



# THE COMMITTEE ON ENERGY AND COMMERCE

## MEMORANDUM

November 12, 2013

TO: Members, Subcommittee on Energy and Power

FROM: Committee Staff

RE: Hearing on “EPA’s Proposed GHG Standards for New Power Plants and H.R. \_\_\_, Whitfield-Manchin Legislation”

On November 14, 2013, at 9:30 a.m. in 2123 of the Rayburn House Office Building, the Subcommittee on Energy and Power will hold a hearing on the Environmental Protection Agency’s proposed greenhouse gas standards for new power plants announced September 20, 2013, and on the discussion draft of “H.R. \_\_\_, Whitfield-Manchin Legislation” released by Chairman Whitfield on October 28, 2013. The hearing will focus on EPA’s pending GHG standards for new and existing power plants and the proposed legislation.

### **I. WITNESSES**

#### **Panel I**

**The Honorable Joe Manchin**  
Senator, West Virginia

#### **Panel II**

**The Honorable Janet McCabe**  
Acting Assistant Administrator for Air and Radiation  
U.S. Environmental Protection Agency

#### **Panel III**

**The Honorable E. Scott Pruitt**  
Oklahoma Attorney General

**The Honorable Henry Hale**  
Mayor  
Fulton, AR

**Mr. Tony Campbell**  
President and CEO  
East Kentucky Power Cooperative

**Dr. Donald R. van der Vaart**  
Chief, Permitting Section  
North Carolina Department of Environment and  
Natural Resources-Division of Air Quality

**Mr. J. Edward Cichanowicz**  
Engineering Consultant

**Mr. Ross E. Eisenberg**  
Vice President, Energy and Resources Policy  
National Association of Manufacturers

**Mr. David Hawkins**  
Director of Climate Programs  
Natural Resources Defense Council

**Ms. Susan F. Tierney**  
Managing Principal  
Analysis Group

## **II. BACKGROUND**

On June 25, 2013, President Obama announced a “[Climate Action Plan](#)” which directs the Environmental Protection Agency (EPA) to establish greenhouse gas (GHG) emissions standards for new and existing fossil fuel-fired power plants. On that date, the President also issued a [Presidential Memorandum](#) specifically directing the agency: 1) to propose standards for new plants by September 20, 2013, and to finalize those standards in a “timely fashion”; 2) to propose standards, regulations, or guidelines for modified, reconstructed, and existing plants by June 1, 2014, and to finalize those standards, regulations, or guidelines by June 1, 2015; and 3) to require States to submit implementation plans not later than June 30, 2016.

The President directed EPA to develop these power plant standards pursuant to [section 111](#) of the Clean Air Act (CAA). This section authorizes the EPA Administrator to list categories of stationary sources that, in the judgment of the Administrator, cause or contribute “significantly to air pollution which may reasonably be anticipated to endanger public health or welfare” and to establish “standards of performance” for such sources.<sup>1</sup>

Section 111(b) of the CAA applies to new, modified, and reconstructed sources and authorizes the EPA Administrator to establish Federal standards of performance, frequently referred to as “New Source Performance Standards” (NSPS) for listed categories of sources. Under section 111(b), EPA has listed and set NSPS standards for more than 70 stationary source categories and subcategories.<sup>2</sup>

Section 111(d) applies to existing sources and authorizes the Administrator to prescribe regulations establishing a procedure under which States submit to the Administrator a plan establishing standards of performance for certain existing sources and certain air pollutants. Under section 111(d) and the agency’s implementing regulations, EPA has issued “Emission Guidelines” for existing sources for 5 source categories.<sup>3</sup>

For purposes of Section 111, a “standard of performance” is defined as:

“a standard for the emissions of air pollutants which reflects the degree of emission limitation **achievable** through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been **adequately demonstrated**.”

42 U.S.C. §7411(a)(emphasis added).

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<sup>1</sup> 42 U.S.C. § 7411(b).

<sup>2</sup> A list of sources regulated under section 111 can be found in [40 CFR Part 60](#).

<sup>3</sup> The categories include: sulfuric acid plants, phosphate fertilizer plants, primary aluminum plants, Kraft pulp plants, and municipal solid waste landfills. See EPA [Overview Presentation](#).

On September 20, 2013, EPA announced proposed GHG standards under section 111 for new power plants.<sup>4</sup> EPA proposes to regulate carbon dioxide (CO<sub>2</sub>) emissions from fossil fuel-fired power plants and to set separate standards for natural gas-fired and for coal-fired electric generating units.<sup>5</sup> While it is generally viewed that for new natural gas plants, the proposed standards can be met using existing, commercially demonstrated and available technologies, the proposed standards for new coal plants at present could only be achieved with carbon capture and storage (CCS) technologies that have not been demonstrated at a commercial-scale power plant.

