JANUARY 2024
VOL. 24-1

PRATT'S

ENERGY LAW REPORT

LexisNexis

Pratt's Energy Law Report

VOLUME 24 **NUMBER 1** **January 2024**

LexisNexis®

QUESTIONS ABOUT THIS PUBLICATION?

For questions about the **Editorial Content** appearing in these volumes or reprint permission, please call or email:

Jessica Carnevale, Esq. at ..... (212) 229-4942
Email: ..... jessica.carnevale@lexisnexis.com

For assistance with replacement pages, shipments, billing or other customer service matters, please call:

Customer Services Department at . . . . . (800) 833-9844
Outside the United States and Canada, please call . . . . . (518) 487-3385
Fax Number . . . . . (800) 828-8341
LexisNexis® Support Center . . . . . https://supportcenter.lexisnexis.com/app/home/

For information on other Matthew Bender publications, please call

Your account manager or . . . . . (800) 223-1940
Outside the United States and Canada, please call . . . . . (518) 487-3385

ISBN: 978-1-6328-0836-3 (print)
ISBN: 978-1-6328-0837-0 (ebook)
ISSN: 2374-3395 (print)
ISSN: 2374-3409 (online)

Cite this publication as:

[author name], [*article title*], [vol. no.] PRATT'S ENERGY LAW REPORT [page number] (LexisNexis A.S. Pratt);

Ian Coles, *Rare Earth Elements: Deep Sea Mining and the Law of the Sea*, 14 PRATT'S ENERGY LAW REPORT 4 (LexisNexis A.S. Pratt)

Editorial Office
230 Park Ave., 7th Floor, New York, NY 10169 (800) 543-6862
www.lexisnexis.com

MATTHEW BENDER

(2024–Pub.1898)

Editor-in-Chief, Editor & Board of Editors

Hydraulic Fracturing Developments
Eric Rothenberg
Partner, O'Melveny & Myers LLP

Pratt's Energy Law Report is published 10 times a year by Matthew Bender & Company, Inc.

POSTMASTER: Send address changes to *Pratt's Energy Law Report*, LexisNexis Matthew Bender, 230 Park Ave. 7th Floor, New York NY 10169.

The Drive to Regulate Fossil-Fuel Fired Power Plants

By Martha S. Thomsen, Debra J. Jezouit, Kent Mayo, Tiffany Cheung, and Samantha Olson*

In this article, the authors review recent rulemakings by the U.S. Environmental Protection Agency targeting the electric generating industry.

The U.S. Environmental Protection Agency (EPA) recently issued a flurry of rulemakings targeting the electric generating industry. The rulemakings are part of a broader Biden administration push to transition away from fossil fuel-fired electric generating units (EGUs) to other energy sources.

These rulemakings will likely result in ripple effects across the electric generating industry, increasing the regulatory costs borne by electric generators and potentially their customers, accelerating the retirement of many coal-fired power plants, and putting renewables and novel technologies, like carbon capture and sequestration/storage (CCS) and hydrogen co-firing, to the test.

For electric generating companies, close scrutiny of these rulemakings is crucial to prepare for compliance and potential enforcement and citizen suits, adapt short-term and long-term business planning, and potentially challenge final rulemakings.

For everyone else, close scrutiny also is warranted to assess the broader impacts of these rulemakings on the future of electricity generation and grid reliability.

EPA'S NEW RULES

EPA's multimedia and multipollutant approach includes a wide variety of proposed and recently finalized air, water, and waste regulations all aimed at reducing greenhouse gas (GHG) emissions and other pollutants from the electric generating sector, including those discussed below.

Proposed Clean Air Act Section 111 GHG Rule for Fossil Fuel-Fired Electric Generating Plants

On May 23, 2023, EPA issued a proposed rule addressing GHG emissions from fossil fuel-fired EGUs under Section 111 of the Clean Air Act (CAA).[1] The rule, if finalized, would most significantly impact the following types of existing EGUs:

---

* The authors, attorneys with Baker Botts LLP, may be contacted at martha.thomsen@bakerbotts.com, debra.jezouit@bakerbotts.com, kent.mayo@bakerbotts.com, tiffany.cheung@bakerbotts.com and samantha.olson@bakerbotts.com, respectively.

