



Online Public Hearing

EPA Office Of Water
Office of Science and Technology
Washington, DC

Hearing #1:
October 14, 2025 at 1:00 PM (EDT)

Hearing #2:
November 12, 2025 at 1:00 PM (EDT)

Proposed Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Category – Deadline Extensions





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EPA Office Of Water
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October 14, 2025
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United States
Environmental Protection
Agency

Agenda

- Overview of Proposed Rule
- Public Comments

Proposed Effluent Limitations
Guidelines and Standards for the
Steam Electric Power Generating
Category – Deadline Extensions



Overview of Proposed Rule

Proposed Effluent Limitations
Guidelines and Standards for the
Steam Electric Power Generating
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Steam Electric ELG Deadline Extension Rule

Virtual Public Hearings: October 14, November 12



Overview

- Background
 - Effluent Limitation Guideline (ELG) Program
 - Summary of this Action
 - Steam Electric ELG Rule History
 - Key Stakeholder Concerns
- Proposed Rule
 - Phased Approach
 - Deadline Extension Rule
 - Data Call
 - Economic Impacts
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Effluent Limitation Guideline (ELG) Program

- ELGs are national regulatory standards for wastewater discharged to surface waters and municipal sewage treatment plants.
- The EPA issues these regulations for industrial categories, based on the performance of treatment and control technologies.
- National regulations for industrial wastewater discharges set technology-based numeric limitations for specific pollutants at several levels of control:
 - BPT – “Best Practicable Control Technology Current Available” – first level of control for conventional and toxic pollutants
 - BAT – “Best Available Technology Economically Achievable” – second level of control for existing sources with direct discharges
 - PSES – “Pretreatment Standards for Existing Sources” – second level of control for existing sources with indirect discharges
- ELGs are based on performance of specific technologies, but the regulations do not require use of a specific control technology.

