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May 30, 2023

The Honorable Michael S. Regan
Administrator
The U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

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RE: Comments of the American Public Power Association on the Environmental Protection Agency’s Proposed Supplemental Steam Electric Effluent Limitation Guideline Rule; EPA-HQ-OW-2009-0819; 88 Fed. Reg. 18,824 (March 29, 2023)

Dear Administrator Regan:

The American Public Power Association (APPA or Association) appreciates the opportunity to submit the attached comments in response to the U.S. Environmental Protection Agency’s (EPA or Agency) proposed “Supplemental Effluent Limitation Guidelines (ELG) and Standards for the Steam Electric Power Generation Point Source Category.”¹

APPA is the national service organization representing the interests of more than 2,000 not-for-profit community and state-owned electric utilities that together provide electricity to approximately 49 million Americans and employ approximately 96,000 people. Most public power utilities have 10 or fewer employees and serve towns, villages, or counties with fewer than 10,000 people, and all but 144 of the nation’s public power utilities would be considered a “small governmental jurisdiction” under the Regulatory Flexibility Act.²

Amid the energy transition, public power utilities have been diligently working to comply with the final 2020 ELG Reconsideration Rule, which required affected facilities to install wastewater treatment technology for flue gas desulfurization (FGD) and bottom ash transport water and created subcategories for high-flow FGD system, low utilization electric generating units and a category for units’ permanently ceasing coal combustion.³ The investment to comply with the existing rule is ongoing and has the potential to result in significant stranded assets. We respectfully request that a new final rule fully consider the investments made and allow public power utilities to realize their investment fully before establishing new requirements for this sector.

¹ 88 Fed. Reg. 18,824 (March 29, 2023) (Proposed Rule).

² 5 U.S.C. §§ 601-12.

³ 85 Fed. Reg. 64,651 (October 13, 2020) (2020 ELG Reconsideration Rule).

If you have any questions regarding APPA's comments, please contact Ms. Carolyn Slaughter via email at CSlaughter@PublicPower.org or call (202) 467-2900.

Sincerely,

A handwritten signature in black ink that reads "Carolyn Slaughter". The script is fluid and cursive, with the first letter 'C' being particularly large and prominent.

Carolyn Slaughter
Senior Director, Environmental Policy
American Public Power Association

APPA Comments on the Environmental Protection Agency's
Proposed Supplemental Steam Electric Effluent Limitation Guideline Rule
EPA-HQ-OW-2009-0819
88 Fed. Reg.18,824; (March 29, 2023)

Table of Contents

I.	Introduction.....	4
II.	Executive Summary	5
	A. Challenges of the Energy Transition and Electric Reliability	6
III.	Compliance with the 2020 ELG Reconsideration Rule is Ongoing.....	7
	A. EPA’s Justification for Proposing New ELGs Seven Years Before They are Due Is Problematic....	8
IV.	Proposed Changes to Subcategories	9
	A. As Proposed, the “Early Adopter” Category Should be Adjusted.....	9
	1. Modify the Early Adopter Subcategory Qualification Deadline.....	10
	2. Modify the Early Adopter Subcategory Cessation Date	10
V.	Membrane Filtration Does Not Meet the BAT Requirements Under the Act for FGDW.....	11
	A. The Rulemaking Record Does Not Support BAT for FGDW Based on Membrane Filtration Technology.....	11
	B. Pilot Applications.....	12
	C. EPA Underestimates Membrane Filtration Retrofit Costs	13
	D. Environmental Disbenefits of Managing the Byproduct of Treating FGDW with Membrane Technology.....	14
	1. Uncertainty with Brine Management	15
	2. Fly Ash Availability	15
	E. EPA Should Allow Regular or Intermittent Discharge from Membrane Filtration Technology If EPA Ultimately Selects the Technology as BAT.....	16
VI.	Concerns with the Economic Achievability of a Completely Closed-Loop Recirculating BATW System.....	16
	A. A Precipitation Discharge Allowance is Warranted	16
	B. Maintenance Event Purge	17
	C. Quench Water is Not “Bottom Ash Transport Water” or “Bottom Ash Purge Water”	17
	1. Minimizing the Purge for High Recycle Rate BATW Systems	18
	D. Cost Assumptions of ZLD BATW System Are Not Justified	19
VII.	Comments on the Proposed Combustion Residual Leachate (CRL) Provisions	20
	A. Facilities That Co- Treat CRL and Stormwater Should Be Exempt	21
VIII.	CRL Discharges via Groundwater Should Not be Subject to BAT Limitations	21
	A. EPA Should Not Require Submission of Information Related to Functionally Equivalent Discharges of CRL through Section 308 Information Requests.	23
	B. The ELG Rule is an Inappropriate Regulatory Framework to Address the Issue of Releases of CRL to Groundwater.....	23
	C. EPA Fails to Address the Threshold Issues of How the NPDES Program Would Apply to CRL Release Via Groundwater to a WOTUS.....	24

