

Powering Strong Communities

Nebraska Department of Environment and Energy (NDEE) and Nebraska Public Power District (NPPD) Power Summit- 2024

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Discussion Agenda

- APPA Overview
- Federal Climate Regulations
- Amendments to the National Environmental Policy Act (NEPA)
- Amendments to the Endangered Species Act (ESA)
- Regional Haze
- Legacy Coal Combustion Residuals and CCR Management Units Final Rule
- Clean Water Act Rules
- Environmental Landscape and Power Sector Trends



About APPA

The voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide.

We serve our nearly 1,500 utility members & 220 corporate members through:



Offering education and professional development opportunities



Sharing information and building connections across the industry



Advocating for policies and regulations that support public power



APPA Resources

- <u>Community Groups and News</u>
 - APPA Engage, Public Power Current, Public Power Magazine
- <u>Cybersecurity</u>
 - Public Power Cybersecurity Roadmap, Public Power Cyber Incident Response Playbook
- Disaster Planning and Response
 - Restoration Best Practices Guidebook, Mutual Air Playbook
- Energy Innovation
 - EV Took Kit, Energy Storage Maturity Model, Rate Design Case Studies
- Industry Reports
 - Salary survey, Governance surveys
- Federal Funding Opportunities for Public Power



Upcoming Events

- **Public Power Week** is October 6 -12. APPA will provide free resources and templates for your community's Public Power Week celebrations.
- Legal and Regulatory Conference October 20-23, 2024, Nashville, TN
- Legislative Rally February 24-26, 2025, Washington, DC
- Engineering & Operations Conference March 30-April 2, 2025, Sacramento, CA
- Lineworkers Rodeo March 28-29, 2025, Roseville, CA
- National Conference June 6-11, 2025, New Orleans, LA

For more, go to:https://www.publicpower.org/event/group/conferences-meetings.





Federal Climate Regulations

- On May 9, 2024, the Environmental Protection Agency (EPA) published in the *Federal Register* the New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean EnergyRule
- EPA also issued three other final rules impacting the power sector:
 - Mercury and Air Toxic Standards Residual Risk & Technology Review (MATSRTR)
 - Steam Electric Effluent Limitation Guidelines (ELGs)
 - Legacy Coal Combustion Residual (CCR) Rule



Overview of the Final Rule

- Final GHG Rule Package Included:
 - Fact Sheets, Technical Support Documents, Regulatory Text, Regulatory Impact Analysis
- Repeals the Affordable Clean Energy (ACE) Rule
- Formally withdraws the 2018 changes proposed to the New Source Performance Standards (NSPS) for coal-fired units that were never finalized (would have changed BSER for new coal-fired units from partial Carbon Capture and Storage to supercritical (large units) or subcritical (small units) steam conditions).
- State Implementation Plans are due 24 months from publication in the Federal Register.



Overview of Final Rule- Reliability

- Includes two mechanisms for potential one-year extension:
 - For new and existing units installing control technologies, a one-year extension is available where implementation delays are due to factors beyond owner/operator's control.
 - For existing units with cease operation dates, a one-year extension is available in situations in which the unit is needed for reliability through a "reliability assurance mechanism," provided appropriate documentation is submitted.
- The rule also has another "short-term" reliability assurance mechanism that allows affected EGUs to operate at baseline emission rates during documented reliability emergencies.



Clean Air Act Section 111

- Standards of Performance Section 111(a)
 - "The term 'standard of performance' means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the **best system of emission reduction** which (taking into account the **cost** of achieving such reduction and any **nonair quality health** and **environmental impact** and **energy requirements**) the Administrator determines has been adequately demonstrated."
 - Section 111(b): New source performance standards (NSPS) apply to any new source, modified or reconstructed source; EPA determines the standards of performance.
 - Section 111(d): Emission guidelines: applies to existing sources for which there is an NSPS, but only for a very limited universe of pollutants (including GHGs); the standard of performance is set by the states based on the BSER identified by EPA.



