

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 1174

INTRODUCER: Senator Gibson

SUBJECT: Power Plant Carbon Dioxide Emissions

DATE: March 24, 2014

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Gudeman</u>	<u>Uchino</u>	<u>EP</u>	<u>Pre-meeting</u>
2.	_____	_____	<u>CU</u>	_____

I. Summary:

SM 1174 urges the United States Congress to allow states to develop their own performance standards, compliance schedules, and guidelines for regulating carbon dioxide emissions from existing coal-fired power plants.

II. Present Situation:

Coal Production in the United States and Florida

Coal is the most common source of fuel for electricity production in the United States. Coal is an abundant natural resource in the United States, which has the largest recoverable coal reserves in the world.¹ There are more than a quarter trillion tons of coal underground, spanning from the Appalachians through Illinois and into the Rocky Mountains. It is estimated that there is enough coal to last 250 years based on today's consumption rate.²

Coal is relatively inexpensive; however, the emissions from coal combustion have an adverse effect on human health and the environment.³ The six pollutants ("criteria pollutants") that set the standards for admissible emissions levels include carbon monoxide, lead, sulfur dioxide, nitrogen oxides, ground-level ozone, and particulate matter.⁴ Carbon dioxide is not considered a "critical 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.⁵

¹U.S. Energy Information Administration, *Energy in Brief*, http://www.eia.gov/energy_in_brief/article/role_coal_us.cfm (last visited Mar. 24, 2013).

² National Geographic, *The Coal Paradox* (March 2006), available at <http://science.nationalgeographic.com/science/earth/inside-the-earth/coal-paradox.html> (last visited Mar. 24, 2014).

³ *Supra* note 1.

⁴ 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 Mar. 24, 2014).

⁵ *Id.* at 8.

Regulation of Carbon Dioxide Emissions

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:⁶

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

The CAA was significantly amended in 1990 and required more stringent emissions standards for coal-fired power plants. Since the passage of the CAA, many coal-fired power plants have been retrofitted to reduce harmful emissions and new plants are constructed using advanced technologies that greatly reduce airborne pollutants.⁷ Since the CAA was implemented and improvements made to coal-fired power plants, the total criteria pollutant level in emissions decreased between 40 and 60 percent.⁸

On June 25, 2013, the President directed the Environmental Protection Agency (EPA) to issue standards, regulations, or guidelines that address carbon dioxide emissions from new, existing, modified, and reconstructed coal-fired power plants. The memorandum directed the EPA to finalize the rule by June 1, 2015, and required states to submit a state implementation plan to the EPA no later than June 30, 2016.⁹

The proposed EPA rule requires:

- New large natural gas-fired turbines must meet a limit of 1,000 pounds of carbon dioxide per megawatt-hour;
- New small natural gas-fired turbines must meet a limit of 1,100 pounds of carbon dioxide per megawatt-hour; and
- New coal-fired units must meet a limit of 1,100 pounds of carbon dioxide per megawatt-hour, with the option to meet a more stringent limit if they choose to average emissions over multiple years, giving those units additional operational flexibility.¹⁰

⁶ 42 U.S.C. ss. 7401-7671 (2013).

⁷ Institute for Energy Research, *The Facts About Air Quality and Coal-Fired Power Plants*, <http://www.instituteforenergyresearch.org/pdf/the-facts-about-air-quality-and-coal-fired-power-plants-final.pdf> (last visited Mar. 24, 2014).

⁸ *Id.*

⁹ Memorandum to the Environmental Protection Agency from President Barak Obama, (June 25, 2013), *available at* <http://www.whitehouse.gov/the-press-office/2013/06/25/presidential-memorandum-power-sector-carbon-pollution-standards> (last visited Mar. 24, 2014).

¹⁰ EPA, *Proposed Rule, Standards for Performance for Greenhouse Gas Emissions From New Stationary Sources: Electric Utility Generating Units*, *available at* <https://www.federalregister.gov/articles/2014/01/08/2013-28668/standards-of-performance-for-greenhouse-gas-emissions-from-new-stationary-sources-electric-utility> (last visited Mar. 24, 2014).

The EPA proposal also included guidance to help states develop and submit revised state implementation plans that comply with the new standards. The revised state implementation plans must include:

- Emissions limits and control measures;
- Ambient air quality monitoring;
- Enforcement of CAA permitting programs;
- Adequate personnel and funding;
- Adequate authorities;
- Stationary source monitoring;
- Consultations with government officials;
- Public notifications;
- Prevention of Significant Deterioration increments;
- Modeling and data;
- Permitting fees; and
- Participation by local entities.¹¹

Florida has 15 coal-fired power plants that account for 23 percent of the state's electricity generation. Florida ranks fifth in the nation for total carbon dioxide emissions. Approximately 227 metric tons of carbon dioxide were emitted in Florida in 2011. Air quality in Florida is subject to federal emissions standards for hazardous waste air pollutants, as determined by the EPA. The Department of Environmental Protection (DEP) is responsible for implementing programs that are in compliance with federal requirements. The DEP adopted Rule 62-204, F.A.C., which incorporates the CAA requirements by reference and identifies Florida's state implementation plan.¹²

Regulatory Impact Analysis of Proposed EPA Rule

According to the Regulatory Impact Analysis for the proposed EPA rule, the construction of new power plants in the future will be few if any, based on current and anticipated economic conditions. The economy, combined with the new regulations, and increased natural gas production, will result in the proposed rule having a negligible impact on reducing carbon dioxide emissions.¹³

III. Effect of Proposed Changes:

SM 1174 urges the United State Congress to allow states to develop their own performance standards, compliance schedules, and guidelines for regulating carbon dioxide emissions. Specifically, the memorial urges Congress to respect the primacy of states and to rely on state regulators who take into account unique policies, energy needs, resource mix, economic

¹¹EPA, *Guidance on Development and Submission of Infrastructure State Implementation Plans for National Ambient Air Quality Standards*, available at, <http://www.epa.gov/oar/urbanair/sipstatus/docs/Fact%20Sheet%20Guidance%20on%20Infrastructure%20SIP%20Elements%20final%20Sept%202013.pdf> (last visited Mar. 24, 2014).

¹² See Rule 62-204, F.A.C., see also EPA, *Florida State Implementation Plan*, <http://www.epa.gov/region4/air/sips/fl/contents.htm> (last visited Mar. 24, 2014).

¹³ *Supra* note 10.

priorities, and environmental priorities. A copy of the memorial must be delivered to the EPA administrator.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

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:

None.

VII. Related Issues:

None.

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.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.