In its recently proposed rule, EPA contends CCS for coal plants has been “adequately demonstrated” for purposes of CAA section 111. To support the proposal, EPA cites four government-subsidized CCS power plant demonstration projects that are in various stages of planning or development.<sup>6</sup> None of the projects have been completed, and two of the projects have not yet begun construction.

EPA describes its recent new plants proposal as the agency’s “[first steps](#)” to regulate CO<sub>2</sub> emissions from power plants. With respect to its planned regulation of existing plants, EPA has scheduled 11 public listening sessions.<sup>7</sup> See Appendix 1. EPA also has developed a set of “[Questions for State Partners](#)” relating to development of regulations for existing plants expected to be proposed in June 2014.

### III. SUMMARY OF LEGISLATION

EPA’s pending GHG standards for fossil fuel-fired power plants have major implications for the nation. Coal currently provides approximately [40 percent](#) of the nation’s electricity, and is the largest source of electricity generation in the United States.<sup>8</sup> For a map of the sources of generation in the United States, see Appendix 2.

On October 29, 2013, Chairman Ed Whitfield and Senator Joe Manchin released a discussion draft of legislation that would provide direction to EPA regarding the establishment of GHG standards for power plants. This proposed legislation includes the following provisions:

Section 1: This section provides the short title.

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<sup>4</sup> This proposed rule replaces a prior proposed rule published by EPA in April 2012. In that original proposal, EPA had proposed to set a single standard for both natural gas-fired and coal-fired power plants of 1,000 pounds of carbon dioxide (CO<sub>2</sub>) per megawatt hour (lbs/MWh). See EPA [Press Release](#); [Fact Sheet](#); [Proposed Rule](#); [Regulatory Impact Analysis](#).

<sup>5</sup> See EPA [Press Release](#); [Proposed Rule](#) (Pre-Publication Version); [Fact Sheet](#); [Regulatory Impact Analysis](#). For **natural gas-fired units**, the rule proposed a CO<sub>2</sub> standard of 1,000 lbs/MWh for large units (greater than 850 mmBtu/hour), and a standard of 1,100 lbs/MWh for smaller natural gas units (less than 850 mmBtu/hour). For **coal-fired units**, the rule proposes a standard of 1,100 lbs/MWh over 12 months, or 1,000 to 1,050 lbs/MWh over a period of 84 months (7 years).

<sup>6</sup> EPA identifies (1) Southern Company’s “Kemper” Project (582 MW IGCC) under construction in Kemper County, Mississippi; (2) SaskPower’s Boundary Dam CCS Project (rebuilt 110 MW coal-fired unit) under construction in Estevan, Saskatchewan, Canada; (3) Summit Power Group Inc.’s planned “Texas Clean Energy Project” (400 MW IGCC) near Odessa, Texas; and (4) Hydrogen Energy California, LLC’s planned “Hydrogen Energy California Project” (300 MW IGCC) in Kern County, California. See e.g., [Proposed Rule](#) at pp. 19, 21-22, 28, 63-64, 236-237, 272. EPA also refers to a project at NRG’s W.A. Parish generating facility. *Id.* at p. 22, 243.

<sup>7</sup> See [Regulatory Actions](#); [Public Listening Sessions](#); [Overview Presentation](#); [“What EPA is Doing.”](#)

<sup>8</sup> Coal is mined in [25 states](#) and the U.S. Energy Information Administration [reports](#) that the United States has the world’s largest estimated recoverable reserves of coal.

Section 2: This section provides direction relating to the establishment of standards for new fossil fuel-fired electricity generating units (EGUs).

Section 2(a) provides that the EPA Administrator may not issue, implement, or enforce any proposed or final rule under section 111 of the CAA that establishes GHG emissions standards for new fossil fuel-fired EGUs unless the Administrator meets the requirements of subsections (b) and (c).

Section 2(b) provides that the Administrator must establish separate source categories for new EGUs fueled with coal and natural gas. This section provides that for the coal category, the EPA Administrator may not set a standard unless it has been achieved for a continuous 12-month period by at least 6 EGUs located at different power plants in the U.S., which collectively are representative of the operating characteristics of EGUs at different locations in the U.S., and which have operated for the entire 12-month period on a full commercial basis.

Section 2(c) further provides for the coal category that the Administrator must establish a subcategory for new EGUs fueled by lignite coal, and may not set a standard for that subcategory unless it has been achieved for a continuous 12-month period by at least 3 EGUs located at different power plants in the U.S., which collectively are representative of the operating characteristics of EGUs at different locations in the U.S., and which have operated for the entire 12-month period on a full commercial basis.