**Note that ELGs also contain two additional levels of control for new sources which are not at issue in this action*

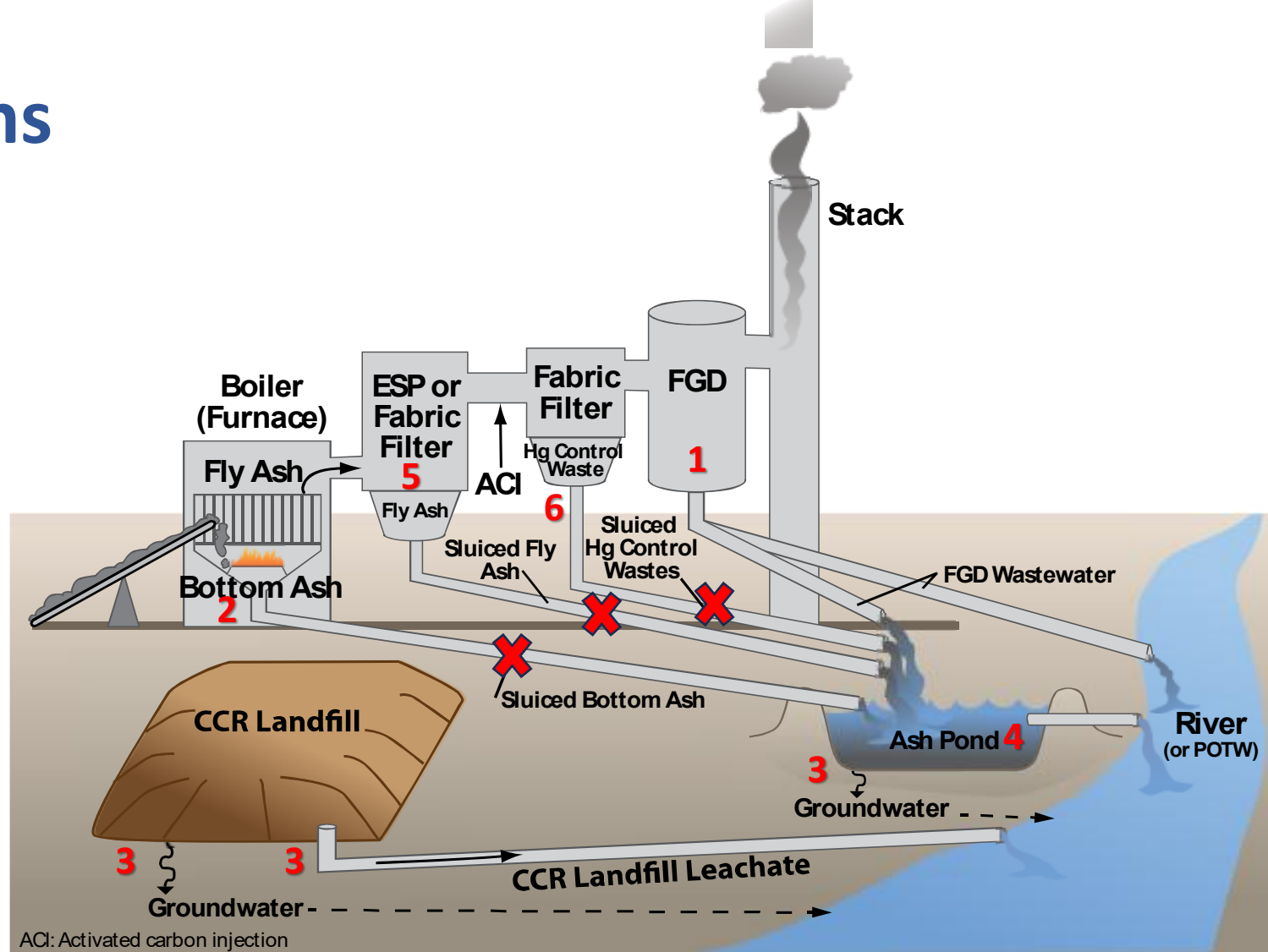
Summary of This Action

- The U.S. Environmental Protection Agency (the EPA or Agency) is proposing a Clean Water Act (CWA) rule to:
 - Extend deadlines promulgated in the 2024 “Supplemental Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category” (2024 rule);
 - Update the transfer provisions at 40 CFR 423.13(o) to allow facilities to switch between compliance alternatives;
 - Create authority in 40 CFR 423.18 for alternative applicability dates and paperwork submission dates, based on site-specific factors;
 - Solicit comment on potential clarifications to existing reliability-related flexibilities; and
 - Solicit comment on information that would support further rulemaking to reconsider existing limitations and compliance alternatives

2015 Rule Wastestreams

1. Flue Gas Desulfurization (FGD) Wastewater
2. Bottom Ash (BA) Transport Water
3. Combustion Residual Leachate (CRL) from ash/FGD ponds and landfills
4. Legacy Wastewaters
5. Fly Ash (FA) Transport Water
6. Flue Gas Mercury Control (FGMC) Wastewater