1. The NPDES Program Is Not Designed to Regulate Pollutants Released via Groundwater to WOTUS	25
2. Other Environmental Statues May be Better Suited to the Treatment of CRL Releases via Groundwater	26
IX. Comments on the Legacy Wastewater Provisions	27
A. Applicability of Part 423 to Inactive/Retired Plants	27
B. EPA Should Not Set a Uniform BAT Standard for Legacy Wastewaters.....	28
C. EPA Should Also Refrain From Creating New Definitions of Legacy Wastewaters.	28
D. EPA Should Not Establish Additional Factors that Permitting Authorities Must Consider When Establishing BPJ Limits.	29
X. 2020 ELG Reconsideration Rule Subcategories.....	29
A. APPA Supports Maintaining the 2020 ELG Rule Voluntary Incentive Program and Cessation of Combustion Subcategories.....	29
B. APPA Oppose Eliminating the Low Utilization Subcategory.....	30
XI. Implementation of 2020 and Proposed Rule.....	31
A. While EPA Is Considering Further Action on LWW and CRL, EPA’s 1982 Rule Controls.	31
B. Proposed ELG Website Reporting Requirements	31
C. State Permitting Authorities are Better Suited to Address PFAS Issues.	32
XII. Modeling Impacts of Infrastructure Law is Premature	32
XIII. Conclusion	33

I. Introduction

The American Public Power Association (APPA or Association) appreciates the opportunity to submit the following comments in response to the U.S. Environmental Protection Agency's (EPA or Agency) proposed "Supplemental Effluent Limitation Guidelines (ELG) and Standards for the Steam Electric Power Generation Point Source Category."¹ APPA is the national service organization representing the interests of more than 2,000 not-for-profit community and state-owned electric utilities that together provide electricity to approximately 49 million Americans and employ approximately 96,000 people. Approximately 1,300 of the nation's 2,000 or so public power utilities have 10 or fewer employees and serve towns, villages, or counties with fewer than 10,000 people, and all but 144 of the nation's public power utilities would be considered a "small governmental jurisdiction" under the Regulatory Flexibility Act.²

APPA advocates and advises on electricity policy, technology, trends, training, and operations. Association members strengthen their communities by providing superior service, engaging citizens, and instilling pride in community-owned power. All public power utilities share a common characteristic: providing customers in the community with not-for-profit, cost-based electricity. Public power utilities may generate their own electricity, or they may purchase power from other electric power generators, including from other large public power utilities called joint action agencies formed to collectively serve smaller communities. Public power utilities are transparent because they are subject to sunshine laws, and their boards are accountable to the community's citizens. Public power utilities, by their nature, involve citizens in their decision-making.

The APPA participates on behalf of its members collectively in EPA's rulemakings and other Clean Water Act (CWA or Act) proceedings that affect the interests of public power utilities. APPA commented on previous rulemaking proceedings on this matter and most recently during EPA's federalism consultation under Executive Order 13132.³ For these reasons, APPA has a clear interest in any potential regulatory changes to the Steam Electric ELG Rule, as well as the suite of Agency rulemakings impacting the power sector as it transitions to lower and non-emitting electric generation resources, all while ensuring affordable, reliable, and sustainable service for our customers. APPA supports the comments submitted by APPA member utilities as they detail specific information regarding the impact and assumptions used to develop the Proposed Rule. APPA is a member of the Utility Water Act Group (UWAG) and supports their detailed legal and technical comments on the Proposed Rule. APPA supports the comments on this Proposal submitted by the Small Business Administration Office of Advocacy.

