

FACT SHEET
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. The power sector is the largest stationary source of greenhouse gases (GHGs), emitting 25 percent of the overall domestic emissions in 2021. 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 would set limits for new gas-fired combustion turbines, existing coal, oil and gas-fired steam generating units, and certain existing gas-fired combustion turbines. Consistent with EPA's traditional approach to establishing pollution standards for power plants under section 111 of the Clean Air Act, 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 PM_{2.5}, SO₂, and NO_x – 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. 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 on new gas and existing coal 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.
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- The quantified climate and health benefits include the value of multiple climate change impacts, including (but not limited to) changes in net agricultural productivity, human health effects, property damage from increased flood risk natural disasters, disruption of energy systems, risk of conflict, environmental migration, and the value of ecosystem services.
- The proposals provide utilities options for meeting these standards as well as the time needed to plan and invest for compliance and continue to support a reliable supply of affordable electricity.
- The more frequently and longer a unit operates, and the greater its capacity, the more cost-effective it is to install controls for CO₂ emissions. These proposals considered this fact to create subcategories in the standards and guidelines. For some subcategories, the proposals phase in technology standards over time in recognition of the time needed to plan for and install controls.

- EPA is also simultaneously proposing to repeal the Affordable Clean Energy (ACE) rule.
- The proposals build on and respond to extensive stakeholder engagement. EPA looks forward to continuing to engage stakeholders as we work toward finalizing these proposals.
- EPA will take comment on these proposals for 60 days after publication in the Federal Register and hold a virtual public hearing. Registration for the public hearing will open after the proposal is published in the Federal Register.
- EPA will host virtual trainings on June 6 and 7 to provide communities and Tribes with information about the proposal and about participating in the public comment process. Registration information will be available on the web at [Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants](#).

Proposed Technology-Based Standards

- The technology-based standards EPA is proposing that would cut CO₂ from power plants include:
 - Updates to the New Source Performance Standards (NSPS) for fossil fuel-fired stationary combustion turbines (generally natural gas-fired)
 - Emission guidelines for large, frequently used existing fossil fuel-fired stationary combustion turbines (generally natural gas-fired)
 - Emission guidelines for existing fossil fuel-fired steam generating EGUs (generally coal-fired)
- These proposed actions consider the extensive input received from a broad range of stakeholders on a variety of topics, including the operation of these regulated sources, in light of the rapid evolution of the power sector. At the same time, these proposed actions ensure that new and certain existing natural gas-fired combustion turbines and existing steam EGUs achieve significant and cost-effective reductions in GHG emissions through the application of adequately demonstrated control technologies.
- These proposed standards are designed to allow the power sector continued resource and operational flexibility and to facilitate long-term planning. Among other things, these elements include:
 - subcategories of new natural gas-fired combustion turbines that allow for the stringency of GHG emission standards to vary by capacity factor;
 - subcategories for existing steam EGUs that are based on operating horizons and fuel, and that accommodate the stated plans of many power companies to voluntarily cease operation of some sources;

- compliance deadlines for both new and existing EGUs that provide ample lead time for states and utilities to plan; and
 - proposed state plan flexibilities.
- Starting in 2030, the proposals would generally require more CO₂ emissions control at fossil fuel-fired power plants that operate more frequently and for more years and would phase in increasingly stringent CO₂ requirements over time. The proposed requirements vary by the type of unit (new or existing, combustion turbine or utility boiler, coal-fired or natural gas-fired), how frequently it operates (base load, intermediate load, or low load (peaking) and its operating horizon (i.e., planned operation after certain future dates).
 - State plans would reflect limits that go into place in 2030 for existing coal-fired units. Depending on the expected length of the units' period of operation, those proposed limits are based on CO₂ emission rates achieved by natural gas co-firing or CCS.
 - Limits for natural gas-fired combustion turbines are based on CCS and/or use of low-GHG hydrogen and vary based on whether the units are new or existing, and whether they are used for baseload or intermediate load generation.
 - State plans would reflect limits that go into place for existing natural gas-fired combustion turbines in 2035, for turbines that install CCS; or 2032 and 2038, for turbines that co-fire with low-GHG hydrogen.
 - Limits for new natural gas-fired combustion turbines would apply as soon as they are constructed and, similar to limits for existing sources, become more stringent in 2035, for turbines that install CCS; or 2032 and 2038, for turbines that co-fire with low-GHG hydrogen.
 - EPA has designed these proposed standards and emission guidelines in a way that is compatible with the nation's overall need for a reliable supply of affordable electricity.
 - EPA has carefully considered the importance of maintaining resource adequacy and grid reliability in developing these proposals. These proposed NSPS and emission guidelines provide extensive lead time and compliance flexibilities, preserving the ability of power companies and grid operators to maintain the reliability of the nation's electric power system.

