

# Federal Efforts to Address Climate Change

- Public power utilities are reducing their greenhouse gas (GHG) emissions through a variety of means, including increased use of renewable energy resources, the development of new nuclear power, the addition of distributed energy resources and storage, the adoption of energy efficiency programs, and the promotion of transportation electrification.
- The American Public Power Association (APPA) supports congressional efforts to address climate change through a statutory framework that provides electric utilities with regulatory certainty for the clean energy transition while keeping electricity affordable and reliable for all customers.
- Congress should continue to fund federal research, development, and deployment of clean energy technologies and infrastructure that increases the resilience of the grid, reduces emissions, and helps keep electricity affordable.
- APPA does not believe that the Environmental Protection Agency's (EPA) new proposed rules to reduce GHG emissions from new and existing power plants is cost-effective, practically achievable, or incorporates future market trends.

## Background

Following the U.S. Supreme Court's landmark decision in *Massachusetts v. Environmental Protection Agency* in 2007, which held that EPA has the authority to regulate tailpipe emissions of GHGs under the Clean Air Act (CAA) because GHGs are pollutants that potentially "endanger" public health and welfare, Congress and EPA have sought to address climate change through legislation and regulations. In 2009, the House of Representatives passed the American Clean Energy and Security Act of 2009 by a vote of 219-212. The legislation would have established an economy-wide GHG cap-and-trade system. The Senate did not consider the House bill; nor did it consider its own comprehensive climate bill due to the lack of sufficient support among senators.

With Congress failing to enact climate change legislation in 2010, the Obama administration's EPA issued proposed New Source Performance Standards for new fossil fuel-fired power plants in 2012. Just over three years later, in August 2015, EPA issued final rules to regulate carbon dioxide (CO<sub>2</sub>) emissions from new power plants and existing power plants ("Clean Power Plan" or CPP).

The CPP set final emission guidelines in the form of nationally uniform CO<sub>2</sub> emission performance rates for coal-fired and natural gas-fired power plants. It also set CO<sub>2</sub> emissions-reduction goals for each state and allowed for emissions reductions through energy efficiency upgrades at power plants and fuel switching from coal to natural gas or renewables.

In October 2015, the CPP was challenged in the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit). The case was subsequently dismissed in September 2019, with the court noting that challenges to the rule were moot due to the repeal of the CPP and replacement of the rule with the Trump administration's Affordable Clean Energy (ACE) rule. The ACE rule sought to establish the "best system of emissions reduction" (BSER) for limiting CO<sub>2</sub> emissions from affected electric generating units in the form of heat rate improvement measures that could be applied to or at an affected unit (i.e., "inside the fence-line"). In September 2019, the ACE rule was challenged in the D.C. Circuit, where the court vacated and remanded the rule back to EPA. Subsequently, the D.C. Circuit's decision was appealed to the U.S. Supreme Court. The court ruled in *West Virginia v. EPA* et al. (No. 20-1530) that EPA's conclusion in the CPP that an "outside the fence" approach, including a cap-and-trade system, that resulted in a shift of electricity production from coal plants to other sources of lower GHG emissions exceeded EPA authority under section 111(d) of the CAA. Thus, the court reversed and remanded the case to the D.C. Circuit.

#### Administrative Action

In May, EPA issued its long-awaited proposal to regulate GHG emissions from new, modified, reconstructed, and certain large existing gas plants under section 111 of the CAA. Specifically, the proposal takes five stand-alone regulatory actions: 1) updates the new source performance standards (NSPS) for fossil-fuel-fired stationary combustion turbines; 2) updates the NSPS for GHG emissions from fossil-fired steam generating units that undertake large modifications; 3) establishes emission guidelines for GHG emissions for fossil-fired steam generating electric generating units; 4) establishes emission guidelines for GHG emission for fossil-fired steam generating electric generating units; 4) establishes emission guidelines for GHG emission from certain stationary combustion turbines; 5) and repeals the ACE rule. Section 111 requires EPA to determine performance standards and emission limitations by applying the BSER, which considers the cost of achieving such reduction and any non-air quality health and environmental impacts and energy requirements EPA determines have been adequately demonstrated. Once BSER is determined for new plants, EPA must also address existing sources and establish emission guidelines as the baseline for states to develop state implementation plans for their existing sources. The proposal relies on the use of highly efficient generation practices, carbon capture and storage (CCS), and co-firing natural gas with low GHG-hydrogen as BSER, depending on the type of affected facility. The proposed rules aim to drive down GHGs in the electric generation sector significantly by requiring certain new and existing fossil fuel generation to reduce emissions based on the use of CCS by 2035 or co-firing with hydrogen by 2032.