¹ 88 Fed. Reg. 18,824 (March 29, 2023) (Proposed Rule).

² 5 U.S.C. §§ 601-12.

³ The American Public Power Association's Comments on the Environmental Protection Agency's Potential Revisions to the Steam Electric Effluent Limitation Guidelines (ELG); (APPA's Federalism Comments); EPA-HQ-OW-2009-0819-9023.

II. Executive Summary

EPA's new proposed ELG rule represents an unwarranted change of course given wastewater treatment requirements were just imposed in EPA's 2020 ELG Reconsideration Rule.⁴ Public power utilities have been working diligently to comply with the 2020 ELG Reconsideration Rule in the midst of the electric power industries transitioning to low- and zero-carbon power while providing affordable and reliable energy. This rulemaking threatens to disrupt those efforts by diverting time and money to a mid-course change unlikely to yield benefits commensurate with its costs. APPA comments on the Proposed Rule are summarized below:

- APPA recommends EPA ensure the investments and commitments made to meet the requirements in the 2020 ELG Reconsideration Rule are preserved in any final rule. In particular the Proposed Rule imposes a disproportionate burden on small public power utilities.
- APPA urges EPA to maintain the permanent cessation of coal combustion and low utilization subcategories from the 2020 ELG Reconsideration Rule; the availability of these subcategories provides public power utilities with the flexibility to provide their communities with affordable and reliable electricity as the power sector transitions to low-emitting and cleaner generation.
- APPA recommends EPA modify the "early adopter" subcategory to expand the qualification deadline or allow facilities to participate in the subcategory based on their permit applicability date or by the effective date of a final rule.
- APPA does not support chemical precipitation plus membrane filtration technology as the best available economically technology (BAT) for the treatment of flue gas desulfurization wastewater (FGDW). The record does not support the notion that the technology is available or the economically achievable due to EPA's underestimated cost for brine management as well as fly ash availability.
- APPA supports the determination in the 2020 ELG Reconsideration Rule that BAT for bottom ash transport wastewater (BATW) is a high recycle rate BATW system with a limited purge. In addition, APPA does not believe that the dry handling or closed loop system is economically achievable and can serve as the BAT basis for the BATW ELGs under the new rule.
- APPA recommends EPA not establish a national uniform treatment standard based on the use of chemical precipitation (CP) technology as the BAT for the discharges of combustion residual leachate (CRL) from applicable facilities. We believe that the differences in the amount of discharge flow and pollutant loadings are significant between active landfills, those nearing closure, and closed landfills at retired facilities and the treatment requirements should reflect those differences.
- APPA does not believe CRL discharges via groundwater should be subject to ELG BAT limitations. There already exist regulatory protections for those discharges via groundwater under the local, state, and federal rules and regulating those discharges

⁴ 85 Fed. Reg. 64,650 (October 13, 2023) (2020 ELG Reconsideration Rule).

under the national pollutant discharge elimination system (NPDES) permitting process is an unnecessary burden for many utilities.

- APPA supports EPA’s proposal to allow the permitting authorities to set facility-specific legacy wastewater treatment (LWW) standards on a best professional judgment (BPJ) basis.

A. Challenges of the Energy Transition and Electric Reliability

The energy transition presents a dynamic and fluid period for public power utilities. Public power utilities are entities of state and local governments. As such, public power utility customers directly bear the costs of procuring and installing environmental treatment technologies to comply with EPA regulations for air emissions, water discharges, and solid waste. As EPA knows, the suite of requirements affecting the power sector must be coordinated to ensure new regulatory regimes do not disturb the power sector’s obligation to provide affordable, reliable electric service to customers. As such, APPA has concerns that the Proposed Rule does not adequately address concerns about maintaining electric reliability and diverts resources that could be utilized to support the energy transition to a requirement that, if finalized, would generate stranded assets and increase costs for communities that can ill-afford to make new investments as contemplated under the Proposed Rule.

The CWA requires EPA to consider “the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate.”⁵ We contend that reliability is a non-water quality environmental impact that should be evaluated in establishing BAT for all the wastestreams EPA proposes to set technology based standards.