*Not Pictured: Gasification
Wastewater; Oil-Fired Units*

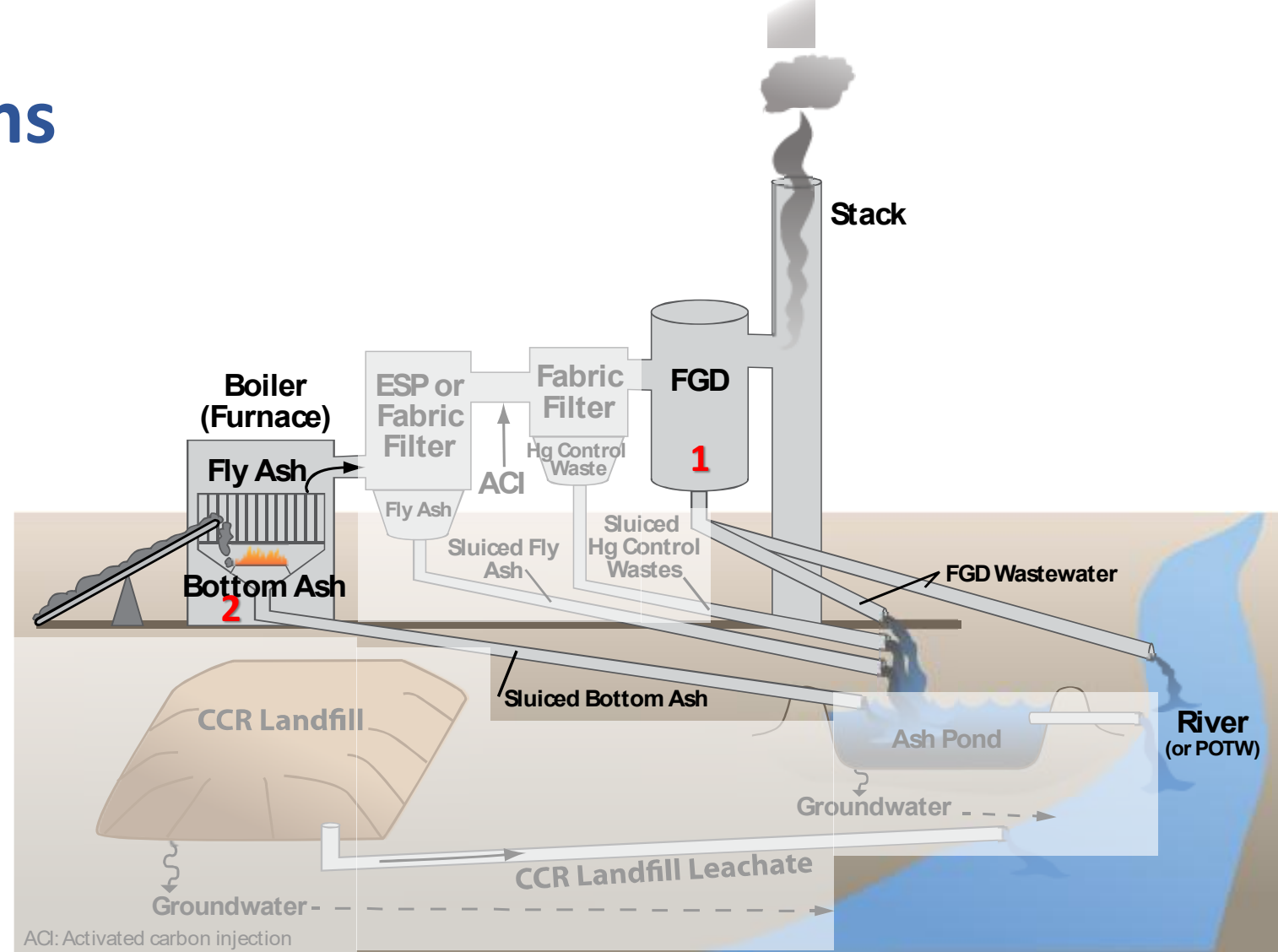


Steam Electric ELG Rule History: Pre-2020 Rule

- In 2015, EPA issued a final rule to reduce water pollution from steam electric generating facilities, especially for coal-fired power plants. Covered wastewaters were:
 - Fly ash (FA) transport water; bottom ash (BA) transport water; flue gas desulfurization (FGD) wastewater; flue gas mercury control (FGMC) wastewater; combustion residual leachate (CRL), gasification wastewater; and legacy wastewater
 - Subcategorized small units (≤ 50 MW) and oil-fired units
 - Established voluntary incentives plan (VIP) for FGD wastewater
- Received multiple legal and administrative petitions
- In April 2019, the Fifth Circuit Court of Appeals vacated the 2015 Rule limits for combustion residual leachate and legacy wastewater; remaining claims are held in abeyance or have been withdrawn
- In April 2020, the Supreme Court held in *County of Maui v. Hawaii Wildlife Fund* that the Clean Water Act requires permits for discharges of pollutants from a point source to waters of the United States that travel through groundwater if the discharge is the "functional equivalent of a direct discharge."

2020 Rule Wastestreams

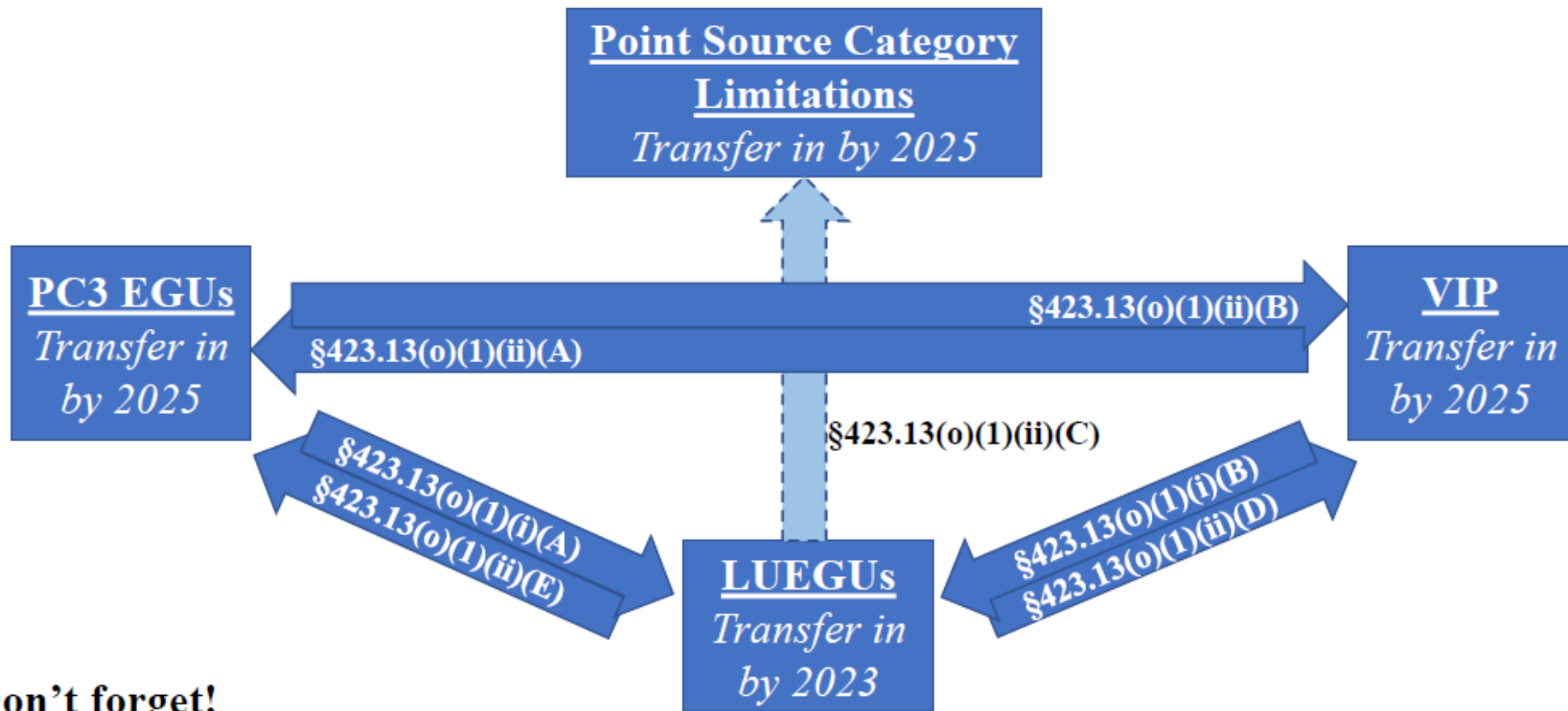
1. Flue Gas Desulfurization (FGD) Wastewater
2. Bottom Ash (BA) Transport Water



