

**U.S. HOUSE OF REPRESENTATIVES**  
**COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY**  
**SUBCOMMITTEES ON ENVIRONMENT AND ENERGY**

**HEARING CHARTER**

***U.S. Energy Information Administration Report: Analysis of the Impacts of  
EPA's Clean Power Plan***

Wednesday, June 24, 2015  
10:00 a.m. – 12:00 p.m.  
2318 Rayburn House Office Building

**PURPOSE**

The Environment and Energy Subcommittees will hold a joint hearing entitled *U.S. Energy Information Administration Report: Analysis of the Impacts of the EPA's Clean Power Plan* on Wednesday, June 24, 2015 in Room 2318 of the Rayburn House Office Building. The hearing will examine the U.S. Energy Information Administration's recent report *Analysis of the Impacts of the Clean Power Plan*.<sup>1</sup> This report was requested by Chairman Lamar Smith in August 2014.<sup>2</sup> Witnesses will provide testimony on analyses of impacts of the EPA's Clean Power Plan, including on the recent EIA analysis and other independent analyses that they have conducted regarding the cost and impact of the rule.

**WITNESS LIST**

- **Mr. Howard Gruenspecht**, Deputy Administrator, U.S. Energy Information Administration
- **Mr. Stephen Eule**, Vice President for Climate and Technology, U.S. Chamber of Commerce
- **Dr. Susan Tierney**, Senior Advisor, Analysis Group, Inc.
- **Dr. Kevin Dayaratna**, Senior Statistician and Research Programmer, The Heritage Foundation

**BACKGROUND**

On June 2, 2014, EPA proposed the Clean Power Plan with the intent of regulating carbon emissions from existing source electricity generating units.<sup>3</sup> Under Section 111(d) of the Clean Air Act, EPA proposes that states formulate implementation plans to limit carbon

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<sup>1</sup> <sup>1</sup> U.S. EIA, Analysis of the Impacts of the Clean Power Plan, May 22, 2015, available at: <http://www.eia.gov/analysis/requests/powerplants/cleanplan/>.

<sup>2</sup> Letter from Hon. Lamar Smith, Chairman, H. Comm. on Science, Space, and Technology, to Hon. Adam Sieminski, Administrator, U.S. Energy Information Administration, Aug. 13, 2014, available at <http://www.eia.gov/analysis/requests/powerplants/cleanplan/pdf/powerplant.pdf> at p. 74.

<sup>3</sup> Clean Power Plan Proposed Rule, U.S. EPA, available at: <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule> (last visited Feb. 17, 2015).

emissions.<sup>4</sup> The scope and manner in which the rule has been conceived by the agency has been met with considerable opposition from the states and industry groups.<sup>5</sup> It is anticipated that the EPA will issue its final rule for the Clean Power Plan this summer.

The Clean Power Plan would require states to meet requirements for carbon emissions from electricity generating units.<sup>6</sup> EPA proposes that states meet these requirements through four building blocks: improving the efficiency of coal steam electric generating units on an average of six percent, using combined cycle natural gas units up to a 70 percent capacity factor, constructing more zero and low-emitting power sources, and implementing energy efficiency measures to limit annual electricity demand by 1.5 percent annually.<sup>7</sup>

On August 13, 2014, Chairman Lamar Smith sent a letter requesting that the EIA “analyze the impacts of the [Clean Power Plan]” under various specifications for analysis.<sup>8</sup> Chairman Smith requested that EIA conduct this analysis due to the fact that EPA had not considered a number of broad economy-wide impacts of the regulation.<sup>9</sup> EIA agreed to conduct this analysis in accordance with the parameters requested by the Chairman.

On May 22, 2015, EIA released its report, *Analysis of the Impacts on the Clean Power Plan*. According to the report, EIA analyzed the impacts of the Clean Power Plan using the Annual Energy Outlook 2015 (AEO2015) as the reference case. Additionally, EIA analyzed the impact of the rule in the context of the AEO2015 High Economic Growth and High Oil and Gas Resource cases – each of which make certain assumptions on the growth of the economy and access to large amounts of domestic oil and gas resources.<sup>10</sup> EIA states that these cases were used “in order to examine indicators of the proposed rule’s impacts on energy markets under varying assumptions regarding economic growth, electricity demand, and fuel prices.”<sup>11</sup> The EIA’s report uses the National Energy Modeling System or NEMS, the standard modeling system used by the agency to determine its long-term projections of the U.S. energy sector through the year 2040.<sup>12</sup>

EIA also provided analysis of the Clean Power Plan under the following additional scenarios: 1) extension of the Clean Power Plan regulation to reduce CO<sub>2</sub> emissions from electricity generating units by 45% relative to 2005 levels by 2040; 2) treatment of future nuclear capacity similar to the treatment of renewable capacity; 3) sensitivities for expenditures and effectiveness of energy efficiency programs; 4) sensitivities for the cost and effectiveness of heat

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<sup>4</sup> Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,830 (June 18, 2014).