The Nation’s grid reliability regulators and operators have issued clear warnings that forced coal plant closures are accelerating and now moving far faster than they can be reliably replaced. The “2022 Long-Term Reliability Assessment” (LTRA), published in mid-December 2022 by the North American Electric Reliability Corporation (NERC), identified several energy and capacity risks that underscore the need for reliability to be a top priority for resource and system planners in North America as the energy transition unfolds.⁶ The report concluded that planners and operators of the grid must increasingly account for different characteristics and performance of resources being brought online during the energy transition. “The bulk power system is undergoing unprecedented change on a scale and at a speed that challenges the ability to foresee and design for its future state,” said John Moura, NERC’s director of Reliability Assessment and Performance Analysis. The report recommends that policymakers mitigate reliability risks, specifically, “manage the pace of generator retirements until solutions are in place that can continue to meet energy needs and provide essential reliability services.”⁷

⁵ CWA § 304(b)(2)(B), 33 U.S.C. § 1314(b)(2)(B).

⁶ North American Electric Reliability Corporation (NERC), 2022 Long-Term Reliability Assessment (December 2022) (2022 LTRA).

⁷ 2022 LTRA at 7.

If public power utilities are forced to install new wastewater treatment technologies, such as membrane filtration, to meet reliability and customer demands, customers may be forced to absorb the higher costs of switching to membrane technologies. Public power utilities have no shareholders. Therefore, the costs of new technology are passed directly on to customers. Furthermore, public power utilities governing boards would be motivated to keep these facilities operating to recover those investments in new technology to keep electric rates affordable and curtail investment in cleaner technologies. NERC's Summer 2023 Reliability Assessment largely reaffirms its mid-December report. Specifically, the summer reports highlights that for the Midcontinent Independent System Operator (MISO) and Southwest Power Pool (SPP), energy output during peak demand is a key factor in determining whether there is sufficient electricity supply in the system.⁸ Both regions could experience energy challenges if wind output is lower than expected in MISO, and SPP would experience challenges meeting thermal and hydro outages if wind generation is below normal.⁹ These uncertainties could necessitate some generating resources remain operating rather than retire.

III. Compliance with the 2020 ELG Reconsideration Rule is Ongoing

In January 2021, the Biden Administration issued Executive Order 13990,¹⁰ calling on EPA, to, among other things, review the 2020 ELG Reconsideration Rule.¹¹ In August 2021, EPA issued a notice in the *Federal Register* announcing its intent to issue the 2021 Supplemental Steam Electric Rulemaking (2021 Supplemental Rule).¹² EPA announced that it would undertake a rulemaking to revise the ELGs for electric generating units (EGUs) and intended to issue a proposed rule in the fall of 2022. EPA has stated that both the 2015 Rule and 2020 Reconsideration Rule will remain in place during its review. EPA's intent to revise a rule it has just finalized while industry is already complying with both the 2015 Rule and the 2020 Reconsideration Rule is problematic. Compliance with the 2020 ELG Reconsideration Rule, requires costly treatment decisions and capital investments to have been made. To now go back and revisit the ELG Rule in the midst of industry compliance, seems arbitrary and will lead to confusion, stranded assets, and wasteful capital investments.

Local boards and city councils govern APPA member utilities. New capital projects require working through governing boards and city councils to secure approval and financing, issuing bonds to pay for the projects, and navigating the local permitting process or securing contractors through the local labor unions. Approvals are needed for any capital-intensive projects that may be required, should EPA revise the BAT limits for FGDW, BATW and set new discharge limits for CRL and LWW. Wasted costs would be compounded by installing different technologies to comply with a new rule. These costs will not be fully depreciated, and customers will have no corresponding benefits if EPA doesn't revise its Proposed Rule to account for facilities that are complying "as soon as possible" with the current 2020 ELG limitations.

⁸ 2023 NERC Summer Reliability Assessment (2023 SRA) at 5.

⁹ *Id.* at 5.

¹⁰ *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, Executive Order 13990 (Jan. 20, 2021), 86 Fed. Reg. 7,037 (Jan. 25, 2021).

¹¹ See 85 Fed. Reg. 64,650 (Oct. 13, 2020) or (2020 Reconsideration Rule or 2020 ELG Rule).