Updates to the New Source Performance Standards for Fossil Fuel-fired Stationary Combustion Turbines (Primarily New Natural Gas Units)

- EPA is proposing to update and establish more protective NSPS for GHG emissions from new and reconstructed fossil fuel-fired stationary combustion turbine EGUs that are based on highly efficient generating practices in addition to CCS or co-firing low-GHG hydrogen.

- For new and reconstructed fossil fuel-fired combustion turbines, EPA is proposing to create three subcategories based on the function the combustion turbine serves:
 - a low load (“peaking units”) subcategory that consists of combustion turbines with a capacity factor of less than 20 percent;
 - an intermediate load subcategory for combustion turbines with a capacity factor that ranges between 20 percent and a source-specific upper bound that is based on the design efficiency of the combustion turbine;
 - and a base load subcategory for combustion turbines that operate above the upper-bound threshold for intermediate load turbines.
- This subcategorization approach is similar to the current NSPS for these sources, which, in 2015, established subcategories for base load and non-base load units.
- This revised approach to subcategories recognizes that power companies are building new natural gas-fired combustion turbines with plans to operate them at varying levels of capacity, in coordination with existing and expected energy sources.
- For each subcategory, EPA is proposing a distinct BSER and standard of performance based on its evaluation of the statutory factors, including feasibility, emissions reductions, and cost-reasonableness of available controls.
- For the low load subcategory, EPA is proposing that the BSER is the use of lower emitting fuels (*e.g.*, natural gas and distillate oil) with standards of performance ranging from 120 lb CO₂/MMBtu to 160 lb CO₂/MMBtu, depending on the type of fuel combusted.
- For the intermediate load and baseload subcategories, EPA is proposing an approach in which the BSER has several components: (1) highly efficient generation; and (2) depending on the subcategory, use of CCS or co-firing low-GHG hydrogen.
- These components form the basis of a standard of performance that applies to affected facilities in phases. Affected facilities are those that commence construction or reconstruction after the date of publication in the *Federal Register* of this proposed rulemaking.
 - Phase 1: Affected facilities must meet a first phase standard of performance, based on highly efficient generation, by the date the rule is promulgated or upon initial startup of the facility for units that commence construction after the date of promulgation.
 - Phases 2 and 3: Affected facilities in the intermediate load and base load subcategories must also meet more stringent phases of the standard of performance at specified compliance deadlines in the future. These compliance deadlines allow time for affected sources to plan for and install controls.
 - Intermediate load affected facilities must meet a second phase standard based on 30% low-GHG hydrogen (by volume) by 2032.
 - Base load affected facilities that follow the CCS pathway must meet a second phase standard based on 90% capture of CO₂, using CCS, by 2035

- Baseload affected facilities that follow the low-GHG hydrogen pathway must meet a second phase standard based on co-firing 30% low-GHG hydrogen by volume by 2032 and a third phase standard based on co-firing 96% by volume low-GHG hydrogen by 2038.
- EPA is proposing to define low-GHG hydrogen as that produced with an overall emissions intensity of less than 0.45 kgCO₂e/kgH₂ with the boundary conditions of well-to-gate, consistent with the Congressional definitions provided in section 45V(b)(2)(D) of the Inflation Reduction Act. This definition ensures that only lowest-GHG hydrogen can qualify as part of the combustion turbine co-firing BSER.

