

GAO Highlights

Highlights of [GAO-14-672](#), a report to the Ranking Member, Committee on Energy and Natural Resources, U.S. Senate

Why GAO Did This Study

EPA recently proposed or finalized four regulations affecting coal-fueled electricity generating units, which provide about 37 percent of the nation's electricity supply. These regulations are the: (1) Cross-State Air Pollution Rule; (2) Mercury and Air Toxics Standards; (3) Cooling Water Intake Structures regulation; and (4) Disposal of Coal Combustion Residuals regulation. In 2012, GAO reported that, in response to these regulations and other factors such as low natural gas prices, companies might retire or retrofit some units. GAO reported that these actions may increase electricity prices and, according to some stakeholders, may affect reliability—the ability to meet consumers' demand—in some regions. In 2012, GAO recommended that DOE, EPA, and FERC develop and document a formal, joint process to monitor industry's progress responding to these regulations. In June 2014, EPA proposed new regulations to reduce carbon dioxide emissions that will also affect these units.

GAO was asked to update its 2012 report. This report examines (1) agencies' efforts to respond to GAO's recommendation and (2) what is known about planned retirements and retrofits. GAO reviewed documents, analyzed data, and interviewed agency officials and stakeholders.

What GAO Recommends

GAO is not making new recommendations but believes it is important that these agencies jointly monitor industry progress and fully document these steps as GAO recommended in 2012. The agencies concurred with GAO's findings.

View [GAO-14-672](#). For more information, contact Frank Rusco at (202) 512-3841 or ruscof@gao.gov.

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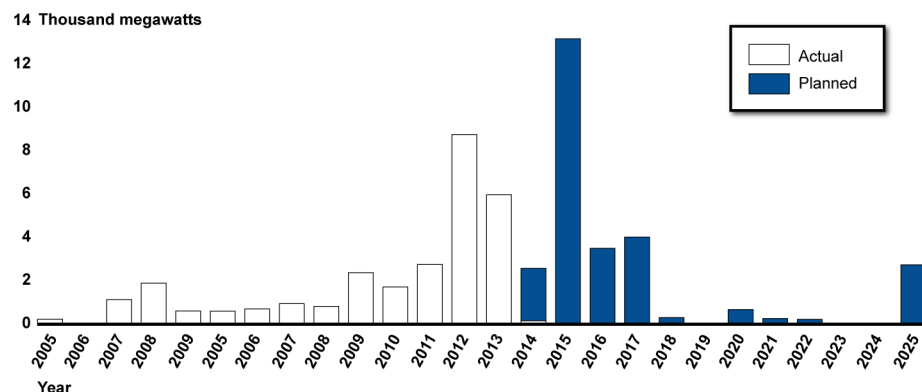
Update on Agencies' Monitoring Efforts and Coal-Fueled Generating Unit Retirements

What GAO Found

The Department of Energy (DOE), the Environmental Protection Agency (EPA), and the Federal Energy Regulatory Commission (FERC) have taken initial steps to implement a recommendation GAO made in 2012 that these agencies develop and document a joint process to monitor industry's progress in responding to four proposed or finalized EPA regulations affecting coal-fueled generating units. GAO concluded that such a process was needed until at least 2017 to monitor the complexity of implementation and extent of potential effects on price and reliability. Since that time, DOE, EPA, and FERC have taken initial steps to monitor industry progress responding to EPA regulations including jointly conducting regular meetings with key industry stakeholders. Currently, these monitoring efforts are primarily focused on industry's implementation of one of four EPA regulations—the Mercury and Air Toxics Standards—and the regions with a large amount of capacity that must comply with that regulation. Agency officials told GAO that in light of EPA's recent and pending actions on regulations including those to reduce carbon dioxide emissions from existing generating units, these coordination efforts may need to be revisited.

According to GAO's analysis of public data, power companies now plan to retire a greater percentage of coal-fueled generating capacity and retrofit less capacity with environmental controls than the estimates GAO reported in July 2012. About 13 percent of coal-fueled generating capacity—42,192 megawatts (MW)—has either been retired since 2012 or is planned for retirement by 2025, which exceeds the estimates of 2 to 12 percent of capacity that GAO reported in 2012 (see fig.). The units that power companies have retired or plan to retire are generally older, smaller, more polluting and not used extensively, with some exceptions. For example, some larger generating units are also planned for retirement. In addition, the capacity is geographically concentrated in four states: Ohio (14 percent), Pennsylvania (11 percent), Kentucky (7 percent), and West Virginia (6 percent). GAO's analysis identified about 70,000 MW of generating capacity that has either completed some type of retrofit to reduce sulfur dioxide, nitrogen oxides, or particulate matter since 2012 or plan to complete one by 2025, which is less than the estimate of 102,000 MW GAO reported in 2012.

Capacity of Actual and Planned Retirements of Coal-Fueled Generating Units, 2005-2025



Source: GAO analysis of SNL Financial data. | GAO-14-672