Steam Electric ELG Rule History: 2020 Rule

- Relaxed the limitations for bottom ash (BA) transport water
- Modified the limitations for Flue Gas Desulfurization (FGD) wastewater (generally applicable and voluntary incentives program (VIP))
- Established three subcategories with less stringent limitations
 - High FGD flow facilities (not utilized),
 - Low utilization electric generating units (utilized by two plants, both retiring), and
 - Units permanently ceasing coal combustion by 2028 (utilized by ~39 plants)
 - Could continue meeting 1980s-era limitations based on the use of surface impoundments to avoid incurring the costs of the new, more stringent bottom ash and FGD treatment technologies
 - Interplay with Coal Combustion Residuals (CCR) disposal rule
- Implementation flexibilities (**including pathways to stay in operation after filing Notice of Planned Participation (NOPP) to retire**)
 - Established provisions in 40 CFR 423.13(o) to transfer: VIP $\leftrightarrow$ Ceasing coal combustion
 - Established permit conditions in 40 CFR 423.18 that deemed facilities in compliance if they needed to continue operations for reliability
- This rule received judicial petitions from environmental groups which are currently held in abeyance by the Fourth Circuit Court of Appeals in *Appalachian Voices v. EPA*

Overview of how §423.13(o) transfers work



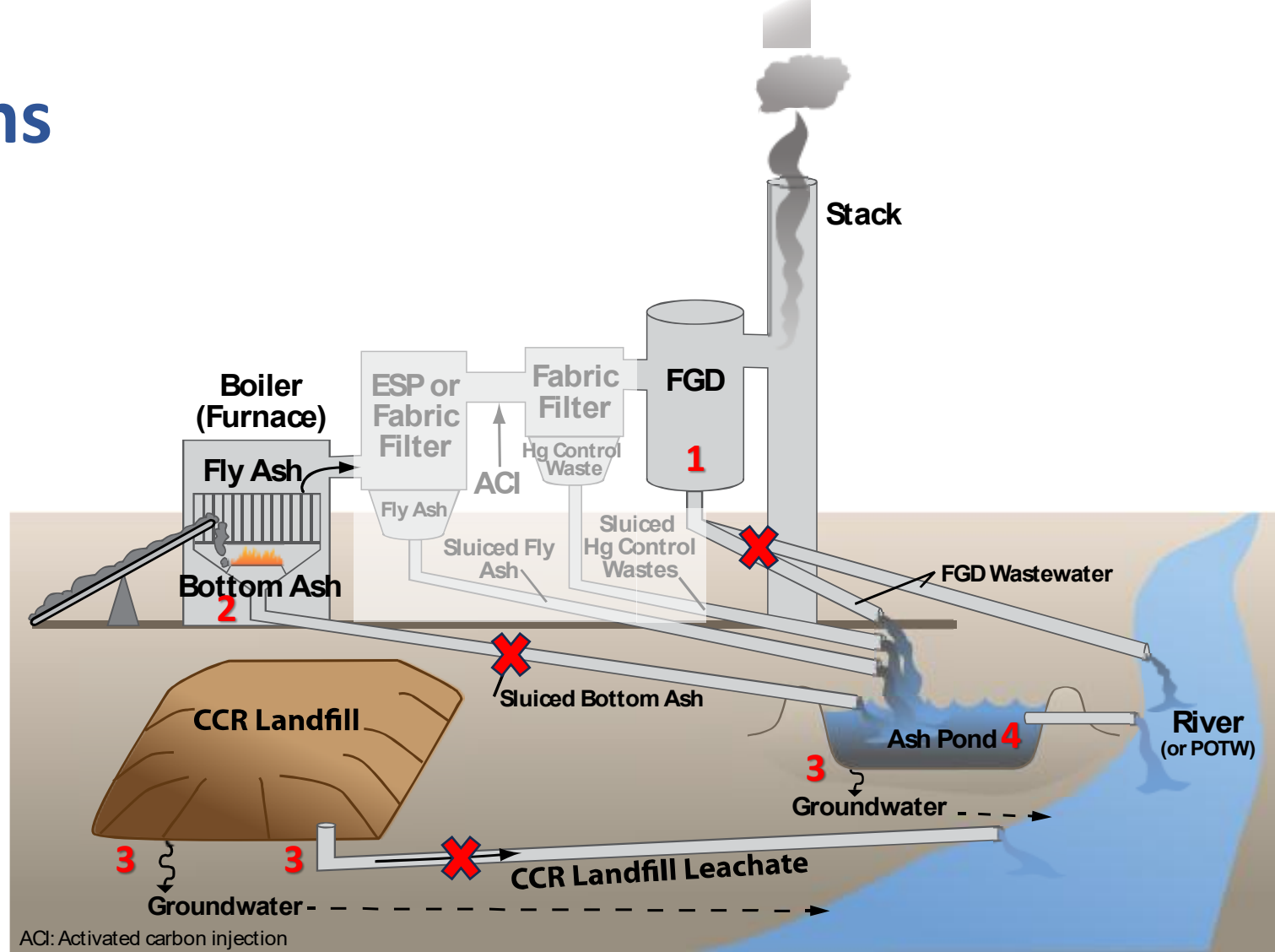
Don't forget!