[1] 88 Fed. Reg. 33,240 (May 23, 2023).

- *Existing Natural Gas-Fired Combustion Turbines*. For large, frequently used existing fossil fuel-fired stationary combustion turbines, the rule would require the use of CCS by January 1, 2035, or co-firing 30% low-GHG hydrogen by January 1, 2032, with an increase to 96% low-GHG hydrogen co-firing by January 1, 2038. EPA proposes to define the universe of covered fossil fuel-fired stationary combustion turbines as those as having an electric capacity greater than 300 MW and a capacity factor of greater than 50%, which primarily applies to existing natural gas-fired combustion turbines.
- *Existing Coal-Fired Steam Generating Units*. The rule would subcategorize existing coal-fired EGUs by their planned retirement date: imminent-term; near-term; medium-term; and long-term. The rule would not impose any emission reduction requirements on coal-fired EGUs in the imminent-term subcategory – units that commit to retire by January 1, 2032. Coal-fired EGUs in the near-term subcategory – those that continue operating past December 31, 2031, but commit to retire by January 1, 2035 – would be subject to a 20% annual capacity factor limit. Coal-fired EGUs in both of those subcategories would be subject to GHG standards equivalent to their baseline rate, Coal-fired EGUs in the medium-term subcategory – those units that continue to operate past December 31, 2034, but would retire by January 1, 2040 – would be required to meet a GHG emission limit based on co-firing 40% natural gas beginning January 1, 2030, while coal-fired EGUs in the long-term subcategory-those that do not commit to retirement by January 1, 2040 – would be subject to a GHG emission limit based on 90% CO2 capture via CCS beginning January 1, 2030.
- *Other Existing Fossil Fuel-Fired Steam Generating Units*. The rule would not impose GHG emission reduction requirements on other existing fossil fuel-fired steam generating units but they would be subject to unit-specific standards based on routine methods of operation and maintenance.

The rule also would impact new and reconstructed fossil fuel-fired stationary combustion turbines. The proposed rule would subcategorize these turbines by load level (low, intermediate, and base) and would most significantly impact turbines in the following subcategories:

- *Intermediate-Load Subcategory*. The rule would impose requirements across two phases. During Phase 1, intermediate-load turbines would be required to achieve an emission limit based on highly efficient generation. During Phase 2, intermediate-load turbines would be

required to co-fire 30% low-GHG hydrogen beginning January 1, 2032.

- *Base-Load Subcategory*. The rule would similarly impose requirements across multiple phases. During Phase 1, base-load turbines would be required to achieve an emission limit based on highly efficient generation. During Phase 2, either 90% CO2 capture via CCS beginning January 1, 2035, or 30% low-GHG hydrogen co-firing beginning January 1, 2032, would be required. Stationary combustion turbines on the co-firing pathway also would be subject to a Phase 3 – co-firing 90% low-GHG hydrogen beginning January 1, 2038.

Hazardous Air Pollutants from Fossil Fuel-Fired Power Plants

On April 24, 2023, EPA issued a proposed rule to revise the National Emission Standards for Hazardous Air Pollutants for coal- and oil-fired electric generating units – also known as the Mercury and Air Toxics Standards (MATS).[2] The rule, if finalized, would impact coal-fired EGUs by lowering the emission limit for filterable particular matter (fPM), which serves as a surrogate for non-mercury (non-Hg) hazardous air pollutant (HAP) metals, from 0.02 lb/MMBtu to 0.01 lb/MMBtu, as well as require the use of a PM continuous emission monitoring system (CEMs) to demonstrate compliance with the fPM limit. The rule also would lower the Hg emission limit from 4.0 lb/TBtu to 1.2 lb/TBtu for lignite-fired EGUs. These EGUs would be required to comply with the revised limits no later than three years after the effective date of the final rule – March 2027, if EPA issues the final rule by March 2024 as intended.

Good Neighbor Plan

On June 5, 2023, EPA published a final Federal Implementation Plan (FIP) addressing interstate transport for the 2015 ozone national ambient air quality standards (NAAQS), dubbed the "Good Neighbor Plan" by EPA.[3] The Good Neighbor Plan revised the Cross-State Air Pollution Rule's (CSAPR) Group 3 ozone season nitrogen oxide (NOx) trading program for EGUs in 22 states, starting on August 4, 2023,[4] including three states that were not previously part of any CSAPR ozone season trading program.