CAA §111 (d): Existing Steam Generating Units Emission Guidelines

Coal- Fired Category	BSER	CO2 Emissions Rate	Compliance Date
Long Term- Coal Operating on or after January 1, 2039	CCS with 90 percent capture	88.4 percent reduction in Ib/MMh-g demonstrated annually for a source- specific baseline	January 1, 2032
Medium Term- Coal Operating on or after January 1, 2032, and ceasing operating before January 1, 2039	Co-firing 40 percent by heat input natural gas	16 percent reduction in emission rate in lb/MWh-g demonstrated annual from a source specific baseline	January 1, 2030
Exempt - Coal Permanently ceasing operating before January 1, 2032	Retirement: Federally enforceable cease operation dates to be finalized in state plans	None	Before January 1, 2030



CAA § 111(d): Existing Steam Generating Units Nat. Gas/ Oil Fired

NG/Oil-Fired Category	BSER	CO2 Emission Rate	Compliance Date
Baseload NG/Oil Annual capacity Factor greater than 45 percent	Routine methods of operation and maintenance	1,400 lb CO2/MWh-g	January 1, 2030
Intermediate NG/Oil Annual capacity factor greater than 8 percent and less than or equal to 45 percent	Routine method of operation and maintenance	1,600 lb CO2/MWh-g	January 1, 2030
Low-load NG/Oil Annual capacity factor less than 8 percent	Routine method of operation and maintenance	Uniform fuels and a presumptive input- based standards of 170 lb CO2/mmBTU for NG-fired units	January 1, 2030



CAA §111(b) New and Reconstructed Turbines

CT Category	BSER Phase I: Upon Rule Promulgation or Initial Startup	BSER Phase II: Beginning Jan. 1, 2032	CO2 Emission Rate
Low Load CTs Capacity Factor less than 20 % based on percent of potential electric sales	Lower emitting fuels (e.g., hydrogen natural gas, distillate oil)	None (Same as Phase I)	Phase I: Less than 160 lbs CO2/mmBTu Phase II: No change. Less than 160 lb/ Co2/mmBTU
Intermediate Load CTs Capacity Factor greater than or equal to 20% to 40% based on a percent of potential electric sales	Highly efficient simple cycle technology and best operating and maintenance practices	None (Same as Phase 1)	Phase I: 1,170 lb CO2/MWh-g Phase II: No change: 1,170 lb CO2/MWh-g
Base Load CTs Capacity factor greater than 40 % based on percent of potential electric sales	Highly efficient combined cycle technology and best operating and maintenance practices	CCS or another technology if source can achieve the rate using another technology such as hydrogen co-firing	Phase I: 800 lb CO2/MWh-g (EGUs with baseload rating of 2,000 mmBTu/h or more or 800- 900 lb CO2/MWH-g (EGUS with baseload rating of less than 2,000 mmBTu/h) Phase II: 100 lbCO2/MWH-g for all sizes



Upcoming Stationary Combustion Turbines Rules

- On February 29, 2024, EPA announced plans to pursue a suite of rulemakings to address GHGs, air toxics, and criteria pollutants from natural gas-fired turbines in the power sector.
- EPA opened a nonregulatory docket (EPA-HQ-OAR-2024-0135) to seek input on what technologies should be part of the BSER, market mechanisms (mass-based trading or emissions averaging), subcategorization, compliance flexibilities, and interaction between existing sources and new sources.
- Upcoming Turbine Rules:
 - CAA section 111(d) GHG emission guidelines for existing CT- Fall 2024
 - CAA section 111(b) new source performance standards for CTs- November 2024
 - CAA section 112 national emission standards for hazardous air pollutants January 2025