The proposed rules would allow for various technology options, and compliance timelines that are intended to account for an individual facility's lifespan. The proposed standards vary based on whether an EGU is new or existing, coal-fired or gas-fired, and the frequency of use. EPA's reliance on CCS and co-firing with low GHG hydrogen as BSER assumes these technologies are "adequately demonstrated" and "economically achievable." Many of the proposal's assumptions are based upon changes in the electric power sector, technology developments, the passage of the Infrastructure Investment and Jobs Act (IIJA)(P.L. 117-58) and Inflation Reduction Act (IRA)(P.L. 117-169), state support for investment in CCS, and hydrogen co-firing projects. While CCS may fit within the U.S. Supreme Court's interpretation of "inside the fence line," questions remain about whether EPA's approach will survive other legal challenges.

Further, the proposal may encourage the retirement of many thermal power plants unable to invest in capital-intensive CCS infrastructure or overhaul plants to use hydrogen. These retirements could potentially affect grid reliability as the United States transitions from primarily fossil-fired EGUs to a more diverse, low-carbon resource mix, including intermittent renewable generation, virtual power plants, demand response, and electric storage. The proposed rules are by far the most ambitious attempt to reduce GHG emissions from the power sector and raise a wide range of issues for public power utilities to evaluate during the public comment period.

#### **Congressional Action**

Climate issues were a key legislative focus during the 117<sup>th</sup> Congress. In the House of Representatives, the Democratic majority supported legislation, the Climate Leadership and Environmental Action for our Nation's (CLEAN) Future Act, which would have created a clean energy standard requiring retail electric suppliers to obtain 100 percent of their electricity from clean energy sources by 2035. It also included a host of provisions on transmission, electrification of the transportation sector, grid modernization, distributed energy resources, and hydropower, among others.

The CLEAN Future Act was the basis for a subsequent effort by House and Senate Democrats to create the Clean Electricity Performance Program (CEPP) that would have amended the Federal Power Act to require electric utilities to increase their percentage of clean electricity annually between 2023 and 2030. Utilities meeting the annual clean energy compliance obligation would receive federal grants for clean energy infrastructure, reducing electricity rates, or other activities, such as energy efficiency or electrification, that further reduce GHG emissions. Electric utilities failing to meet the targets in the CEPP would have been subject to financial penalties.

Neither the CEPP nor the CLEAN Future Act were considered by the Senate, which took a different approach and sought to expand existing energy tax credits and create new ones with the purpose of promoting clean energy technologies to reduce emissions to address climate change. The IRA also for the first time made these credits available to public power utilities, allowing them to claim these credits as refundable elective payment tax credits.

In addition, in November 2021, President Biden signed the IIJA into law, which provides much needed federal funding for a host of programs to promote clean energy, energy efficiency, grid resilience, and electrification of the transportation sector. APPA believes many of these programs will help public power utilities further reduce their GHG emissions or facilitate their ability to reduce emissions from other sectors, such as transportation.

The 118<sup>th</sup> Congress is primarily focused on oversight, not only of federal agencies such as the Departments of Energy, Transportation, and Treasury tasked with implementing the energy tax credits and grant programs created by recently passed laws like the IRA and IIJA, but also of executive actions to address climate change, including EPA's proposed power plant regulations. In early June, the House Energy & Commerce Committee's Subcommittee on Environment, Manufacturing, & Critical Minerals held a hearing on the proposed rule, during which Republicans largely focused on the proposed rule's impact on electric reliability, while Democrats predominantly focused on its impact on public health.

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The American Public Power Association is the voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide. We represent public power before the federal government and protect the interests of the more than 49 million people that public power utilities serve and the 96,000 people they employ.