A company must comply with the requirements of its current and future provisions to transfer §423.13(o)(2)

A company must maintain any more stringent limitations already being met §423.13(o)(3)

2024 Rule Wastestreams

1. Flue Gas Desulfurization (FGD) Wastewater
2. Bottom Ash (BA) Transport Water
3. Combustion Residual Leachate (CRL) from ash/FGD ponds and landfills
4. Legacy Wastewaters



Note: as of 2024, there were 277 coal-fired electric generating units operating at 148 coal-fired power plants

Steam Electric ELG Rule History: 2024 Rule

- Set zero-discharge limitations for three wastewaters:
 - Flue Gas Desulfurization (FGD) wastewater,
 - Bottom Ash (BA) transport water, and
 - Combustion Residual Leachate (CRL) (except “unmanaged”)
- Set mercury and arsenic limitations for two wastewaters:
 - Unmanaged CRL,* and
 - A subset of legacy wastewater
- Declined to establish nationwide limitations for legacy wastewaters generally.
(i.e., technology-based effluent limitations are left to case-by-case determinations based on the permitting authority’s best professional judgment)

**Unmanaged CRL is CRL that either: (1) Is determined by the permitting authority to be the functional equivalent of a direct discharge to waters of the United States (WOTUS) through groundwater; or (2) Has leached from a waste management unit into the subsurface and mixed with groundwater prior to being captured and pumped to the surface for discharge directly to WOTUS.*

Steam Electric ELG Rule History: 2024 Rule

- Created a subcategory for the permanent cessation of coal combustion by 2034 which would allow utilities to continue to operate their existing wastewater treatment technologies for the remainder of their useful life rather than retrofit to achieve zero discharge (this includes facilities complying with 2020 rule subcategories).
- EPA received nine judicial petitions for review of the 2024 rule which were consolidated in the Eighth Circuit Court of Appeals in *Southwestern Electric Power Company v. EPA*.
 - Two requests to stay the 2024 rule pending judicial review were denied by the Eighth Circuit in 2024.
 - EPA has most recently requested a long-term abeyance in the case.
- EPA also received two* administrative petitions:
 - Edison Electric Institute (requests clarifications of the applicability for Combustion Residual Leachate (CRL)
 - Utility Water Act Group (requests that EPA stay and repeal the 2024 rule in full)

**America's Power sent a letter requesting that EPA repeal the 2024 rule without replacement as well as revise the 2020 rule.*

Key Stakeholder Concerns

- 2024 Rule
 - Due to unprecedented demand growth (including localized growth due to data centers and AI), the top issue for providing affordable, reliable electricity is extending near-term compliance deadlines
 - Stakeholders almost universally oppose the limitations for unmanaged Combustion Residual Leachate (CRL) and would like limitations to be reconsidered (though stakeholders differ on the ultimate recommendation)
 - Stakeholders also voiced concerns that although EPA clearly explained in the preamble and response to comments that CRL limitations were only applicable prospectively, the regulatory text is ambiguous
 - EPA also heard feedback that zero-discharge systems for Flue Gas Desulfurization (FGD) wastewater are not available industry-wide, are too costly, or result in sunk costs for currently installed treatment systems under the 2020 rule given the current zero-discharge timelines
 - Other site-specific challenges were raised
- 2020 Rule
 - Several utilities have power plants that had planned to retire by 2028 and, due to load growth, are now seeking to operate past that date using available 2020 rule flexibilities that may need modifications:
 - Existing short-run flexibility under section 423.18 to be deemed in compliance when ordered to generate electricity after December 31, 2028
 - Existing long-run flexibility under section 423.13(o) to transfer into the voluntary incentives plan (VIP) and generally applicable limitations and continue operating pursuant to those limitations

Phased Approach

- On June 30, EPA announced a two-phased approach to reviewing and revising the Steam Electric ELG
- Phase 1: Deadline Extension Rule (**current action**)
 - Extends deadlines and related flexibilities via notice-and-comment rulemaking in a way that provides the maximum flexibility to regulated utilities and allows those utilities to provide reliable, affordable power to American households; and
 - Includes a data call that solicits comment on compliance alternatives; new cost and performance data
- Phase 2: “Best Available Technology Economically Achievable” (BAT) Reconsideration
 - Reconsider BAT for unmanaged Combustion Residual Leachate (CRL)
 - Reconsider BAT for additional wastewaters if warranted based on information provided by stakeholders in response to the Phase 1 data call

