I

111TH CONGRESS
2D SESSION

H. R. 5674

To amend the Clean Air Act to require reductions in mercury emissions from electric utility steam generating units, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 1, 2010

Mr. COSTA introduced the following bill; which was referred to the Committee on Energy and Commerce

---

A BILL

To amend the Clean Air Act to require reductions in mercury emissions from electric utility steam generating units, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Mercury Reduction and Energy Security Act of 2010''.

SEC. 2. FINDINGS AND PURPOSE.

(a) FINDINGS.—Congress finds the following:

(1) The Environmental Protection Agency (''EPA'') was required by the terms of the Clean Air Act Amendments of 1990 and a 1998 consent agree-

ment to determine whether regulation of mercury from electric utility steam generating units under section 112 of the Clean Air Act was appropriate and necessary.

(2) In a December 2000, regulatory finding, the EPA concluded that regulation of mercury from electric utility steam generating units was appropriate and necessary.

(3) In 2005, the EPA withdrew its 2000 regulatory finding in favor of a national cap-and-trade system for mercury emissions from electric utility steam generating units, the Clean Air Mercury Rule (''CAMR'').

(4) CAMR was subsequently challenged in petitions for review filed by 17 States.

(5) The United States Court of Appeals for the District of Columbia Circuit vacated the rule on February 8, 2008, finding that once the EPA had listed electric utility steam generating units as a source of hazardous air pollutants, it was required by law to proceed with Maximum Achievable Control Technology (''MACT'') regulations under section 112 of the Clean Air Act unless it delisted the source category, under procedures set forth in section 112(c)(9).

(6) Mercury control technologies for coal-fired electric utility steam generating units have advanced rapidly in the last few years.

(b) PURPOSE.—The purpose of this Act is to protect public health and welfare, and the environment, through mercury emission reductions from electric utility steam generating units.

SEC. 3. MERCURY EMISSION REDUCTIONS.

The Clean Air Act (42 U.S.C. 7401 et seq.) is amended by adding at the end the following new title:

"TITLE VII—MERCURY REDUCTIONS

"SEC. 701. DEFINITIONS.

''In this title:

''(1) AFFECTED UNIT.—The term 'affected unit' means a coal-fired electric steam generating unit (including a cogeneration unit) that—

''(A) has a nameplate capacity greater than 25 megawatts; and

''(B) generates electricity for sale.

''(2) COGENERATION UNIT.—The term 'cogeneration unit' means a stationary, coal-fired boiler or a stationary, coal-fired combustion turbine having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating,

or cooling purposes through the sequential use of energy that produces during the 12-month period starting on the date the unit first produces electricity and during any calendar year after which the unit first produces electricity—

"(A) for a topping-cycle cogeneration unit—

"(i) useful thermal energy not less than 5 percent of total energy output; and

"(ii) useful power that, when added to one-half of useful thermal energy produced, is not less than—

"(I) 42.5 percent of total energy input if useful thermal energy produced is 15 percent or more of total energy output; or

"(II) 45 percent of total energy input if useful thermal energy produced is less than 15 percent of total energy output; and

"(B) for a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input.

"(3) INLET MERCURY.—The term 'inlet mercury' means the quantity of mercury found—

''(A) in the as-fired coal used by an affected unit; or

''(B) for an affected unit using coal that is subjected to an advanced coal cleaning technology, in the as-mined coal used by the affected unit.

''SEC. 702. MERCURY REDUCTION PROGRAM.

''(a) ANNUAL LIMITATION FOR AFFECTED UNITS.—Except as provided in subsection (f), an affected unit in operation before or after the date of enactment of this title shall be subject to the following emission limitations on an annual average calendar year basis with respect to mercury:

''(1) CALENDAR YEARS 2012 THROUGH 2014.—For the period beginning on January 1, 2012, and ending on December 31, 2014, the less stringent limitation of the following (calculated on a one-year rolling average):

''(A) 80 percent capture of inlet mercury.

''(B) An emission rate of 1.60 pounds of mercury per trillion British thermal units of input coal.

''(2) CALENDAR YEAR 2015 AND THEREAFTER.—For calendar year 2015 and each calendar

year thereafter, the less stringent limitation of the following (calculated on a one-year rolling average):

"(A) 90 percent capture of inlet mercury.

"(B) An emission rate of 0.80 pounds of mercury per trillion British thermal units of input coal.

"(b) AVERAGING ACROSS UNITS WITHIN A FACILITY OR STATE.—(1) An owner or operator of more than one affected unit at a single facility may demonstrate compliance with the applicable annual average emission limitations under subsection (a) by averaging emissions from all affected units at that facility, weighted by total input coal British thermal units.

"(2) An owner or operator of more than one affected unit or units within a State may demonstrate compliance with the applicable annual average emission limitations under subsection (a) by averaging emissions from all affected units owned or operated by that owner or operator within such State, weighted by total input coal British thermal units, if all affected units are owned or operated by the same entity.

"(3) If an affected unit is owned or operated by more than one entity, the State in which the affected unit is located shall allocate to each such owner or operator an appropriate portion of the generation from the affected

unit for purposes of averaging emissions pursuant to paragraph (1) or (2).

''(c) REFERENCE METHODS FOR MEASURING MERCURY EMISSIONS.—(1) The owner or operator of an affected unit shall use any of the following methods as a reference method to calibrate the instruments used to measure the mercury concentration in emissions from affected units:

''(A) ASTM D6784–02, 'Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources' (Ontario Hydro Method).