States subject to the Good Neighbor Plan are now subject to new and generally more stringent ozone season NOx budgets reflecting EPA's identified

---

[2] 88 Fed. Reg. 24,854 (Apr. 24, 2023).

[3] See Federal "Good Neighbor Plan" for the 2015 Ozone National Ambient Air Quality Standards, 88 Fed. Reg. 36,654 (June 5, 2023).

[4] Due to judicial stays of several states' interstate transport State Implementation Plan disapprovals, a necessary prerequisite before EPA can implement a FIP, the Good Neighbor Plan will not go into effect for some of the states included in the rule.

EGU control stringency of optimization of all existing post-combustion controls by the 2023 ozone season, the installation of state-of-the-art NOx combustion controls by the 2024 ozone season, and the addition of new post-combustion controls by 2026 and 2027.

The Good Neighbor FIP also makes several new "enhancements" to the revised Group 3 ozone season trading program, including the annual recalibration of NOx allowances starting in 2024 and the imposition of a daily backstop NOx emissions rate for coal-fired EGUs greater than or equal to 100 MW by the 2024 ozone season for units with existing post-combustion controls or by the 2030 ozone season for units without post-combustion controls, and would implement a dynamic NOx budget in each affected Group 3 state starting in 2030.

Proposed Revisions to the Steam Electric Power Generating Effluent Limitation Guidelines (ELGs)

On March 29, 2023, EPA published a proposed rule to revise and generally make more stringent the ELGs for steam electric power generators.[5] EPA proposed zero discharge limitations for flue gas desulfurization (FGD) wastewater and bottom ash transport water (BATW), and more stringent numerical limits for direct discharges of combustion residual leachate (CRL) and discharges to groundwater that are the functional equivalent of a direct discharge under the Supreme Court's test in *County of Maui v. Hawaii Wildlife Fund*. EPA expects to finalize the rule in April 2024.

If finalized, the proposed rule would require compliance with the new ELGs as soon as possible after the rule's effective date but no later than December 31, 2029. Certain types of units could qualify for one or more subcategories that would exempt them from the new more stringent requirements; among other, the proposed rule would retain the existing subcategory for units committed to retiring or repowering by December 31, 2028. Likewise, the proposal would also create a new subcategory for "early adopters" of the 2015 or 2020 ELGs that plan to retire by December 31, 2032.

Coal Combustion Residuals (CCR)

Several recent CCR-related actions are and will continue to affect electric generation facilities in the coming years. On May 18, 2023, EPA published a proposed rule that would significantly expand the scope of units regulated under the federal CCR regulations (CCR Rule) to include both legacy CCR surface impoundments (inactive surface impoundments at inactive generating

[5] See Supplemental Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 88 Fed. Reg. 18,824 (Mar. 29, 2023).

facilities) as well as additional "CCR management units," or CCRMUs, at facilities otherwise subject to federal CCR regulations.[6] If finalized, the proposal would bring long-closed units under the scope of the CCR Rule and even potentially past beneficial uses of CCR.

EPA is expected to issue a final rule in April 2024, with the rule going into effect six months later. If finalized as proposed, owners/operators of legacy CCR surface impoundments and CCRMUs would be subject to several requirements, including groundwater monitoring, corrective action, and closure, beginning as early as late 2024.

Key Upcoming Dates

SECTION 111 GHG PROPOSAL	MATS	GOOD NEIGHBOR	CCR	STEAM ELECTRIC ELGS
• Expected to be finalized April 2024 • Would impose GHG emission limits on certain existing, coal-fired EGUs starting in 2030 • Would impose various CCS, hydrogen co-firing, and other requirements on coal-fired EGUs and fossil fuel-fired combustion turbines starting in 2032 for existing units	• Expected to be finalized March 2024 • Compliance with revised standards requiring starting 2027	• Finalized June 2023 • Annual allowance bank recalibration begins 2024 • Backstop daily emissions rate implemented for large coal-fired EGUs without post-combustion controls in 2030 • Dynamic budgeting starting in 2030	• Expected to be finalized April 2024 • Would go into effect in late 2024 • Compliance with certain requirements would begin immediately upon effective date	• Expected to be finalized April 2024 • Units in retirement subcategory to retire in 2028 • Outermost compliance deadline December 31, 2029 • Units in early adopter subcategory to retire in 2032

[6] Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments, 88 Fed. Reg. 31,982 (May 18, 2023) (Legacy CCR Proposal).