¹² See 86 Fed. Reg. 41,801 (Aug. 3, 2021) or (2021 Supplemental Rule).

A. EPA’s Justification for Proposing New ELGs Seven Years Before They are Due Is Problematic.

In July 2021, EPA announced plans to issue a supplemental ELG rule based on the Agency’s re-evaluation of the membrane technology even though the Agency finalized the 2020 ELG Reconsideration rule just eight months earlier. The CWA requires EPA to review effluent limitations “at least every five years, and if appropriate revise []” those limitations.¹³ EPA stated it was reversing course because the membrane technology was continuing to advance. EPA may not simply reverse course without providing a “more detailed justification” for the rule that reflects a reversal in position if the new rule (1) rests on contradictory factual findings or (2) the prior “rule has engendered serious reliance interest.”¹⁴ Both factors are relevant here, the industry’s reliance on the 2020 ELG Reconsideration rule and the cost associated with implementing that rule.

The 2020 ELG Reconsideration Rule included significant requirements for the power sector, the least of which was the cessation of the coal combustion subcategory. Facilities had to certify cessation of coal burning for one or more units by December 31, 2028.¹⁵ Facilities that elect to participate in the subcategory would not have to invest and incur costs to comply with the 2020 ELG Reconsideration Rule’s BAT limitations. According to EPA, 74 coal-fired plants at 33 facilities applied to participate in the permanent cessation of coal subcategory.¹⁶ Facilities that closed or repowered will likely have to still invest in replacement generation and spend money on funding, procuring, installing, and permitting that generation.

The 2020 ELG Reconsideration Rule included a subcategory for low utilization units and high FGD flow plants. The proposed rule would eliminate both subcategories.¹⁷ After reliance on these subcategories, the facilities would have to retire, repower or incur significant costs. APPA-member utility, Indiana Municipal Power Agency, filed a Notice of Plan Participation (NOPP) to participate in the low utilization EGU (LUEGU) subcategory by October 13, 2021, for their BATW system. IMPA is an indirect discharge and thus subject to PSES for their BATW. IMPA has relied on this subcategory to continue to operate its 65-megawatt (MW) peaking plant to support grid reliability. As EPA noted in the 2020 ELG Reconsideration Rule, EGUs are useful, if not necessary, for ensuring electricity reliability in the near term.”¹⁸ Reliability concerns remain and the available capacity margins in regional transmission organizations (RTOs) throughout the country have continued. As a result, dispatchable resources that can respond to peak conditions and seasonal capacity shortfalls remains necessary to the stability of the bulk power system.

However, the most significant reliance impact on the affected facilities is on those that began applying new technologies such as chemical precipitation (CP) and low hydraulic residence time biological reduction (LRTR) (CP+LRTR) systems under the 2020 ELG Reconsideration Rule BAT limitations for FGDW. While the Agency undertakes this new

¹³ 33 U.S.C §1311(d).

¹⁴ *FCC v. FOX TELEVISION STATIONS, INC.* 613 F. 3d 317.

¹⁵ 85 Fed. Reg. at 64,679.

¹⁶ 88 Fed. Reg. at 18,837.

¹⁷ 88 Fed. Reg. at 18,826.

¹⁸ 85 Fed. Reg at 64,677.

rulemaking, facilities will continue to be subject to the requirements of the 2015 Rule, *as amended by the 2020 Rule*, which are currently effective.... EPA expects permitting authorities to continue to implement the current regulations while the Agency undertakes a new rulemaking.”¹⁹

IV. Proposed Changes to Subcategories

APPA supports the continued use of subcategories. Subcategories in the 2020 ELG Reconsideration Rule were based on the CWA section 304(b)(2)(B) statutory factors of costs and the burden associated with recouping investments, the remaining useful life, equipment age, potential non-water quality environmental impacts and the harmonization with the Coal Combustion Residual (CCR) rule alternative closure provisions. APPA believes that EPA should maintain the 2020 Reconsideration Rule’s cessation subcategory, as this subcategory is essential for the industry’s transition to new, low-carbon generation. APPA believes that EPA should also maintain the subcategory for low utilization EGUs as this subcategory is essential for local reliability and grid resiliency. APPA believes EPA should modify the proposed “early adopter” subcategory to allow facilities to benefit from reasonable investments made due to the 2020 Reconsideration Rule.