''(B) 40 C.F.R. Part 60, Appendix A–8, Method 29, 'Determination of Metals Emissions from Stationary Sources'.

''(C) 40 C.F.R. Part 60, Appendix A–8, Method 30A, 'Determination of Total Vapor Phase Mercury Emissions from Stationary Sources (Instrumental Analyzer Procedure)'.

''(D) 40 C.F.R. Part 60, Appendix A–8, Method 30B, 'Determination of Total Vapor Phase Mercury Emissions from Coal-Fired Combustion Sources Using Carbon Sorbent Traps'.

''(2) The Administrator may revise or supplement the list of permitted methods set forth in paragraph (1) to reflect improvements or other developments in the measurement of mercury emissions from coal-fired electric steam generating units.

''(d) MONITORING SYSTEM.—(1) The owner or operator of an affected unit shall install and operate a continuous emissions monitoring system (CEMS) to measure the quantity of mercury that is emitted from each affected unit.

''(2) For purposes of complying with paragraph (1), the owner or operator of an affected unit may use—

''(A) any CEMS that meets the requirements in Performance Specification 12A (PS–12A), 'Specifications and Test Procedures for Total Vapor-Phase Mercury Continuous Monitoring Systems in Stationary Sources';

''(B) a mercury concentration CEMS that meets the requirements of 40 C.F.R. Part 75; or

''(C) a sorbent trap monitoring system that meets the requirements of 40 C.F.R. 75.15 and 40 C.F.R. Part 75, Appendix K, 'Quality Assurance and Operating Procedures for Sorbent Trap Monitoring Systems';

''(3) The Administrator may revise or supplement the list of permitted monitoring systems set forth in paragraph (2) to reflect improvements or other developments in mercury emissions reduction technologies and mercury emissions monitoring systems.

''(e) EXCESS EMISSIONS.—(1) Except as provided in subsection (f), the owner or operator of an affected unit that emits mercury in excess of the applicable annual average emission limitation under subsection (a) shall pay an excess emissions penalty determined under paragraph (2).

''(2) The excess emissions penalty for mercury shall be an amount equal to $50,000 for each pound of mercury emitted in excess of the applicable annual average emission limitation under subsection (a). Such penalty shall be prorated for each fraction of a pound.

''(f) BEST PRACTICES.—(1) Effective, January 1, 2015, if the owner or operator of any affected unit fails to achieve the annual average emission limitation under subsection (a)(2), such owner or operator may notify the Administrator of such failure prior to March 1, 2015, and request an alternate emissions limitation for mercury with respect to such affected unit. Such owner or operator shall submit to the Administrator mercury emissions data measured by a CEMS that complies with subsection (d)

for evaluation. If the Administrator determines that such owner or operator has properly installed and operated such CEMS and control technology designed to achieve such annual average emission limitation and is unable to meet such limitation, the Administrator may, not later than April 1, 2016, establish an alternate emissions limitation for mercury with respect to such affected unit based on the optimal performance of properly installed and operated control technology.

''(2) With respect to any affected unit, for any year for which an alternate emissions limitation for mercury is in place for such affected unit, the Administrator may review such alternate emissions limitation and impose a more stringent emissions limitation for mercury for the subsequent year based on new data regarding the demonstrated control capabilities of the type of control technology installed and operated at such affected unit.

''(3)(A) Except as provided in subparagraph (B), an owner or operator of an affected unit failing to achieve the annual average emission limitation under subsection (a)(2) that notifies the Administrator of such failure and requests and alternate emissions limitation for mercury pursuant to paragraph (1) shall be considered in compliance with this section (and not subject to any excess emissions penalty) for the period beginning on January 1,

2015, and ending on the date such an alternate emissions limitation is implemented.

''(B) An owner or operator described in subparagraph (A) shall pay an excess emissions penalty, as determined under subsection (e)(2), for the period described in such subparagraph, if such owner or operator operates or maintains the affected unit, including any associated air pollution control equipment, in a manner that is inconsistent with good air pollution control practices for the minimization of mercury emissions, as determined by the Administrator. In determining whether the owner or operator of the affected unit operates and maintains the affected unit in a manner that is consistent with good air pollution control practices for the minimization of mercury emissions, the Administrator may review the emissions monitoring data and operating and maintenance procedures of the affected unit and may inspect the affected unit.

''(4)(A) With respect to any affected unit for which an alternate emissions limitation for mercury is in place under this subsection, the owner or operator of such affected unit that emits mercury in excess of such alternate emissions limitation shall pay an excess emissions penalty determined under subparagraph (B).

''(B) The excess emissions penalty for mercury for an owner or operator of an affected unit described in sub-

paragraph (A) shall be an amount equal to $50,000 for each pound of mercury emitted in excess of the alternate emissions limitation for mercury in place for such affected unit. Such penalty shall be prorated for each fraction of a pound.

''(g) SOLE LIMITATION ON MERCURY.—This title shall apply the sole emission standard or limitation under this Act with regard to the emission of mercury from electric utility steam generating units and shall supersede any other such requirement under section 112 or any other provision of this Act.

''(h) RELATIONSHIP TO OTHER LAW.—Except as otherwise specifically provided in this title, nothing in this title precludes a State or political subdivision of a State from adopting or enforcing any additional requirements for the control or abatement of mercury emissions, except that no State or political subdivision thereof shall adopt or attempt to enforce any standard relating to the reduction or control of mercury emissions from electric utility steam generating units that is less stringent than the standards provided in this title.''.

○