<sup>5</sup> Michael Grunwald, *Inside the War on Coal*, Politico, May 2015, available at: <http://www.politico.com/agenda/story/2015/05/inside-war-on-coal-000002>.

<sup>6</sup> U.S. EPA, EPA Fact Sheet: Clean Power Plan National Framework for States, *available at* <http://www2.epa.gov/sites/production/files/2014-05/documents/20140602fs-setting-goals.pdf>.

<sup>7</sup> *Id.*

<sup>8</sup> Letter from Hon. Lamar Smith, Chairman, H. Comm. on Science, Space, and Technology, to Hon. Adam Sieminski, Administrator, U.S. Energy Information Administration, Aug. 13, 2014, *available at* <http://www.eia.gov/analysis/requests/powerplants/cleanplan/pdf/powerplant.pdf> at p. 74.

<sup>9</sup> *Id.*

<sup>10</sup> U.S. EIA, Analysis of the Impacts of the Clean Power Plan, May 22, 2015, *available at* <http://www.eia.gov/analysis/requests/powerplants/cleanplan/> .

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

rate improvement measures; 5) no availability of markets for CO<sub>2</sub> captured from electric power plants for enhanced oil recovery (EOR); 6) an alternative compliance phase-in trajectory during the 2020-2029 period; 7) alternative accounting rules for emissions from biomass generation; 8) national compliance cooperation; and 9) limited interregional trade.<sup>13</sup>

Within these parameters, EIA found numerous impacts of EPA's proposed Clean Power Plan. The agency reports that the Clean Power Plan would reduce CO<sub>2</sub> emissions from the power sector between 29% and 36% relative to 2005 emissions levels by 2030.<sup>14</sup> The total amount of CO<sub>2</sub> emissions reduction from the power sector would be between 1,553 and 1,727 million metric tons of carbon across all of the cases analyzed by EIA.<sup>15</sup> EIA further determined that the predominant strategy for complying with CO<sub>2</sub> emissions reductions would be achieved by switching from coal-fired to natural gas-fired power generators.<sup>16</sup> Additionally, EIA found that renewable energy sources would not begin to play a role in CO<sub>2</sub> reduction until approximately 2020.<sup>17</sup> Moreover, EIA found that if EPA were to treat nuclear power as a renewable energy source for purposes of compliance regulations with the Clean Power Plan, the rule would result in increased nuclear power generation.<sup>18</sup>

EIA also found that the Clean Power Plan would have a significant impact in retiring a large number of coal-fired power plants. Under current regulatory conditions, EIA projects that 40 gigawatts of coal-fired electricity generation will retire by 2040 as a result of additional EPA rules such as the Mercury Air Toxics Rule.<sup>19</sup> EIA found that an additional 50 gigawatts of coal-fired generation would be forced to retire for a total of 90 gigawatts. These coal-fired plants would mostly be retired by 2020 when the regulatory requirements of the rules begin to go into effect.<sup>20</sup> Additionally, EIA found that the Clean Power Plan would have an adverse impact on projected U.S. coal production. According to EIA projections, the agency found that coal production in 2020 and 2025 would be 20% and 32% lower, respectively, compared to baseline projections.<sup>21</sup> By 2040, EIA found that coal production would remain 20% lower than current projections.<sup>22</sup>

EIA's report also found that electricity prices would increase under the Clean Power Plan. The agency's analysis concludes that the regulations would raise electricity prices by approximately 3% to 7% annually above baseline increases that are already projected to occur by 2040.<sup>23</sup> The impact of increased electricity prices is not distributed evenly throughout the various regions of the United States. EIA found that in certain regions the increases in electricity prices would be even greater than the average projections. For example, the report states that Texas, Florida, Mississippi Delta, Tennessee Valley, Southwest, Southern Plains, and Eastern

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<sup>14</sup> U.S. EIA, Analysis of the Impacts of the Clean Power Plan, May 2015, available at <http://www.eia.gov/analysis/requests/powerplants/cleanplan/pdf/powerplant.pdf>

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

Wisconsin regions would experience electricity price increases greater than 7% by 2020 as a result of the Clean Power Plan regulation.<sup>24</sup>

Additionally, EIA analysis found that the costs of the Clean Power Plan regulations would lead to a reduction of 0.17% to 0.25% in cumulative gross domestic product (GDP) projections over 2015-2040 ranges.<sup>25</sup>

**Additional Reading:**

The full EIA report, “Analysis of the Impacts of the Clean Power Plan” is available at <http://www.eia.gov/analysis/requests/powerplants/cleanplan/pdf/powerplant.pdf>.

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<sup>24</sup> U.S. EIA, Analysis of the Impacts of the Clean Power Plan, May 2015, *available at* <http://www.eia.gov/analysis/requests/powerplants/cleanplan/pdf/powerplant.pdf>

<sup>25</sup> *Id.*