ENERGY OUTLOOK IMPACTS

The rulemakings discussed above strongly incentivize retirement of coal-fired generation and replacement with other types of generating sources. As discussed below, however, certain regulatory and non-regulatory constraints may impact the ability to repower coal-fired sites and, more generally, threaten the ability to obtain full replacement power for the coal-fired units that have either committed to or are now contemplating early retirement. As a result, these rulemakings bear close scrutiny not just from the electric generating industry but from other stakeholders and the broader perspective of protecting grid reliability.

Collection of Retirement Incentives

Read together, the suite of proposed and final rules targeting coal-fired units offer significant incentives for earlier retirement. On the one hand, these rules represent significant increased costs to companies to continue coal-fired generation. On the other, several of these proposed rules offer decreased short-term compliance costs for companies willing to commit to retirement of their coal-fired units in the 2028 to 2034 timeframe. For instance, coal-fired units that retire by 2030 would not be subject to NOx emission limits under the Good Neighbor Plan based on the installation of post-combustion controls, and coal-fired units that retire by 2032 or 2034, with a capacity factor limit, would not be subject to Section 111 GHG emission reduction requirements. In contrast, units that commit to retiring or repowering by 2028 are subject to less stringent ELGs, and units that commit to retiring by 2032 and have complied with 2015 or 2020 ELGs are not subject to more stringent proposed ELGs.

Impact on Gas/Renewables

For coal-fired electric generating plants that commit to retiring, repowering those facilities with gas or renewable siting (i.e., solar or wind farms) offers compelling potential benefits.

First, the retiring plant already has much of the necessary infrastructure for a new type of source to supply electricity to the grid.

Second, for solar and wind farms that can take up significant acreage, placement on an existing electric generating plant site spares greenfield sites from development into new electric generating facilities.

In effect, repowering is a means of recycling the existing site for a new generating source.

The regulatory incentives for repowering, however, are mixed. In some instances, EPA is clear that retirement incentives also apply to facilities that are repowering. As an example, facilities can take advantage of the 2028 retirement

subcategory in the ELGs, which offers less stringent and lower cost compliance targets, if they are retiring or repowering.

Conversely, however, the proposed changes to the CCR Rule represent a potentially significant disincentive to renewable redevelopment at existing coal-fired electric generating plant sites. The current regulations provide that the CCR Rule applies to EGUs that were actively generating electricity in 2015, "regardless of the fuel currently used at the facility to produce electricity."[7] EPA is proposing to find that the rule extends to any active electric generating facility, even those that do not use fossil fuels.[8] The result is that a facility could have retired in 2014 or earlier but be retroactively subject to the CCR Rule if the facility chooses to repower with wind or solar any time after 2015. As a result, companies looking to place solar or wind farms may decline to reuse existing electric generating plant sites and infrastructure.

Reliability Questions

Many companies and organizations, including electric grid operators, have raised questions about EPA's suite of regulations and their potential to negatively impact grid reliability. PJM reported in February 2023 that "the combined requirements" for regulations coming from EPA and state agencies "and their coincident compliant periods have the potential to result in a significant amount of generation retirements within a condensed timeframe."[9] Going one step further in response to EPA's proposals to deny extension requests under the CCR Rule to continue operating certain CCR impoundments – which risked possible plant shutdowns – MISO commented that:

> MISO has significant concerns that substantial problems could result if all, or even some, of the 3.1 gigawatts of capacity involved . . . is lost as the direct or indirect result of EPA action. Loss of these generators will further tighten supply across the entire MISO region and could exacerbate already dangerously thin coverage of demand in certain subregions in the North and Central Regions of MISO.[10]

As a result of these concerns posed by grid operators and others, EPA's proposed set of regulations targeting coal-fired generation bear close scrutiny individually, but also collectively, to assess the overall impacts and ensure

---

[7] 40 C.F.R. § 257.50(c).

[8] Legacy CCR Proposal, 88 Fed. Reg. at 31,995.