Emission Guidelines for Large and Frequently Used Existing Fossil Fuel-Fired Stationary Combustion Turbines (Primarily Existing Natural Gas Units)

- EPA is proposing emission guidelines for large and frequently used existing stationary combustion turbines.
- Large, frequently operated turbines are larger than 300 MW with a capacity factor of greater than 50 percent.
- Because these existing combustion turbines are similar to new stationary combustion turbines, EPA is proposing a BSER that is consistent with the second and third phases of the BSER for new base load combustion turbines.
- Specifically, EPA is proposing that BSER for these units is based on either 90 percent capture of CO₂ using CCS by 2035, or co-firing of 30% by volume low-GHG hydrogen beginning in 2032 and co-firing 96% by volume low-GHG hydrogen beginning in 2038.
- Further, EPA is soliciting comment on how the Agency should approach its legal obligation to establish emission guidelines for the remaining existing fossil fuel-fired combustion turbines not covered by this proposal, including smaller frequently used existing fossil fuel-fired combustion turbine EGUs and less frequently used existing fossil fuel-fired combustion turbines.

Emission Guidelines for Existing Fossil Fuel-Fired Steam Generating EGUs (Primarily Existing Coal Units)

- EPA is proposing to establish new emission guidelines for existing fossil fuel-fired steam generating EGUs that reflect the application of CCS and the availability of natural gas co-firing.
- EPA is proposing that the BSER for coal-fired steam EGUs that will operate in the long-term (i.e., after December 31, 2039) is the use of carbon capture and storage (CCS) with 90 percent capture of CO₂. The associated degree of emission limitation is an 88.4 percent reduction in emission rate (lb CO₂/MWh-gross basis).
- EPA has determined that CCS satisfies the BSER criteria for these sources because it is adequately demonstrated, achieves significant reductions in GHG emissions, and is highly cost-effective.

- Although the EPA considers CCS to be a broadly applicable BSER, the Agency also recognizes that CCS will be most cost-effective for existing steam EGUs that are in a position to recover the capital costs associated with CCS over a sufficiently long period of time.
- In response to industry input, and recognizing that the cost-effectiveness of CO₂ controls depends on the period of time over which a plant will be operated, EPA is proposing to divide the subcategory for coal-fired units into additional subcategories based on operating horizon (*i.e.*, dates for electing to permanently cease operation) and, for one of those subcategories, load level (*i.e.*, annual capacity factor), with a separate BSER and degree of emission limitation corresponding to each subcategory. For each subcategory, EPA is proposing standards of performance reflecting controls that are cost-effective and achievable for existing plants in that subcategory.
 - For units that elect to commit to permanently cease operations prior to January 1, 2040, and that are not in other subcategories, EPA is proposing that the BSER is co-firing 40 percent natural gas on a heat input basis. The associated degree of emission limitation is a 16 percent reduction in emission rate (lb CO₂/MWh-gross basis).
 - For units that elect to commit to permanently cease operations prior to January 1, 2035, and commit to operate with an annual capacity factor limit of 20 percent, EPA is proposing that the BSER is routine methods of operation and maintenance. The associated degree of emission limitation is no increase in emission rate.
 - For units that elect to commit to permanently cease operations prior to January 1, 2032, EPA is proposing that the BSER is routine methods of operation and maintenance. The associated degree of emission limitation is no increase in emission rate.
- EPA is also proposing emission guidelines for natural gas- and oil-fired steam generating units, with additional subcategorization by capacity factor. For each of the proposed subcategories, the BSER is routine methods of operation and maintenance and the degree of emission limitation is no increase in emission rate.

Standards for New, Reconstructed and Modified Coal Units

- The 2015 standards for new and reconstructed coal units, based on CCS, remain in place.
- EPA determined not to review the new and reconstructed standards because we anticipate no further new units.
- EPA reviewed and is proposing to revise the standards for modified units to be based on the BSER of CCS with 90 percent capture, to ensure consistency for any existing units currently subject to the emission guidelines that may modify and become subject to the NSPS.