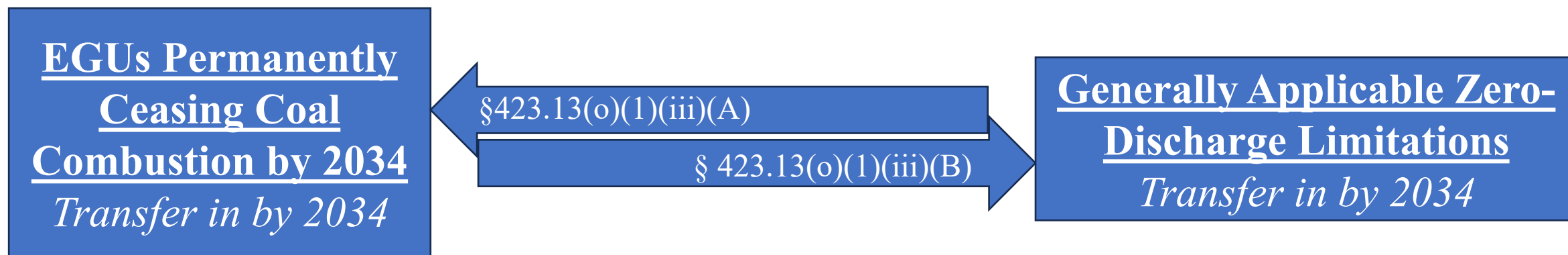
Deadline Extension Rule

1. Proposes to extend the Notice of Planned Participation (NOPP) deadline for the permanent cessation of coal combustion from December 31, 2025, to December 31, 2031.
 - Deregulated markets (e.g., PJM) have 1-year and 3-year capacity auctions
 - Regulated markets typically have 2- to 3-year integrated resource planning time horizons
 - This extension allows utilities to see how and where data centers will locate, what the increased demand is, and how generation should be managed prior to the utility definitively committing to an already planned retirement.

Note: a companion Direct Final Rule (DFR) that would only extend the December 2025 NOPP submission deadline was signed simultaneously with the NPRM

Deadline Extension Rule

2. Proposes to modify 40 CFR 423.13(o) to allow for transfers between the permanent cessation of coal combustion by 2034 subcategory and the generally applicable zero-discharge limits



Deadline Extension Rule

3. Proposes to extend the latest compliance date for zero-discharge requirements applicable to direct dischargers from Dec. 31, 2029, to Dec. 31, 2034 (FGD wastewater, BA transport water, and CRL)
 - Ensures facilities have time to acquire necessary components in a changed marketplace
 - Allows facilities to consider retirement decisions and/or transfer between compliance alternatives up until the 2034 deadline
 - Prevents facilities with sunk costs for biological treatment from incurring a second round of costs in short order and instead allows longer amortization periods for cost recovery, thus preventing potential excessive rate increases over a short period of time