A. As Proposed, the “Early Adopter” Category Should be Adjusted

EPA seeks comment on many issues related to the “early adopter” subcategory. EPA proposes to create a new subcategory for facilities that have achieved compliance with either the 2015 or 2020 rule limitations for FGDW and BATW by March 29, 2023, the date of publication of the Proposed Rule, and that elect to retire no later than December 31, 2032.²⁰ EPA states “that other utilities have avoided incurring any costs for as long as possible, and as a result, may be better poised to adjust to today’s more stringent standard.”²¹ EPA’s rationale for establishing the “early adopter” subcategory was to address the disparate costs for facilities with shorter amortization periods, eight years or less.

The “early adopter” subcategory is only available to a small fraction of affected facilities that have already obtained approvals for, contracted, installed, and started operations for wastewater treatment equipment to meet the prior ELG Rules. The “early adopter” subcategory ignores the fact that small entities generally need more time to install equipment and least likely to have their equipment to meet the 2020 ELG Reconsideration Rule installed now. The subcategory should account for the 2020 ELG Reconsideration Rule’s requirement that *all facilities* that are subject to the generally applicable compliance deadlines and those subject to the pretreatment standards for existing sources (PSES) limitations. The 2020 ELG Reconsideration Rule directs dischargers to achieve compliance with the new requirements for FGDW and BATW beginning on October 13, 2021 (“as soon as possible”, ASAP date), but no later than December 31, 2025.²² The facilities subject to the PSES limits in the 2020 ELG Rule

¹⁹ 86 Fed. Reg. at 41,801, 41,802 (Aug. 3, 2021).

²⁰ Fed. Reg at 18,859

²¹ *Id.*

²² 40 C.F.R §423.11(t).

have an even *earlier* compliance deadline of October 13, 2023. The ASAP dates in the 2020 ELG Reconsideration Rule factor in the time to plan, design, procure, and install compliance equipment, changes due to other environmental regulations impacting the power sector, time to raise capital by issuing bonds (in the case of public power), and permitting. EPA seeks to disregard simple fairness by forcing facilities to incur costs with one rule while drafting a new rule that could potentially waste consumers' money.²³

1. Modify the Early Adopter Subcategory Qualification Deadline

EPA should amend the “early adopter” qualification deadline based on meeting the 2020 ELG Reconsideration Rule discharge limits by the applicability date in the facilities permit or by the effective date of a final rule. The subcategory should also include units that have *contracted but haven't* installed chemical precipitation plus biological treatment to comply with the 2020 ELG Reconsideration Rule. Setting a March 29, 2023, deadline to qualify for the “early adopter” subcategory in a Proposed Rule will likely hasten plant closures. Further, EPA did not provide fair notices of such requirements or provide utilities with an adequate opportunity to comply.

2. Modify the Early Adopter Subcategory Cessation Date

The subcategory should also include a later cessation date for facilities that select to cease coal combustion or repower. A later date is necessary to allow for the use of wastewater treatment equipment across the equipment's useful life and avoid wasteful expenditures. EPA's proposed cessation date for the early adopter subcategory, December 31, 2032, was unanticipated for facilities during the installation of waste treatment systems to comply with the 2020 ELG Reconsideration Rule. If EPA doesn't modify the early adopter subcategory, EPA should create a new cessation subcategory to allow facilities to continue to operate after a payback period subject to zero liquid discharge (ZLD) requirements no later than December 31, 2035, or no longer subject to ELG provisions if the facility repowers or retires by December 31, 2040. This approach would avoid stranded costs, help ensure grid reliability, support an orderly energy transition, and minimize the rate shock to customers. In addition, this new subcategory would likely result in more commitments to retire if facilities could amortize equipment costs over a longer-time horizon.²⁴ In the case of public power utilities, which use 20, 30 and in some cases 40-year bond to finance large capital projects the “early-adopter” subcategory disfavors a large swath of public power utilities.