Sections 2(b) and (c) also provide that in establishing standards for the coal category, the Administrator may not set the standards based on results from a demonstration project.

Section 3: This section provides that any rules or guidelines issued by the Administrator establishing standards of performance under CAA section 111 for modified or reconstructed fossil fuel-fired EGUs, or guidelines for existing fossil fuel-fired EGUs, will not take effect unless a Federal law is enacted specifying such rule's or guidelines' effective date. The section further provides that such rules or guidelines may not take effect unless the Administrator has submitted to Congress a report containing (1) the text of such rule or guidelines; (2) the economic impacts of such rule or guidelines, including potential effects on economic growth, competitiveness and jobs, and on electricity ratepayers; and (3) the amount of GHG emissions that such rule or guidelines are projected to reduce as compared to overall GHG emissions.

Section 4: This section provides that the EPA's proposed standards for new fossil fuel-fired EGUs, and any substantially similar rules that do not meet the requirements of section 2 of this Act, are of no force and effect. The section further provides that any rules or guidelines for modified, reconstructed, or existing fossil fuel-fired EGUs promulgated prior to enactment of the Act are also of no force and effect.

Section 5: This section contains the following definitions:

(1) "Demonstration project" means a project to test or demonstrate the feasibility of carbon capture and storage technologies that has received government funding or financial assistance.

(2) "Existing source" has the meaning given such term in CAA section 111(a), except that such term shall not include any modified source.

(3) “Greenhouse gas” means any of the following: carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, or perfluorocarbons.

(4) “Modification” has the meaning given such term in CAA section 111(a).

(5) “Modified source” means any stationary source, the modification of which is commenced after the date of enactment of the Act.

(6) “New source” has the meaning given such term in CAA section 111(a), except that such term shall not include any modified source.

#### **IV. ISSUES**

The following issues are expected to be examined at the hearing:

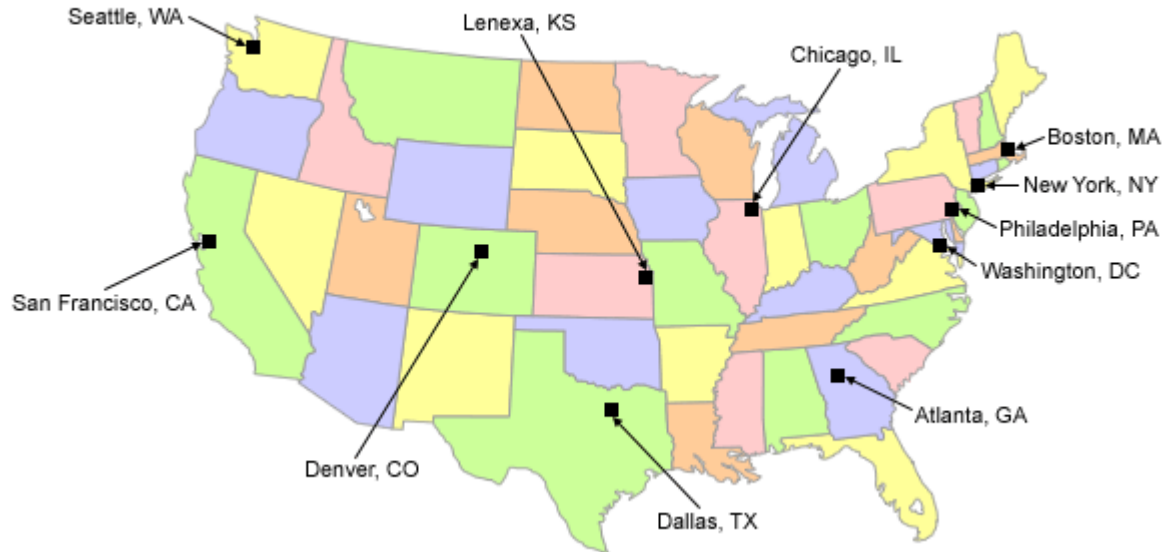
- The EPA’s proposed regulations for new coal-fired power plants;
- The EPA’s planned regulations for existing coal-fired power plants;
- The technical and economic feasibility of commercial-scale CCS technologies;
- The critical role of fuel diversity in ensuring affordable, reliable electricity;
- Potential impacts of EPA’s pending regulations on electricity rates and reliability; and
- Potential impacts of EPA’s pending regulations on jobs and the economy.