Emissions Changes, Benefits and Costs

- EPA estimated the national emissions changes, benefits and costs in a Regulatory Impact Analysis (RIA). The RIA presents information about the NSPS for new gas turbines and the

emission guidelines for existing coal units together. The RIA also provides estimates about the emission changes associated with the existing source gas proposal and another element of the NSPS for new gas turbines.

- The RIA estimates are presented two ways – as present values (PV) and equivalent annualized values (EAV). The PV is the costs or benefits over the 19-year period of 2024 to 2042. The EAV represents the value for each year of the analysis.
- EPA projects the proposals to limit CO₂ from the existing coal fleet and new natural gas units will avoid 617 million metric tons total of CO₂ from 2028-2042 along with tens of thousands of tons of nitrogen oxides (NO_x), sulfur dioxide (SO₂), and fine particulate matter (PM_{2.5}). Climate and health benefits exceed the costs by \$64 billion-\$85 billion from 2024-2042, which is an annual net benefit of \$5.4 billion to \$5.9 billion.
 - These estimates do not include the impact of the proposed requirements for existing gas-fired combustion turbines. EPA performed a separate analysis of these proposed requirements that estimates they would reduce 214-407 million metric tons of CO₂ cumulatively between 2028-2042.
- In 2030 alone, the health benefits of the proposals on existing coal and new natural gas power plants include approximately 1,300 avoided premature deaths; more than 600 avoided hospital and emergency room visits; more than 1,400 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.
- EPA's national-level analysis of emission reduction and public health impacts finds that these proposals would achieve nationwide reductions in EGU emissions of multiple health-harming air pollutants including nitrogen oxides (NO_x), sulfur dioxide (SO₂), and fine particulate matter (PM_{2.5}). These reductions in health-harming pollution would result in significant public health benefits including avoided premature deaths, reductions in new asthma cases and incidences of asthma symptoms, reductions in hospital admissions and emergency department visits, and reductions in lost work and school days.
- The quantified climate and health benefits include the value of all climate change impacts (both negative and positive), including (but not limited to) changes in net agricultural productivity, human health effects, property damage from increased flood risk natural disasters, disruption of energy systems, risk of conflict, environmental migration, and the value of ecosystem services.
- The monetized benefits estimates provide an incomplete overview of the beneficial impacts of the proposals. The monetized benefits estimates do not include important climate benefits that were not monetized in the RIA. In addition, important health, welfare, and

water quality benefits anticipated under these proposed rules are not quantified or monetized. EPA anticipates that taking non-monetized effects into account would show the proposals to be more net beneficial than the tables in this section reflect.

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.
 - **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.

Environmental Justice Analysis

- 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, which is already having a disproportionate impact on communities disproportionately burdened by pollution. The proposed rules deliver on the Administration’s commitment to reduce pollution from the power sector and reduce climate impacts for communities.
- These proposals include an environmental justice analysis that quantitatively evaluates:
 - the proximity of affected facilities to potentially vulnerable and/or overburdened populations for consideration of local pollutants impacted by these proposals and
 - the distribution of ozone and PM2.5 concentrations in the baseline and changes due to the proposed rulemakings across different demographic groups on the basis of race, ethnicity, poverty status, employment status, health insurance status, age, sex, educational attainment, and degree of linguistic isolation.
- The environmental justice assessment also includes discussions of climate impacts across various demographic groups.
- EPA has evaluated how the air quality impacts associated with these proposals would be distributed, with particular focus on potentially vulnerable populations.
 - These proposals are anticipated to lead to modest but widespread reductions in ambient levels of PM2.5 for a large majority of the nation’s population, as well as reductions in ambient PM2.5 exposures that are similar in magnitude across all racial, ethnic, income and linguistic groups.
 - Similarly, EPA found that the proposed standards are anticipated to lead to modest but widespread reductions in ambient levels of ground-level ozone for some of the nation’s population, and that in all but one of the years evaluated the proposed standards would lead to similar reductions in ambient ozone exposures across all demographic groups.
 - Although reductions in PM2.5 and ozone exposures are small relative to baseline levels, and although disparities in PM2.5 and ozone exposure would continue to persist following these proposals, EPA’s analysis indicates that the air quality benefits of these proposals would be broadly distributed.
- EPA has evaluated the percent of potentially vulnerable and/or overburdened populations living near three categories of facilities associated with these proposals. These proximity analyses provide information as to whether there may be potential EJ concerns associated with environmental stressors, such as local hazardous air pollution, emitted from sources affected by the regulatory action for certain population groups of concern.
- The following subsets of affected facilities were separately evaluated:
 - All coal plants (140 facilities) with units potentially subject to the proposed 111 rules: Comparison of the percentage of various populations (race/ethnicity, age,