Deadline Extension Rule

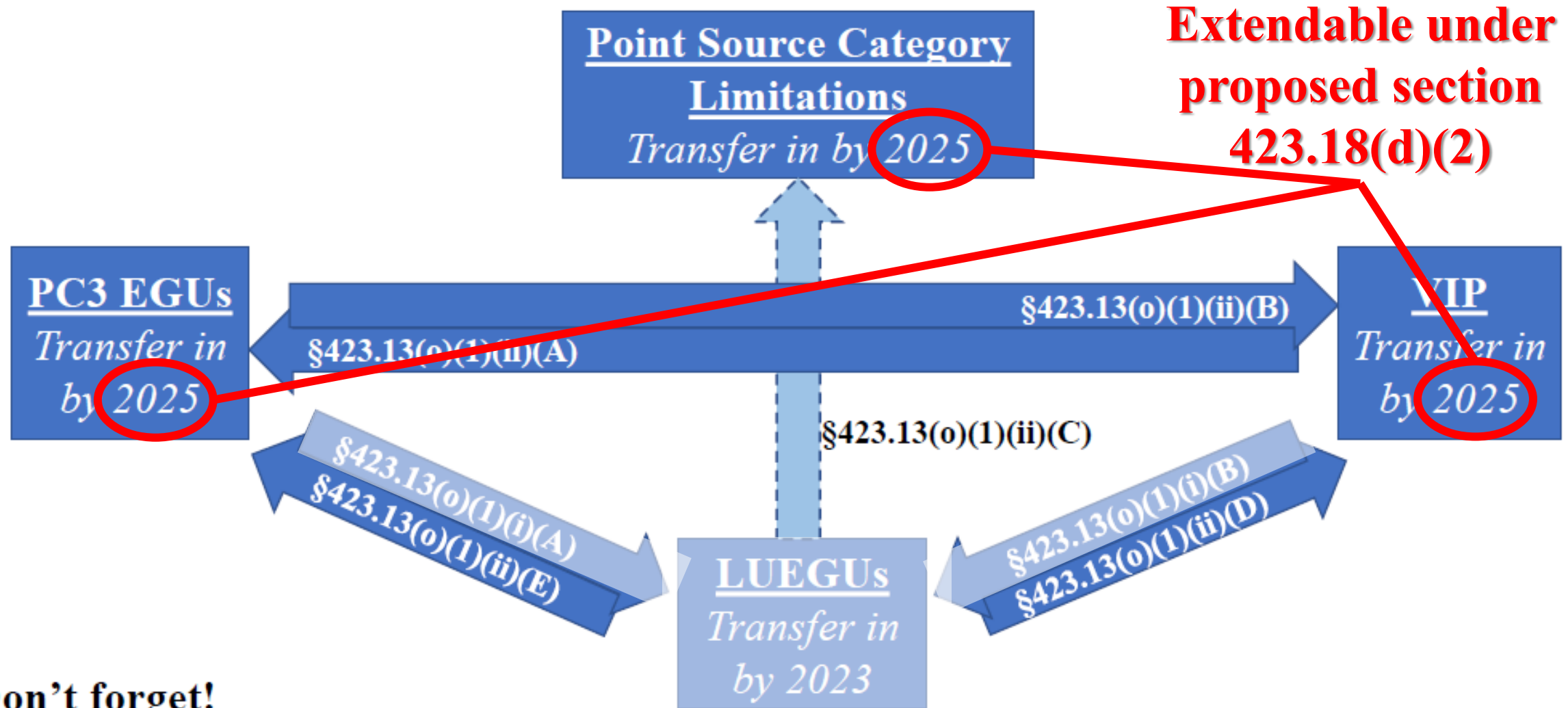
4. Proposes to extend the compliance date for zero-discharge standards applicable to indirect dischargers from May 9, 2027, via a two-tiered Pretreatment Standards for Existing Sources (PSES)
 - The first tier is equivalent to the currently applicable (i.e., 2020 rule) PSES and is applicable three years from promulgation of a final rule
 - The second tier is zero discharge, and timing differs based on option elected by discharger
 - Dischargers electing to apply for an NPDES permit receive site-specific timing under 40 CFR 423.11(t) for zero discharge; or
 - Dischargers declining to apply for an NPDES permit must meet zero-discharge requirements by three years and one day from promulgation of a final rule
 - This tiered PSES provides fairness for indirect dischargers (few in number, but several are municipally-owned utilities)

Deadline Extension Rule

5. Proposes to create a site-specific flexibility in 40 CFR 423.18 where a permitting authority would establish alternative applicability timing for various deadlines and NOPP submission dates in the Steam Electric ELG when one of the following circumstances exist:
 - An unexpected change in capacity markets or local demand causes a discharger to transfer out of a permanent cessation of coal combustion subcategory via section 423.13(o)
 - An unexpected change in capacity markets or local demand causes a discharger to back out of retirement plans for an electric generating unit at a multi-unit facility
 - An unexpected supply-chain issue of a necessary component in a pollution treatment system causes a delay at a key stage of fabrication or installation
 - Any other unexpected circumstance that is outside both a facility's ability to control and plan for

Rule	Wastestream/Submission	Current Deadline	Proposed Deadline	Extendable by 40 CFR 423.18(d)(1)?
2020 Rule	BA Transport Water (Generally Applicable BAT)	December 31, 2025 (No Change)		Yes
	FGD Wastewater (Generally Applicable BAT)			
	FGD Wastewater (VIP limitations)	December 31, 2028 (No Change)		
2024 Rule	NOPP for the Permanent Cessation of Coal Combustion by 2034 Subcategory	December 31, 2025	December 31, 2031	X
	BA Transport Water (Generally Applicable PSES)	May 9, 2027	Promulgation Date Plus Three Years and One Day -or- Site-Specific Date for BAT	X
	FGD Wastewater (Generally Applicable PSES)			
	CRL (Generally Applicable PSES)			
	BA Transport Water (Generally Applicable BAT)	No later than December 31, 2029	No later than December 31, 2034	Yes
	FGD Wastewater (Generally Applicable BAT)			
	CRL (Generally Applicable BAT)			

Overview of how §423.13(o) transfers work



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A company must maintain any more stringent limitations already being met §423.13(o)(3)

Deadline Extension Rule

6. Solicits comment on whether certain limited clarifying changes to the text of Sections 423.18(a) or 423.19(i) are warranted to address:
 - Whether 40 CFR 423.18(a)(2) is interpreted to include the FERC's acceptance of a reliability must-run agreement as being a reliability must-run agreement issued by a Public Utility Commission as contemplated within this subsection;
 - Whether 40 CFR 423.18(a)(3) is interpreted to include the following as a qualifying event: where an EGU(s) has certified it would cease combustion of coal, and an appropriate Balancing Authority projects, pursuant to its authority, that doing so would cause a resource adequacy shortfall for an upcoming delivery year;
 - Whether 40 CFR 423.19(i)(1)(ii) is interpreted to include the 30-day submission applicability to any findings made pursuant to Section 423.18(a)(3); and
 - Whether 40 CFR 423.19(i)(3) is interpreted such that the termination of need statement submission is also triggered 30 days from when the source is no longer subject to extended production (which is increased production) resulting from the qualifying event.