#### **V. STAFF CONTACT**

If you have any questions regarding the hearing, please contact Mary Neumayr, Patrick Currier or Tom Hassenboehler of the Committee staff at (202) 225-2927.

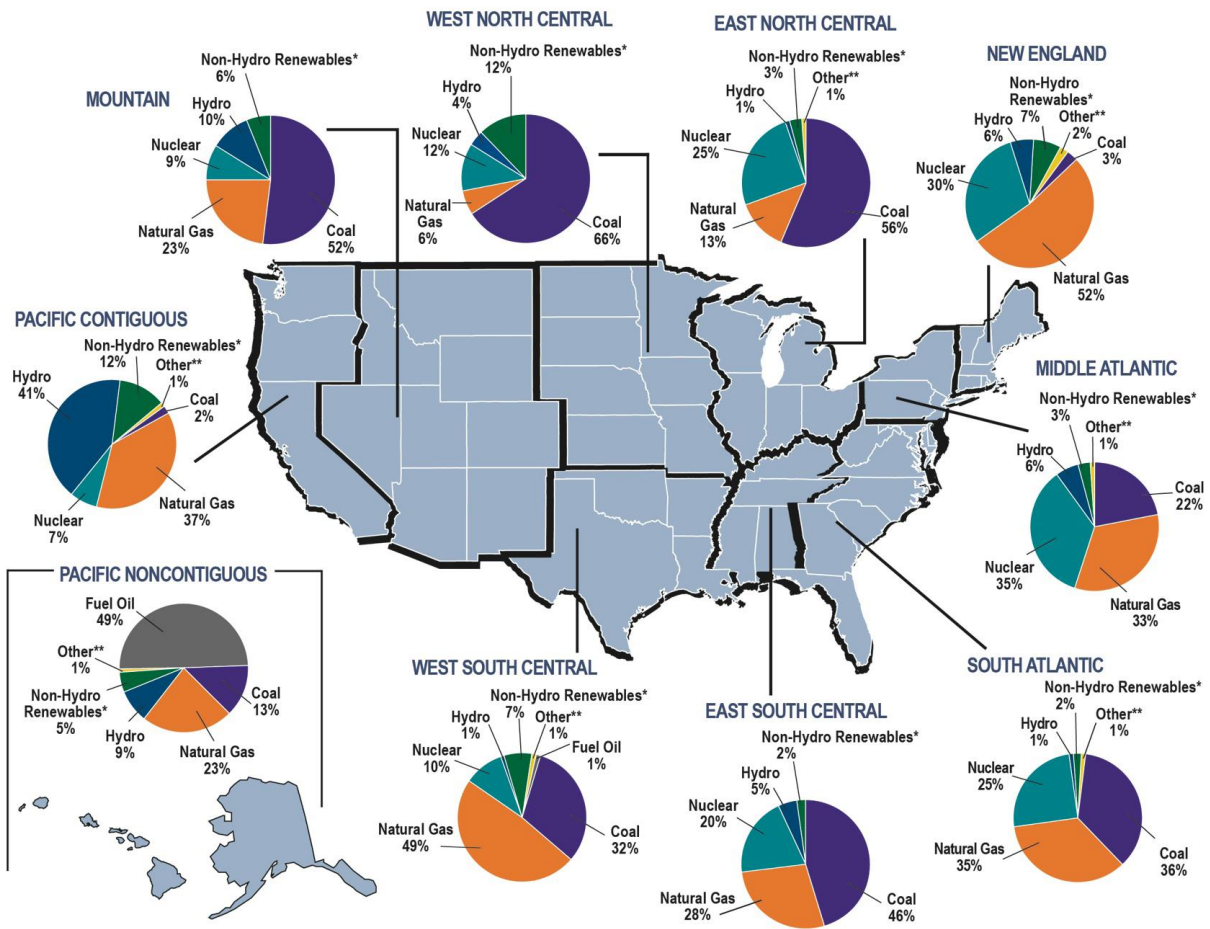
## APPENDIX 1

### Public Listening Session Locations



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[Atlanta, GA](#) | [Boston, MA](#) | [Chicago, IL](#) | [Dallas, TX](#) |  
[Denver, CO](#) | [Lenexa, KS](#) | [New York, NY](#) | [Philadelphia, PA](#) |  
[San Francisco, CA](#) | [Seattle, WA](#) | [Washington, DC](#)

**APPENDIX 2**



\* Includes generation by agricultural waste, landfill gas recovery, municipal solid waste, wood, geothermal, non-wood waste, wind, and solar.

\*\* Includes generation by tires, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Sum of components may not add to 100% due to independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, Power Plant Operations Report (EIA-923); 2012 preliminary generation data.

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