- education, poverty status, income, and linguistic isolation) living near the facilities to average national levels.
- Coal plants retiring by January 1, 2032 (3 facilities) with units potentially subject to the proposed 111 rules: Comparison of the percentage of various populations (race/ethnicity, age, education, poverty status, income, and linguistic isolation) living near the facilities to average national levels.
- Coal plants retiring between January 1, 2032, to January 1, 2040, (19 facilities) with units potentially subject to the proposed 111 rules: Comparison of the percentage of various populations (race/ethnicity, age, education, poverty status, income, and linguistic isolation) living near the facilities to average national levels.
- The proximity analysis of the full population of potentially affected units greater than 25 MW indicated that the demographic percentages of the population within 10 km and 50 km of the facilities are relatively similar to the national averages.
 - The proximity analysis of the 19 units that will retire from January 1, 2032, to January 1, 2040 (a subset of the total 140 units) found that the percent of the population within 10 km that is African American is higher than the national average.
 - The proximity analysis for the 3 units that will retire by January 1, 2032 (a subset of the total 140 units) found that for both the 10 km and 50 km populations the percent of the population that is American Indian for one facility is significantly above the national average, the percent of the population that is Hispanic/Latino for another facility is substantially above the national average, and all three facilities were well above the national average for both the percent below the poverty level and the percent below two times the poverty level.

Meaningful Engagement

- 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.
- In engaging with stakeholders in the development of these proposed emission guidelines, community representatives raised strongly held concerns about the potential health, environmental, and safety impacts of CCS.

- In outreach with potentially vulnerable communities, residents voiced two primary concerns. First, there is the concern that their communities have experienced historically disproportionate burdens from the environmental impacts of energy production, and second, that as the sector evolves to use new technologies such as CCS and hydrogen, they may continue to face disproportionate burdens.
- With regards to CCS, the EPA is proposing that CCS is a component of the BSER for new base load stationary combustion turbine EGUs, existing coal-fired steam generating units that intend to operate after 2040, and large and frequently operated existing stationary combustion turbine EGUs.
- EPA recognizes and has given careful consideration to the various concerns that potentially vulnerable communities have raised with regards to the use of CCS.
- One concern is that adding CCS to EGUs can extend the life of an existing coal-fired steam generating unit, subjecting local residents who have already been negatively impacted by the operation of the coal-fired steam generating unit to additional harmful pollution.
- Communities have also expressed concerns about CO₂ pipeline safety and geologic sequestration.
- EPA and our fellow federal agencies are committed to responsible and safe deployment of CCS and there is a robust existing regulatory framework to ensure that. Deployment of CCS should take place in a manner that is protective of public health, safety, and the environment, and that includes early and meaningful engagement with affected communities and the public.
- As stated in the Council on Environmental Quality's (CEQ) February 2022 Carbon Capture, Utilization, and Sequestration Guidance, "the successful widespread deployment of responsible CCUS will require strong and effective permitting, efficient regulatory regimes, meaningful public engagement early in the review and deployment process, and measures to safeguard public health and the environment." In addition, CEQ notes that Federal agencies have "taken actions in the past decade to develop a robust CCUS regulatory framework to protect the environment and public health across multiple statutes."
- This framework includes, among other things, EPA regulation of geologic sequestration wells under the Underground Injection Control (UIC) program of the Safe Drinking Water Act; required reporting and public disclosure of geologic sequestration activity, as well as implementation of rigorous monitoring, reporting, and verification of geologic sequestration, under the EPA's Greenhouse Gas Reporting Program; and safety regulations for CO₂ pipelines administered by the Pipeline and Hazardous Materials and Safety Administration (PHMSA). PHMSA has announced steps to further strengthen its safety oversight of supercritical CO₂ pipelines, including initiating a new rulemaking to update standards for supercritical CO₂ pipelines and soliciting research proposals to strengthen CO₂ pipeline safety.