[9] Energy Transition in PJM: Resource Retirements, Replacements, & Risks, at 7 (Feb. 24, 2023).

[10] Comments of the Midcontinent Independent System Operator, Docket Nos. EPA-HQ-OLEM-2021-0588 et al., at 7-8 (Feb. 23, 2022).

sufficient replacement capacity to balance planned retirements, early retirements, and any temporary outages resulting from the regulatory onslaught.

POTENTIAL ENFORCEMENT RISKS

EPA's new regulatory activity also creates additional enforcement opportunities and emphasis, both for EPA and citizen plaintiffs, and increases companies' risk for potential allegations of non-compliance and litigation.

In a September 28, 2023 memorandum addressing EPA's Climate Enforcement and Compliance Strategy, newly-confirmed Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance David Uhlmann issued a strong directive focusing on climate-related enforcement activities: "I am directing all EPA enforcement and compliance offices to address climate change, whenever appropriate, in every matter within their jurisdiction."[11] Uhlmann emphasized that EPA's enforcement and compliance program is required to fairly and vigorously enforce the full array of EPA's climate rules, including, but not limited to, greenhouse gas (GHG) reporting requirements," and also stated that enforcement of new climate rules will be prioritized as well.[12] EPA's enhanced enforcement focus for climate further builds on EPA's first-time inclusion of climate change issues as part of the Agency's National Enforcement and Compliance Initiatives (NECI) for 2024-2027.[13]

EPA also has included "Protecting Communities from Coal Ash Contamination" as a new initiative under the most recent NECI.[14] The Agency has stated that noncompliance with the CCR requirements under the Resource Conservation and Recovery Act appears to be "widespread," and that many utilities are not complying with the current performance standards and monitoring and testing requirements. EPA is seeking additional funding and resources for CCR enforcement and intends to focus on conducting investigations and taking enforcement action as appropriate, particularly at coal ash facilities impacting vulnerable or overburdened communities.[15]

---

[11] Memorandum from David M. Uhlmann, EPA, to OECA Office Directors and Deputies et al. regarding EPA's Climate Enforcement and Compliance Strategy at 1 (Sept. 28, 2023), https://www.epa.gov/system/files/documents/2023-09/epasclimateenforcmentandcompliancestrategy.pdf

[12] Id. at 3.

[13] Memorandum from David M. Uhlmann, EPA, to Regional Administrators et al. regarding FY 2024 – 2027 National Enforcement and Compliance Initiatives at 2–3 (Aug. 17, 2023), https://www.epa.gov/system/files/documents/2023-08/fy2024-27necis.pdf.

[14] Id. at 4.

[15] Id.

EPA's increased emphasis on CCR enforcement is creating particular challenges for facilities due to the Agency's evolving interpretations of the underlying regulatory requirements.

In the context of addressing applications (referred to as Part A and Part B applications) by specific facilities for extensions to the closure date for individual CCR impoundments, EPA relied on interpretations of certain CCR regulatory provisions, including groundwater monitoring and closure requirements, that differed from how many facilities had understood these provisions to apply. EPA's interpretations are being challenged in the D.C. Circuit.[16] However, EPA appears to be advancing the same interpretations in the context of specific CCR enforcement actions against individual facilities.

In addition, these same interpretative disputes also create enhanced risk for citizen suit enforcement on CCR issues, with environmental NGOs relying on EPA's recent interpretations to assert that facilities are out of compliance with respect to groundwater monitoring and closure plans, among other issues.[17]

CONCLUSION

As discussed above, EPA is the middle of a substantial overhaul of the regulatory structure governing EGUs. These changes are part of a long-term push to diversify energy sources, and bear close scrutiny both by EGUs and consumers.

EGUs need to carefully assess the potential impacts of the final rulemakings and the related effects on company-wide planning, sources, and enforcement risks.

Other stakeholders should pay close attention to the potential incentives created by these proposals and their impact on energy reliability.

EPA's active participation in the energy transition will have real-world impacts for the power generation industry and consumers.

---

[16] See Electric Energy v. EPA, No. 22-1056 (D.C. Cir.); Electric Energy v. EPA, No. 23-1035 (D.C. Cir.).

[17] See Mobile Baykeeper, Inc. v. Alabama Power Company, No. 1:22-cv-00382-KD-B (S.D. Ala).