

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Environmental Preservation and Conservation

BILL: SM 1228

INTRODUCER: Senator Evers

SUBJECT: Regulation of Carbon Dioxide Emissions from Fossil Fuel-Fired Electric Generating Units

DATE: April 14, 2015

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Gudeman</u>	<u>Uchino</u>	<u>EP</u>	Favorable
2.	_____	_____	<u>CU</u>	_____
3.	_____	_____	<u>RC</u>	_____

I. Summary:

SM 1228 urges the United States Congress to provide states additional time to submit plans for emissions reductions, decrease the interim and final emission reduction goals, extend the compliance schedule for the interim emission reduction goals, extend the date for achievement of final emission reduction goals, and prohibit the retirement of a power plant before the end of its engineering lifetime.

II. Present Situation:

Coal is the most common source of fuel for electricity production in the United States and coal is relatively inexpensive. Emissions from coal combustion have an adverse effect on human health and the environment.¹ The six pollutants (“criteria pollutants”) that the EPA has established admissible emissions levels include carbon monoxide, lead, sulfur dioxide, nitrogen oxides, ground-level ozone, and particulate matter.² Carbon dioxide is not considered a “criteria pollutant” because it is emitted by hundreds of millions of sources; however, coal-fired power plants are the primary source of carbon dioxide emissions in the country.³

The Clean Air Act (CAA) of 1970 authorized the National Ambient Air Quality Standards, which placed limitations on coal combustion emissions. The CAA requires each state to develop a general plan to attain and maintain the emissions requirements in the CAA. The plans are called state implementation plans and must include:

¹ U.S. Energy Information Administration, *Energy in Brief*, http://www.eia.gov/energy_in_brief/article/role_coal_us.cfm (last visited Apr. 14, 2015).

² Institute for Energy Research, *The Facts About Air Quality and Coal-Fired Power Plants*, 1, available at, <http://www.instituteforenergyresearch.org/pdf/the-facts-about-air-quality-and-coal-fired-power-plants-final.pdf> (last visited Apr. 13, 2015).

³ *Id.* at 8

- Ambient air quality monitoring data systems;
- Programs for enforcement of control measures; and
- Adequate authority and resources to implement the plan.⁴

The CAA was significantly amended in 1990 and required more stringent emissions standards for coal-fired electric generating units (EGUs). As a result, many coal-fired EGUs have been retrofitted to reduce harmful emissions and new plants are constructed using advanced technologies that greatly reduce airborne pollutants. Since the CAA was implemented and improvements made to coal-fired EGUs, the total criteria pollutant level has decreased significantly.⁵

On June 25, 2013, the President directed the U.S. Environmental Protection Agency (EPA) to issue standards, regulations, or guidelines that address carbon dioxide emissions from new, existing, modified, and reconstructed EGUs. On September 20, 2013, the EPA issued the Carbon Pollution Standard for New Power Plants under Section 111(b) of the CAA. The proposed standards require:

- New large, approximately 100 megawatts or greater, natural gas-fired turbines to limit carbon dioxide emissions to 1,000 pounds of carbon dioxide per megawatt-hour;
- New small, less than 100 megawatts, natural gas-fired turbines to limit carbon dioxide emissions to 1,100 pounds of carbon dioxide per megawatt-hour; and
- Coal plants must use carbon capture and storage technology to achieve a 12-month average emission rate of 1,100 pounds per megawatt-hour or achieve a seven-year average emission rate between 1,000 and 1,050 pounds of carbon dioxide pounds per megawatt-hour.⁶

On June 2, 2014, the EPA issued the Clean Power Plan, which is the proposed rule to address emissions from existing EGUs. The proposed rule includes state-specific carbon dioxide emission reduction goals to be achieved by 2030, with interim goals to be achieved by 2025. The proposed rule also provides guidelines for the development, submission, and implementation of state plans. The proposed rule includes four measures identified by the EPA to reduce carbon emissions. The measures include:

- Reducing carbon intensity at individual EGUs through heat rate improvement;
- Reducing emissions by increasing the use of natural gas EGUs, which are less carbon intensive than coal-fired EGUs;
- Reducing emissions by increasing electricity generation from low or zero carbon emitting units, including nuclear power plants and renewable technologies; and
- Reducing emissions by implementing energy efficiency programs for consumers to reduce the demand for electricity by EGUs.⁷

⁴ 42 U.S.C. ss. 7401-7671 (2013).

⁵ *Supra* note 2, at 8.

⁶ *Supra* note 4.

⁷ “Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed rule,” 79 Federal Register 117 (June 18, 2014), 34829-34958, *available at* <https://www.federalregister.gov/articles/2014/06/18/2014-13726/carbon-pollution-emission-guidelines-for-existing-stationary-sources-electric-utility-generating> (last visited Apr. 13, 2015).

Although the EPA has provided these measures, states are ultimately responsible for developing unique plans in order to achieve the state-specific emission goals. The EPA has established two options for states to achieve their interim and final emission goals. Option 1 requires states to achieve a lower emission goal by 2030. Option 2 allows states a slightly higher emission goal but it must be achieved by 2025. The EPA calculated each state's goal based on the carbon dioxide emission in pounds per megawatt-hour in 2012. In 2012, Florida's emission rate was 1,238 pounds per megawatt-hour. The interim goal for Florida based on Option 1 is 794 pounds per megawatt-hour and the final goal for Option 1 is 740 pounds per megawatt-hour. The interim goal for Florida under Option 2 is 907 pounds per megawatt-hour and final goal is 884 pounds per megawatt-hour.⁸

The EPA is expected to publish the final rule for existing and new power plants in the summer of 2015. States are required to submit their implementation plans by June 30, 2016, with the option to request a one or two year extension.⁹

III. Effect of Proposed Changes:

The memorial urges the United State Congress to:

- Provide a one-year extension for states to submit their plans to allow for additional time for state legislative and rulemaking activities;
- Decrease the proposed interim and final emission reduction goals expressed as adjusted output for the weighted average emission rate for all affected power plants;
- Extend the compliance schedule for the interim plan by five years;
- Extend the date the final emission goals must be achieved by five years;
- Prohibit the retirement of a power plant before the end of its engineering lifetime unless:
 - The utility has fully recovered the cost of construction and financing of the power plant;
 - The state has sufficient replacement capacity; and
 - The power grid reliability is maintained.

A copy of the memorial must be delivered to the President of the United States, President of the United States Senate, Speaker of the United States House of Representatives, the administrator of the EPA, and to each member of the Florida delegation to the United States Congress.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

⁸ *Id.*

⁹ *Id.*

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

None.

VI. Technical Deficiencies:

In line 76 of the bill, the term “rule making” should be “rulemaking.”

VII. Related Issues:

The memorial urges the United State Congress to provide a one year extension for states to submit their plans. It is unclear if this extension is to the June 30, 2016, due date, or the one to two year extension that is provided for in the proposed rule.

VIII. Statutes Affected:

None.

IX. Additional Information:

A. Committee Substitute – Statement of Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.