- With respect to air emissions, some CCS projects may also require pre-construction permitting under the Clean Air Act's New Source Review (NSR) program and the adoption of additional emission limitations for non-GHG air pollutants based on applicable control technology requirements. EPA invites public comment and feedback from stakeholders on all aspects of its proposed determination that CCS represents the BSER for certain new and existing fossil fuel-fired EGUs, including its evaluation of the various regulatory frameworks that apply to CCS.
- CEQ's guidance, and EPA's evaluation of BSER, recognizes that multiple federal agencies have responsibility for regulating and permitting CCS projects, along with state and tribal governments. EPA is committed to working with federal, state and tribal partners to protect communities from pollution and foster meaningful engagement with communities. This can be facilitated through the existing detailed regulatory framework for CCS projects and further supported through robust and meaningful public engagement early in the project development process.

Repeal of the Affordable Clean Energy Rule

- EPA is simultaneously proposing to repeal the Affordable Clean Energy (ACE) rule because the emission guidelines established in ACE do not reflect the BSER for steam generating EGUs and are inconsistent with section 111 of the CAA in other respects.

Additional Areas of Comment

- EPA is soliciting comment on a number of variations to the subcategories and BSER determinations, as well as the associated degrees of emission limitation and standards of performance.
- EPA is also soliciting comment on BSER options and associated degrees of emission limitation for existing fossil fuel-fired stationary combustion turbines for which no BSER is being proposed (i.e., fossil fuel-fired stationary combustion turbines that are not large, frequently operated turbines).

Background

- In October 2015, EPA issued a final rule to regulate GHGs from new power plants under section 111(b) of the CAA and issued a final rule to regulate GHGs from existing power plants under CAA section 111(d), which was more commonly referred to as the clean power plan (CPP).
- On June 19, 2019, EPA issued the Affordable Clean Energy (ACE) Rule which replaced the 2015 CPP and established emission guidelines for states to develop plans to address GHG emissions from existing coal-fired power plants.

- On January 19, 2021, the ACE Rule was vacated and remained vacated through October 26, 2022. The rule was then reinstated on October 27, 2022, which meant states were once again obligated to submit the state plans required under the rule.
- On March 7, 2023, EPA extended the state submittal deadline under the ACE Rule to April 15, 2024, making it clear that states are not expected to take immediate action to develop and submit plans under Clean Air Act section 111(d) with respect to greenhouse gas emissions from power plants at this time.

Public Hearing and Comment

- EPA will hold a virtual public hearing for this proposed action. Further details will be announced at [Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants](#).
- 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 <https://www.regulations.gov/> and follow the online instructions for submitting comments.
 - Send comments by email to a-and-r-docket@epa.gov, 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 [Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants](#)
- Today's action and other background information are also available electronically at <https://www.regulations.gov/>, EPA's electronic public docket and comment system.
 - The Public Reading Room is located at the EPA Headquarters library, room number 3334 in the EPA WJC West Building, 1301 Constitution Avenue, NW, Washington, DC. Hours of operation are 8:30 a.m. to 4:30 p.m., eastern standard time, Monday through Friday, excluding federal holidays.
 - Visitors are required to show photographic identification, pass through a metal detector, and sign the EPA visitor log. All visitor materials will be processed through an X-ray machine as well. Visitors will be provided a badge that must be visible at all times.

- Materials for this proposed action can be accessed using Docket ID No. EPA-HQ-OAR-2023-0072.