Expected GHG Litigation Timeline

- May 2024: Petitions for review and stay motions filed in the D.C. Circuit
- July 19, 2024: D.C. Circuit denied stay motions. Certiorari filed in the Supreme Court
- July 2024: Emergency stay motions filed in Supreme Court
- October/November 2024: Decision by Supreme
 By end of June 2026: Decision by Supreme Court on stay motion****
- ****Assumes "normal" decision timeline and not the one we are currently experiencing with regard to the Good Neighbor Plan (Supreme Court took nine months to rule in that case)
- September 2024 to June 2025: Briefing and argument in the D.C. Circuit

- Fall 2025: Decision issued by the D.C. Circuit
- Fall/Winter 2025: Petitions for a Writ of
- The earlier these can be filed, the better so that case can hopefully be argued in Spring 2026
- Court IF case argued in Spring of 2026
- By end of June 2027: Decision by Supreme Court likely in Winter of 2026-2027 if case is not argued in Spring 2026 (meaning it is argued in Fall of 2026) (although Court could wait until the end of the term - June 2027)



Regional Haze Rule SIP Status

- EPA continues to review and act on 2nd Planning Period Regional Haze SIPs.
- EPA issued Findings of Failure to Submit effective September 29, 2022, for 15 states (87 FR 52856); 11 remain outstanding.
- 2nd Planning Period Progress Reports are due on January 31, 2025. EPA recently issued a compliance assistance memorandum addressing report requirements.

2nd Planning Periods SIP Status (as of August 2024)			
EPA Final Action	17 (6 Final/ 11 proposed)		
Submitted SIPs awaiting EPA Action	24		
SIPs Outstanding	11		



Regional Haze Rule Revision

- EPA opened a nonregulatory docket seeking input on the 3rd RH Planning Period (See EPA-HQ-OAR-2023-0262).
- EPA received comments from 17 States, 5 RPOs, 4 Industry Groups, 2 FLMs, and 1 coalition of environmental groups.
- Early Engagement Topics:
 - Reasonable Progress
 - Four Factor Analysis
 - Long Term Strategy
 - Future SIP Obligations
- The EPA intends to propose a separate rule extending the 3rd Planning Period SIP deadline beyond 2028.



National Environmental Policy Act (NEPA)

- In 2021, the Council on Environmental Quality (CEQ) began a two-phase rulemaking process to reform the NEPA regulations.
- NEPA Phase I amendments were finalized in April 2022, and they were primarily focused on restoring three narrow elements of the regulations to their pre-2020 form.
 - (1) the purpose and need section of an environmental impact statement;
 - (2) the establishment of CEQ's NEPA regulations as a floor for agencyspecific NEPA regulations;
 - (3) the definition of "effects".
- Fiscal Responsibility Act (FRA) included permitting reforms under NEPA.



NEPA Phase II Amendments

- CEQ's Phase II NEPA Rule became effective on July 1, 2024. 89 Fed. Reg. 35,442 (May 1, 2024).
 - Codified the FRA provisions.
- Makes broad changes to the NEPA regulations.
- Certain provisions are likely to be helpful, such as confirmation that effects must be "reasonably foreseeable," requirements for deadlines and schedules for NEPA review, and allowing contractors to prepare an environmental impact statement (EISs) in addition to environmental assessment (EAs).
- Other new procedures and policy elements could result in more complicated, timeconsuming, and vulnerable NEPA reviews, such as the shift in perspective from NEPA as a procedural statute to one that is "action-forcing," the evaluation of alternatives outside of the action agency's jurisdiction, and requirements to evaluate environmental justice and climate change effects at multiple stages of the NEPAprocess.



NEPA Litigation

- Group of 20 States, led by Iowa, filed suit in North Dakota District Court challenging the Phase II NEPA Rule on May 21, 2024.
- Seek to have the court vacate the rule, remand it to CEQ, enjoin CEQ for enforcing the rule, and reinstate the 2020 Rule.
- Supreme Court will review D.C. Circuit decision in *Seven County Infrastructure Coal. v. Eagle County, CO* next term.
- Involves the appropriate scope of an agency's review under NEPA.
- Whether agency's evaluation of indirect effects of a proposed agency action must include potential downstream GHG emissions from development that is beyond the agency's control.



