FACT SHEET ON STATE PLANS GREENHOUSE GAS STANDARDS AND GUIDELINES FOR FOSSIL FUEL-FIRED POWER PLANTS PROPOSED RULE

Summary

On May 11, 2023, the U.S. Environmental Protection Agency (EPA) announced proposed new carbon pollution standards for coal and gas-fired power plants that will protect public health, reduce harmful pollutants and deliver up to \$85 billion in climate and public health benefits over the next two decades. Consistent with EPA's traditional approach to establishing pollution standards under the Clean Air Act, the proposed limits and guidelines require ambitious reductions in carbon pollution based on proven and cost-effective control technologies that can be applied directly to power plants. They also provide owners and operators of power plants with ample lead time and substantial compliance flexibilities, allowing power companies and grid operators to make sound long-term planning and investment decisions, and supporting the power sector's ability to continue delivering reliable and affordable electricity.

President Biden's policy agenda has driven momentum in the power sector to cut GHGs and is moving us closer to avoiding the worst impacts of climate change. Together with other recent EPA actions to address health-harming pollution from the power sector, the proposed rules deliver on the Administration's commitment to reduce pollution from the power sector while providing long-term regulatory certainty and operational flexibility.

Overview

- EPA is proposing Clean Air Act emission limits and guidelines for carbon dioxide (CO₂) from fossil fuel-fired power plants based on cost-effective and available control technologies. In 2021, the power sector was the largest stationary source of greenhouse gases (GHGs), emitting 25 percent of the overall domestic emissions. These emissions are almost entirely the result of the combustion of fossil fuels in the electric generating units (EGUs) that are the subjects of these proposals.
- The proposals set limits for new gas-fired combustion turbines, existing coal, oil and gasfired steam generating units, and certain existing gas-fired combustion turbines. The proposed standards are based on technologies such as carbon capture and sequestration/storage (CCS), low-GHG hydrogen co-firing, and natural gas co-firing, which can be applied directly to power plants that use fossil fuels to generate electricity.
- As laid out in section 111 of the Clean Air Act, the proposed new source performance standards (NSPS) and emission guidelines reflect the application of the best system of emission reduction (BSER) that, taking into account costs, energy requirements, and other statutory factors, is adequately demonstrated for the purpose of improving the emissions performance of the covered electric generating units.
- EPA has evaluated the emissions reductions, benefits, and costs of the proposals to limit CO2 from the existing coal fleet and new natural gas units. EPA projects these proposals

would cut 617 million metric tons of CO2 through 2042 along with tens of thousands of tons of PM2.5, SO2, and NOx – harmful air pollutants that are known to endanger public health.

- Between 2024 and 2042, projected net climate and health benefits from these emissions reductions range from \$64 billion-to \$85 billion, an annual net benefit that ranges from \$5.4 billion to \$5.9 billion.
- These estimates do not include the impact of the proposed requirements for existing gas-fired combustion turbines or third phase of the NSPS. EPA performed a separate analysis of these proposed requirements that estimates they would reduce between 214 and 407 million metric tons of CO2 cumulatively through 2042.
- In 2030 alone, the health benefits of the proposals include approximately 1,300 avoided premature deaths; more than 800 avoided hospital and emergency room visits; approximately 2,000 avoided cases of asthma onset; more than 300,000 avoided cases of asthma symptoms; 38,000 avoided school absence days; and 66,000 lost work days.

