary

**CHAPTER:** 201

**SESSION:** 2006 Regular Session

**TOPIC:** Mercury emissions from coal plants

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## Overview

Chapter 201 establishes regulations to govern the reduction in emissions of mercury from six coal-fired electric generating units that collectively account for more than 75 percent of the mercury emissions of all such plants in Minnesota. The bill also requires utilities to provide information on how to dispose of fluorescent lamps containing mercury in a safe manner in all communications with customers regarding fluorescent lamps.

### Section

- 1 **Title.** Names the act the Mercury Emissions Reduction Act of 2006.
- 2 **Fluorescent lamps; residential applications.** Requires utilities communicating with customers about fluorescent lamps to state that they contain mercury, that disposal in garbage is illegal and provide them with a way to access information telling them how to dispose of the lamps lawfully.  
  
This section is effective October 1, 2006.
- 3 **[216B.105] Customer share of mercury control costs.** Requires utilities to report to customers in a biannual bill insert the share of the customer's bill represented by the utility's costs to control mercury emissions as required by this legislation.
- 4 **Sunset.** Extends the expiration of the emissions-reduction rider from June 30, 2006 to December 31, 2013, and specifies that projects and riders approved prior to that date will continue to be governed by the statute.

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**[216B.68] Definitions, mercury emissions reduction.**

**Subd. 2. Agency.** “Agency” means the Minnesota Pollution Control Agency.

**Subd. 5. Mercury emissions reduction.** “Mercury emissions reduction” means the amount of mercury emissions reduced from a targeted or supplemental unit relative to the baseline established under section 6.

**Subd. 6. Qualifying facility.** “Qualifying facility” means an electric generating plant in Minnesota whose net dependable capacity as of January 1, 2006 exceeded 500 megawatts from all coal-fired electric generating units.

**Subd. 7. Startup period.** “Startup period” means the first year after the date of compliance established under section 7, or a longer period approved by the commission after consultation with the agency.

**Subd. 8. Targeted unit.** “Targeted unit” means a coal-fired electric generating unit greater than 100 megawatts at a qualifying facility.

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**[216B.681] Monitoring.** Requires a qualifying facility to install, maintain and operate by July 1, 2007, a continuous emissions monitor for mercury on units subject to a mercury emissions reduction plan. The monitoring systems must use methods set forth in federal mercury regulations or be approved by the agency. Data from the monitors must be reported to the agency quarterly, and at least six months of data must be used to establish a baseline for mercury emissions reductions.

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**[216B.682] Mercury emissions reduction plans.**

**Subd. 1. Dry scrubbed units.** (Dry scrubbed units are those that use a spray dryer and fabric filter system to remove mercury from stack gases, such as those at Xcel Energy’s Sherco 3 and A.S. King plants.) Requires utilities owning dry scrubbed targeted units to file plans with the agency and commission by the end of 2007 to reduce mercury emissions at targeted units by the end of 2010, or, if two dry scrubbed units are owned, the plan must provide for implementation at one unit by the end of 2009, and at the second unit by the end of 2010.

The plan must use the available technology most likely to remove at least 90 percent of mercury emitted from each unit.

**Subd. 2. Wet scrubbed units.** (Wet scrubbed units are those that use water or other solutions to remove mercury from stack gases, such as those at Excel Energy’s Sherco 1 and 2 plants and Minnesota Power’s Clay Boswell 3 and 4 units.) Requires utilities owning wet scrubbed targeted units to file plans with the agency and commission by the end of 2009 to reduce mercury emissions at targeted units by the end of 2014.

The plan must use the available technology that is most likely to remove at least 90 percent of mercury emitted from each unit.

**Subd. 3. Mercury emissions plans generally.** Requires each plan to assess the plan’s ability to optimize human health benefits and achieve cost efficiencies. For the utility’s preferred technology option and any alternatives considered, the plan must provide the cost, technical feasibility, and projected mercury emissions reduction.

Plans may also contain measures to reduce the cost and maximize the flexibility of each technology option considered, and may specify targets or conditions to be included in the utility's air quality permit issued by the agency.

The utility may submit an emissions rate rider to the commission under section 8 to recover costs associated with these plans.

**8 [216B.683] Cost recovery and financial incentives.**

**Subd. 1. Emissions reduction riders.** A utility may submit an emissions rate rider to the commission to recover costs associated with a mercury emissions reduction plan or for other environmental initiatives filed under section 12. An emissions reduction rider may include costs specified under section 216B.1692, subdivision 3, and costs associated with:

- purchasing and installing continuous emissions monitoring systems for mercury and mercury emissions reduction equipment;
- construction work in progress;
- ongoing operations and maintenance costs related to the utility's emission control initiatives, including the cost of sorbents and reagents;
- project costs incurred prior to plan approval that the commission deems to be part of the plan;
- studies conducted to support the emissions reduction plan.

The utility may propose to phase in the emissions reduction riders to recover costs over the development and life of the projects.

**Subd. 2. Performance-based incentives.** A mercury emissions reduction rider approved by the commission may include performance-based incentives, including increased returns on investment, that increase the likelihood the utility will achieve mercury emission reductions in excess of 90 percent.

