

# EPA finalizes four new power sector regulations



**The United States Environmental Protection Agency has finalized four new rules that will require significant investment by power plant owners and operators. Whether this investment takes the form of new pollution controls, carbon capture and sequestration, hydrogen co-firing, new renewables, or something else, it marks a transformed landscape for the US power sector.**

The new compliance deadlines for greenhouse gas emissions take effect as early as 2030. Moving forward, there will be a phase-in of greenhouse gas standards, some of which may be met by co-firing hydrogen. Plant operators will need to consider new limits for mercury emissions and requirements for wastewater and coal ash. The combined effects of these rules necessitate that owners and operators take a new look at the remaining life of the coal-fired power generation fleet.

Last year, 60% of the power used to fuel the US economy was generated by fossil fuels. Any existing plans to decarbonize a business, whether power supplier or consumer, will be affected by the implementation of these four rules.



## The four promulgated rules are briefly described below:



### **Carbon pollution standards for fossil fuel-fired power plants**

Also known as the “111” rule, this regulation limits carbon pollution from existing coal-fired and new natural gas-fired power plants. The rule requires that affected coal-fired power plants and new baseload gas-fired plants eliminate or capture 90% of their carbon emissions.



### **Mercury & Air Toxics Standards (MATS) for power plants**

This rule tightens the emissions standard for toxic metals by 67%, finalizes a 70% reduction in the emissions standard for mercury from existing lignite-fired power plants and requires continuous emission monitoring systems.



### **Steam electric power generating effluent guidelines & standards**

This rule targets pollutants discharged through wastewater from coal-fired power plants. The rule strengthens discharge limits for flue gas desulfurization wastewater, bottom ash transport water, combustion residual leachate and legacy wastewaters.



### **Legacy coal combustion residuals surface impoundments & management units**

Under this rule, coal ash management will be required in areas that were previously unregulated at the federal level. Sites include previously used disposal areas that may leak and contaminate groundwater.

## What comes next?

Plans for construction of new gas-fired turbines will need to be evaluated in light of these new rules. For existing coal plants to remain viable, operators and owners will need to reassess and calibrate their path forward for continued operation. States will have two years to finalize their plans to comply with the greenhouse gas emissions requirements. Coal-fired power plants must begin reducing greenhouse gas emissions as early as 2030. For plants that plan to stay online, carbon capture must be fully operational by 2032.

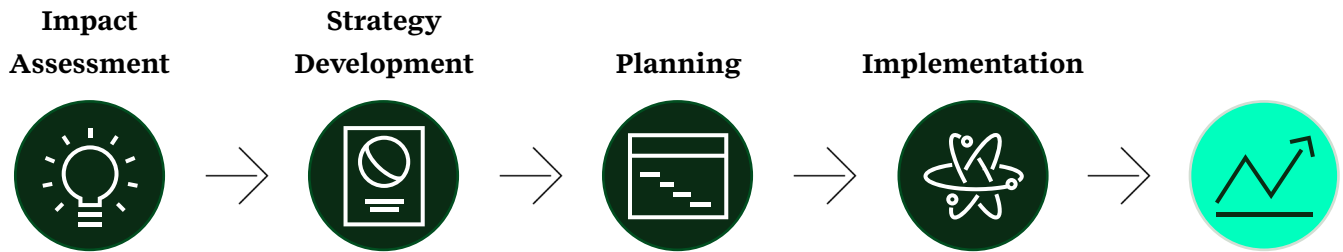
### We recommend near-term actions to respond to these rulemakings:

- 1. Assess the impact to existing generation assets** – These multiple rulemakings affect different aspects of your operations, have different timelines and costs, will be subjected to different legal challenges and pose different risks. To consider their combined effects on your operations, you will need to assess and weigh multiple evolving variables.
- 2. Consider compliance options for existing coal plants** – The legal authority that is the basis of the new greenhouse gas regulation sets emission reduction standards, but it does not dictate technology used to meet those standards. The requirements also change based on future intent of the facility owner. There are a variety of paths with varying costs and risks that could lead to compliance.
- 3. Develop a strategy for coal plant transition, retirement, and/or replacement that includes engagement with necessary partners** – Most of the paths to decarbonize fossil fuel power generation rely on rapidly evolving industries and require partners (e.g., hydrogen sellers, pipeline owners and operators, and carbon off takers). These new compliance approaches elevate the importance of consistent and collaborative communication with parties outside your company.
- 4. Assess plans for new construction of gas-fired power plants in light of new regulations** – These plants may be subject to new emission limits requiring hydrogen co-firing or carbon capture, which would impact the economics of the project.
- 5. Connect with state regulators in the states where affected facilities are located** – States will develop the plans that dictate the specific compliance approach used to demonstrate these standards are met. State regulators will engage stakeholders and provide opportunity for public feedback. Prioritizing participation in local or project-focused groups with cross-sector representation may be a productive approach for identifying solutions for real-world applications that states can adopt.

# How ERM can help

ERM is the only consultancy with the in-house capabilities to partner with you throughout this process: assessment of what these transformative rules mean for your business, strategies to respond, development of a plan and execution of that plan.

## ERM services to support EPA's new power sector regulations



Our power sector advisory group includes experts in regulatory policy, power system economics, environmental compliance, decarbonization technologies, strategy and more. Our offerings include policy analytic support, power system modeling, regulatory response, compliance strategy, rate case strategy, integrated resource planning support and general strategic planning as well as scenario development. This team will identify the risks, challenges and opportunities these new rules create for you and propose tailored solutions and strategies. Whatever path you decide on, our team can help you implement it.

Our expertise in carbon capture and storage (CCS) spans from crafting decarbonization strategies to executing and operating projects successfully. Our integrated approach allows seamless coordination across permitting, social, regulatory and commercial aspects, ensuring alignment with budget and schedule requirements.

ERM is an industry leader in the planning and execution of power plant decommissioning and demolition. ERM has a fully integrated team of subject matter experts that work collaboratively with our clients through the decommissioning and demolition journey from initial strategy through field execution, all the while focused on compliance, safety and business outcomes.

Whether you require assistance with one aspect or comprehensive support, we have the experts and the answers to help you.

### For more information, contact your current ERM consultant or any of our experts:

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