Endangered Species Act Amendments

 On April 5, 2024, the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service finalized three rules amending the Endangered Species Act (ESA).

Interagency Cooperation (Section 7)

- Environmental baselines
- Effects of the action
- Clarification that the agency must reinitiate consultation
- Allowance for off-sets outside the scope of the action area



Endangered Species Act Amendments Cont.

- Listing Species and Designating Critical Habitat (Section 4)
 - Clarification that there may be no reference to economic impacts in listing decisions
 - Modification of evaluation of "foreseeable future" in threatened listings
 - Clarifies the factors considered in delisting a species
 - Revised approach to non-prudent critical habitat determinations
 - Revised approach to designation of unoccupied areas as critical habitat



Endangered Species Act Amendments Cont.

- Regulations Pertaining to Protections for Threatened Species 4(d) Blanket Rule
 - Reestablishing that "threatened species" receive the same protections granted to species listed as "endangered."
 - Confirms that a determination that the regulation is "necessary and advisable" to provide for the conservation of threatened species under Section 4(d) is not required for use of the blanket rule.
 - Agents of federally recognized tribes to the list of entities who are permitted to aid, salvage, or dispose of threatened species without a permit.



Legacy CCR Surface Impoundments and CCR Management Units (CCRMU)

- Utility Solid Waste Activities Group, et al. v. EPA, 901 F.3d 414, 432-33 (D.C. Cir. 2018).
- "Legacy CCR Surface Impoundments" rule was published in the *Federal Register* on May 8, 2024. The final rule:
 - Establishes requirements for the safe disposal of CCR in legacy SIs.
 - Establishes requirements for CCRMU to address the risks from previously unregulated solid waste management of CCR that involves the direct placement of CCR on the land at CCR facilities.
 - Effective date of rule is November 8, 2024.
- EPA plans to issue a rulemaking to fix technical errors before November 8, 2024.



New Definitions

- "legacy CCR surface impoundment" is defined as "a CCR surface impoundment that no longer receives CCR but contained both CCR and liquids on or after October 19, 2015, and that is located at an inactive electric utility or independent power producer."
- "liquids" to mean: "any fluid (such as water) that has no independent shape but has a definite volume and does not expand indefinitely and that is only slightly compressible. This encompasses all of the various types of liquids that may be present in a CCR unit, including water that was sluiced into an impoundment along with CCR, precipitation, surface water, groundwater, and any other form of water that has migrated into the impoundment due to the construction of the unit, which may be found as free water or standing water ponded above CCR or porewater intermingled with CCR."



New Definitions

- The final rule defines the term "contains both CCR and liquids" to mean that "both CCR and liquids are present in a CCR surface impoundment, except where the owner or operator demonstrates that the standard in § 257.102(d)(2)(i) has been met" (i.e., free liquids have been removed).
 - April 2024 Memo on free liquids identification & elimination (See https://www.regulations.gov/document/EPA-HQ-OLEM-2020-0107-1068).