Example Scenario Analyses

Scenario #1 – Involuntary Extension of Operations: A facility has filed a Notice of Planned Participation (NOPP) to retire by December 31, 2028; but, due to an unprecedented growth in demand, has been ordered by a regulatory body to continue generating electricity through May of 2030 (e.g., through a reliability must-run agreement).

Compliance Pathway: Within 30 days of receiving the order, the facility submits a NOPP to its permitting authority under section 423.19(i) to invoke the permit conditions of 423.18. The facility continues operating past December 31, 2028, and discharging pursuant to the limitations for the permanent cessation of coal combustion subcategory and is deemed in compliance. The facility ceases coal combustion at the end of May 2030 and submits a termination of need statement to its permitting authority within 30 days.

Example Scenario Analyses

Scenario #2 – Voluntary Extension of Operations: It is 2026. A facility has filed a NOPP to retire by December 31, 2028; but, due to higher-than-expected capacity auction prices, seeks to continue operations. The facility has not upgraded treatment of its FGD wastewater or BA transport water to comply with the 2020 rule limitations.

Compliance Pathway: Within 60 days of learning of the higher capacity auction prices or the effective date of the final rule (whichever is later) the facility submits an initial request letter detailing the changed circumstances that qualify for section 423.18(d), stating that the facility is seeking a site-specific extension of the section 423.19(i) NOPP submission deadline to transfer into the VIP for FGD wastewater and generally applicable BA transport water limitations, and explaining why the facility needs extensions of the relevant deadlines themselves. The letter includes a timeline for compliance, including contingencies, and the facility follows this timeline, making regular progress reports until it meets the applicable limitations.

Data Call

- EPA solicits comment on the following information that could support inclusion of issues in the scope of any Phase 2 reconsideration:
 - Existing compliance alternatives
 - Pilot Study and Bench Test Information on Voluntary Incentives Plan (VIP)/zero-discharge technologies
 - Technological Availability*
 - Cost Projection Information on zero-discharge technologies
 - Economic Achievability*
 - Newly Installed VIP/Zero-Discharge Systems
 - Technological Availability*
 - Economic Achievability*
 - Resource Adequacy and Reliability Information
 - Non-Water Quality Environmental Impacts*
 - Other Factors*

Economic Impacts

- EPA is assuming for analytical purposes that the effect of the changes in the proposal would be an average three-year postponement of costs and benefits from the current 2024 rule
- EPA has placed a memo in the record with these cost and benefits estimates
- EPA does not intend to run the Integrated Planning Model for the deadline extension rule but would consider whether running the model is warranted for any Phase 2 rulemaking

Public Participation

- Tribal Consultation
 - EPA initiated Tribal Consultation on October 1
 - EPA held a Tribal Listening Session on October 8
 - Tribal Consultations will conclude October 30
- Virtual Public Hearings
 - October 14 and November 12
 - Registration available on the EPA website
- Public Comment
 - The public comment period closes November 3, 2025
 - Any request to extend the public comment period should be made as soon as possible
 - EPA will consider all input received as any final action is developed.
- Additional information on the Steam Electric ELG:
<https://www.epa.gov/eg/steam-electric-power-generating-effluent-guidelines>

Contact Information

- Questions about the Steam Electric ELG:

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Appendix: BAT Statutory Authority

- Under Section 301(b)(2)(A) of the Clean Water Act, EPA is to set “effluent limitations [which] shall require the elimination of discharges of all pollutants if the Administrator finds . . . that such elimination is technologically and economically achievable”
- Best Available Technology Economically Achievable (BAT) must include consideration of the following statutory factors:

Statutory “consideration” factors (CWA section 304(b))	
1) The age of the equipment and facilities involved	5) The cost of achieving such effluent reduction
2) The process employed	6) Non-water quality environmental impact (including energy requirements)
3) The engineering aspects of the application of various types of control techniques	7) Such other factors as the Administrator deems appropriate
4) Process changes	

Public Comments

Proposed Effluent Limitations
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- If you registered to provide public comment during this webinar, you were assigned a Speaker Group Number and a Speaker Number. This information has been emailed to you from meetings@erg.com.
- Shortly before your Speaker Group is called, you will receive a message stating that you are about to be unmuted and to prepare to give your comments.
- When it is your turn to speak, the moderator will announce your name and your line will be unmuted.

Public Comments

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- There will be 2-5 minute breaks between Speaker Groups 1 and 2 for EPA to prepare for the next round of speakers.

Public Comments

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This concludes EPA's online public hearing for the Proposed Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Category – Deadline Extensions

- If you wish to submit charts, photos, graphics other visual materials, or additional public comment, please upload them to **[regulations.gov](https://www.regulations.gov)**.
- Docket No. EPA-HQ-OW-2009-0819