State Plans for Existing Power Plants

- Under section 111(d) of the Clean Air Act, states must submit plans to EPA that provide for the establishment, implementation and enforcement of standards of performance for existing sources. These state plans must generally establish standards that are at least as stringent as EPA's emission guidelines. States may take into account remaining useful life and other factors when applying standards of performance to individual existing sources.
- EPA proposed revisions to the general implementing regulations for emission guidelines under CAA section 111 (also referred to as "subpart Ba") in December 2022 that, if finalized, would also apply to these emission guidelines.
- A few areas specific to existing power plants and CO2 in state plans include:
 - **State plan submission deadline:** EPA is proposing to require that states submit plans to EPA within 24 months of the effective date of the emissions guidelines.
 - State plan components: EPA is proposing requirements specific to these emission guidelines to ensure transparency, including a website hosted by EGU owners/operators to publish documentation and information related to compliance with the state plan.
 - Compliance deadline for sources: EPA is proposing that existing steam generating units must start complying with their standards of performance on January 1, 2030. Existing combustion turbine units must start complying with their standards of performance on January 1, 2032, or January 1, 2035, depending on their subcategory.
 - Presumptive standards: EPA is proposing methodologies for states to use in establishing presumptively approvable standards of performance for most types of affected EGUs.
 - **Remaining Useful Life and Other Factors (RULOF):** States would apply EPA's framework, as we proposed to revise it in the subpart Ba rulemaking, for

applying a less stringent standards based on a particular facility's remaining useful life or other factors. To receive a less stringent standard, a state must demonstrate that a facility cannot reasonably achieve the stringency achievable through application of the BSER.

 Compliance flexibilities/trading: In the proposed rule for existing power plants, EPA is proposing to allow trading and averaging for state plans under the particular circumstances of these emission guidelines. EPA is taking comment on what limitations or requirements should apply to ensure that trading and averaging mechanisms are at least as protective as EPA's emission guidelines. If EPA determines that trading and averaging are appropriate, states would not be required to allow for such compliance mechanisms in their state plans, but could elect to include them.

Meaningful Engagement

- The proposal requires that states, in developing plans for existing sources, undertake meaningful engagement with affected stakeholders, including communities disproportionately burdened by pollution and climate change impacts, as well the energy communities and workers who have powered our nation for generations. President Biden's Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization has identified <u>historic resources</u> for energy communities to invest in infrastructure, deploy new technologies that can help clean up the electric power sector, support energy workers and spur long-term economic revitalization.
- EPA's proposed emission guidelines for existing fossil fuel-fired steam generating units as well as existing fossil fuel-fired stationary combustion turbines would require states to undertake meaningful engagement with affected stakeholders, including communities that are most affected by and vulnerable to emissions from these EGUs. This ensures that the priorities, concerns and perspectives of these communities are heard during the planning process.
- Meaningful engagement requirements are intended to ensure that the perspectives, priorities and concerns of affected communities are included in the process of establishing and implementing standards of performance for existing EGUs, including decisions about compliance strategies and compliance flexibilities that may be included in a state plan.

Public Hearing and Comment

- EPA will hold a virtual public hearing for this proposed action. Further details will be announced at <u>Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants.</u>
- EPA will accept comment on the proposal for 60 days after publication in the *Federal Register*. Comments, identified by Docket ID No. EPA-HQ-OAR-2023-0072, may be submitted by one of the following methods:
 - Go to <u>https://www.regulations.gov/</u> and follow the online instructions for submitting comments.

- Send comments by email to <u>a-and-r-docket@epa.gov</u>, Attention Docket ID No. EPA-HQ-OAR-2023-0072 in the subject line of the message.
- Fax your comments to: (202) 566-9744, Attention Docket ID No. EPA-HQ-OAR-2023-0072.
- Mail your comments to: EPA Docket Center, Environmental Protection Agency, Mail Code: 28221T, 1200 Pennsylvania Ave, NW, Washington, DC 20460, Attention Docket ID No. EPA-HQ-OAR-2023-0072.
- Deliver comments in person to: EPA Docket Center, 1301 Constitution Ave., NW, Room 3334, Washington, DC. Note: In-person deliveries (including courier deliveries) are only accepted during the Docket Center's normal hours of operation. Special arrangements should be made for deliveries of boxed information.

For More Information

• Interested parties can download a copy of the proposed rule from <u>Greenhouse Gas</u> <u>Standards and Guidelines for Fossil Fuel-Fired Power Plants</u>