CCRMU Definition and Applicability

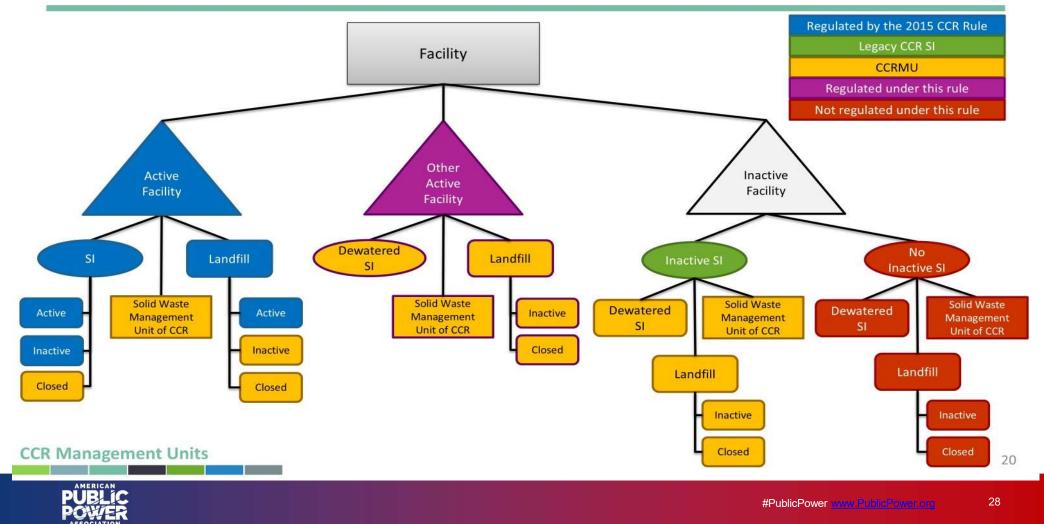
 The final rule defines "CCR management unit" (CCRMU) as "any area of land on which any noncontainerized accumulation of CCR is received, is placed, or is otherwise managed, that is not a regulated CCR unit. This includes inactive CCR landfills and other CCR units that closed prior to October 19, 2015, but does not include roadbed and associated embankments in which CCR is used unless the facility or a permitting authority determines that the roadbed is causing or contributing to a statistically significant level about the groundwater protection standard established under § 257.95(h)."





Regulated Universe





CCR Legacy Rule Litigation

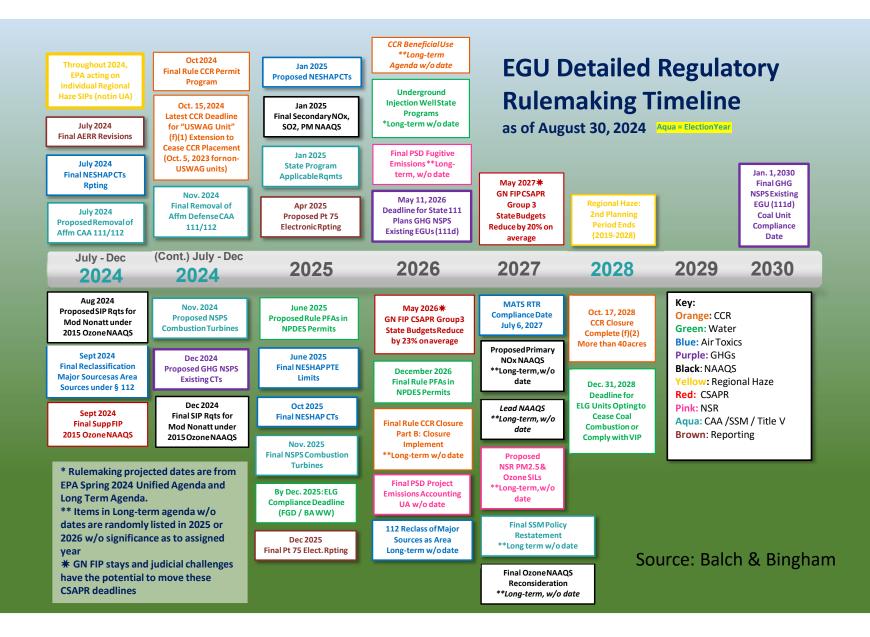
- Six petitions for review have been filed in the D.C. Circuit challenging the CCR Legacy rule.
 - City Utilities of Springfield, Missouri by and through Board of Public Utilities v. EPA, et al. (Case No. 24-1200)
- Potential Issues to be Raised in the Litigation:
 - EPA's regulation of no-site beneficial use exceeds the agency's authority under the Resource Conservation and Recovery Act subtitle D, is arbitrary and capricious, was issued without proper notice and comments, and is not otherwise following the law.
 - EPA's new definition of "contains both CCR and liquids" results in an unlawful retroactive regulation of CCR units previously excluded from the 2015 CCR rule.
 - EPA failed to provide adequate notice and comment on the regulation of CCRMUs at active facilities without a regulated CCR unit.