**Subd. 3. Other provisions.** Specifies that projects in an approved plan are also deemed to be qualifying projects under section 216B.1692, but that subdivision 5, paragraph (c) and subdivision 6 of section 216B.1692 do not apply to these plans.

**9 [216B.684] Environmental assessment.** The agency shall submit its evaluation of a utility's plans to the commission within 180 days of filing. The agency shall assess whether the plan meets the requirements of section 7 or 11, and evaluate the environmental and public health benefits and technical feasibility and cost-effectiveness of each technology option considered.

**10 [216B.685] Commission approval.**

**Subd. 1. Commission review and evaluation.** In reviewing plans, the commission shall consider the agency's report as specified under section 9, and the competitiveness of customer rates.

**Subd. 2. Commission approval.** Requires the commission to order a plan to be implemented within 180 days of its filing, unless it determines that the plan fails to

provide increased environmental and health benefits or would impose excessive costs to customers. If the commission is unable to approve a plan, it shall direct the utility to amend it; a utility may also submit a new plan.

**Subd. 3. Technical issues.** Instructs the commission to give due consideration to the agency's report with respect to compliance issues, technical feasibility, and environmental and public health benefits.

**Subd. 4. Other provisions.** The commission may not require existing pollution control equipment to be replaced as a condition for approving a plan. The commission may allow up to two extensions of up to 12 months each of any deadlines established in sections 5 to 14, except that a deadline for final installation of pollution control equipment may not be extended for longer than 12 months.

**Subd. 5. Equipment optimization required.** A commission order under this section must require a utility to optimize the operation of equipment installed as part of an approved plan to obtain maximum mercury reductions.

11 [216B.6851] **Utility option.**

**Subd. 1. Election.** Allows a utility with fewer than 200,000 customers that owns two wet scrubbed units (Minnesota Power) to be regulated under this section.

**Subd. 2. Supplemental unit.** Defines "supplemental unit" as a unit included in a plan submitted under this section.

**Subd. 3. Plan for 90 percent reduction required.** A plan filed under this section must be designed to achieve total mercury reduction at targeted and supplemental units equivalent to a goal of 90 percent at a utility's targeted units by the end of 2014.

**Subd. 4. Alternative plans.** A utility shall also submit one or more alternative plans to the 90 percent reduction plan required under subdivision 3 that is designed to achieve mercury reductions as close to 90 percent as technically possible.

**Subd. 5. Early action; wet scrubbed units.** A plan for one of the utility's wet-scrubbed units must be filed by the end of 2007, and implemented by the end of 2010. If the plan is approved and implemented, the plan for the second wet-scrubbed unit must be filed by July 1, 2011 and implemented by the end of 2014.

**Subd. 6. Agency review and commission approval.** The agency and commission shall review the plans as provided in sections 9 and 10, and shall approve the plan that comes closest to achieving the equivalent of a 90 percent mercury emissions reduction goal without imposing excessive costs on utility customers. If the commission is unable to approve a utility's plan under subdivision 3, it shall order the utility to implement the most stringent alternative proposed by the utility under this section that provides increased environmental and public health benefits without imposing excessive costs.

12 [216B.686] **Other environmental improvement plans.**

**Subd. 1. Election.** Allows a utility to submit additional plans and associated emission reduction riders with respect to investments in pollution control technology addressing pollutants in addition to mercury necessary for the utility to comply with state or federal law that became effective after December 31, 2004. These plans must result in increased environmental and public health benefits without imposing excessive costs, and must, at a minimum, achieve compliance with state or federal

regulations.

**Subd. 2. Emission reduction riders.** A utility filing a plan under this section may also file an emissions reduction rider under section 8, subdivision 1.

**Subd. 3. Agency review.** Within 180 days of receiving a plan filed under this section, the agency will report to the commission, verifying that the plan qualifies under subdivision 1, describing its environmental benefits, and assessing its appropriateness.

**Subd. 4. Commission approval.** The commission shall consider environmental and public health benefits, total costs, and the impact on competitiveness of customer rates of plans and riders submitted under this section, and shall approve them within 180 days of receiving them if they meet the requirements of subdivision 1.

**13 [216B.687] Implementation and operation.**

**Subd. 1. Permit conditions for mercury reductions.** The agency shall establish the mercury emissions reduction for each targeted and supplemental unit.

**Subd. 2. Enforcement by the agency.** Unless required by federal regulation, a mercury reduction incorporated into an air quality permit is a state-only condition and will not be enforced by the agency during the startup period. The agency may establish a facility-wide mercury emissions reduction after all startup periods have ended and actual mercury emissions have been determined.

**Subd. 3. Equipment optimization required.** The agency shall revise a unit's air quality permit every five years to insure optimal emissions reduction by the control equipment installed, in light of technical and operational advances, and may recommend, but not require, additional investment in pollution control equipment or the removal of equipment installed under an approved plan. The agency may seek commission review of the costs associated with a permit requirement or request for equipment optimization, which the commission shall approve unless it determines that the revision will impose excessive consumer costs.

**14 [216B.688] Relationship to state regulation.** Except as provided in section 216B.687, a utility implementing an approved plan is not required to undertake additional investments or incur additional operating or maintenance costs to reduce mercury at a unit included in an approved plan.