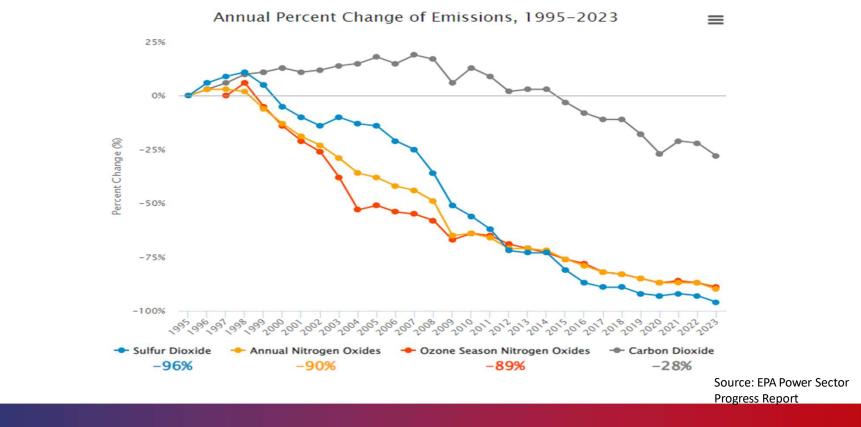
Clean Water Act Rules

- On September 27, 2023, the EPA finalized the Clean Water Act (CWA) section 401 Water Quality Certification Rule. The final rule was effective November 27, 2023.
 - Pre-filing meeting request
 - Setting a reasonable period of time for review
 - Certifying authority analysis
 - Certification decision
 - Federal agency review
- On March 28, 2024, EPA finalized the Clean Water Act Hazardous Waste FacilityResponse Plans. The final rule was effective May 28, 2024. FRP is due June 1, 2027.
 - Applicability criteria
 - Substantial harm criteria
 - Regional Administrator authority
 - Facility response plan requirements



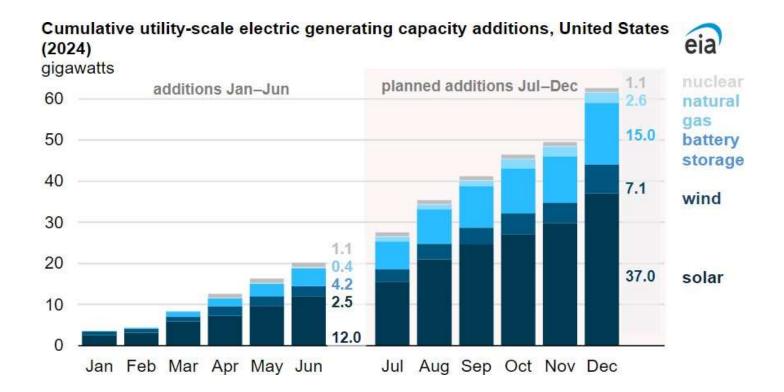


Power Sector Emission Profile



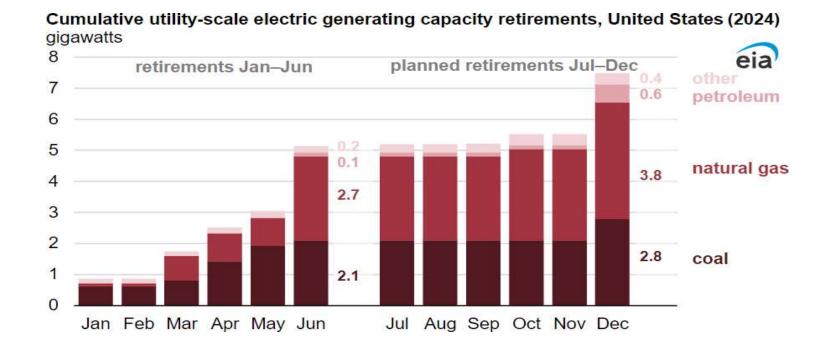


New Generation Capacity First half of 2024





Retired Capacity





Questions

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