Units that convert to other fuels should also qualify for the new cessation subcategory. The pollutant loading for facilities that have decommissioned or repowered to fired natural gas is the same. Further, excluding coal plants that repower limits a communities' ability to take advantage of the existing site permits and infrastructure (transmission lines, substations, water) to support a new combustion turbine.

²³ *Landgraf v. USI Film Products*, 511 US 244, 265-66 (1994). (“Elementary consideration of fairness dictate that individuals should have an opportunity to know what the law is and to confirm their conduct accordingly; settled expectations should not be lightly disrupted.”)

²⁴ A 20-year amortization period for large capital equipment is typical for the power sector.

V. Membrane Filtration Does Not Meet the BAT Requirements Under the Act for FGDW

The 2020 ELG Reconsideration rule determined that membrane filtration was not BAT for FGDW. EPA should maintain its position. EPA is reversing course to find that chemical precipitation followed by membrane filtration with 100 percent recycling of the permeate is the technology basis for establishing BAT limitation to control discharges in FGDW.²⁵ EPA has not justified its position that advancements in membrane technology justify reversing the Agency's rejection of membrane technology in the 2020 ELG Reconsideration rule. EPA's reversal, of course, fails to provide adequate justification for this change in position; there is little new information on membranes, membrane filtration is not technologically available, and EPA's economic analysis of costs regarding brine management and paste encapsulation is flawed.

A. The Rulemaking Record Does Not Support BAT for FGDW Based on Membrane Filtration Technology

Section 301(b)(2)(A)²⁶ of the Clean Water Act requires, based on the information available to EPA, the application of the BAT for the control of toxic and nonconventional pollutants from direct dischargers. EPA must consider the technological availability and the economic achievability of a control technology in determining what level of control technology represents BAT.²⁷ EPA is proposing to base its determination that membrane filtration is technologically available to control pollutants in FGDW on full-scale foreign installations of membrane filtration to treat FGDW, domestic and international pilot tests of membrane filtration on FGDW, use of membrane filtration on other industrial wastestreams, and the use of membrane filtration on wastestreams in different industries.

EPA gathered substantial information for the 2020 ELG Reconsideration Rule, such as membrane pilot studies and information on foreign installations using membranes for various purposes.²⁸ However, as part of the Proposed Rule development process, EPA points to new information "about these international installations that support its Proposal."²⁹ EPA states that the new information pertains to the foreign installations that have achieved "zero-liquid discharge" (ZLD) of FGDW "in part by adjusting ratios and dosages of the specific chemicals used in the chemical precipitation pretreatment systems."³⁰ In the preamble, EPA cites notes from a call with Dupont, a membrane technology supplier, that sold membranes to some Chinese facilities to treat FGDW.³¹ Those notes do not provide any performance data, no operational information, no maintenance information, nor does it include basic facts such as the size of the units. The plants referenced in EPA's internal memo "*Technologies for the Treatment of Flue Gas Desulfurization Wastewater, Coal Combustion Residual Leachate, and Pond Dewatering – DCN SE10281*" pre-date the 2020 ELG Reconsideration Rule except for EPA's notes from two calls

²⁵ 88 Fed. Reg. 18,837.

²⁶ 33 U.S.C. § 1311(b)(2)(A).

²⁷ *Id.*

²⁸ 88 Fed. Reg. 18,839.

²⁹ *Id.*

³⁰ *Id.*

³¹ EPA-HQ-OW-2009-9378.

with Dupont in 2021.³² This “new information” is insufficient to propose new standards for an industry still working to comply with the 2020 ELG Rule requirements.

The Proposed Rule also points to information EPA became aware of since the 2020 ELG Reconsideration Rule that supports its decision to set BAT for FGDW based on CP+Membrane Filtration Technology. EPA says it learned that “certain Chinese facilities with membrane installations have successfully achieved zero discharges of FGDW in part by adjusting the ratios and dosage of the specific chemicals used in chemical precipitation pretreatment system.”³³ However, this citation points to a 2018 memo based on a call with Oasys, a membrane technology company. EPA also says it learned that “plants with later installations did not need to pilot membrane filtration systems before successfully installing and operating them at full scale.”³⁴ This information seems to be from a document used in the 2020 rulemaking that reports on a call with Dupont in April 2020.³⁵ This information was available to EPA before the finalization of the 2020 ELG Reconsideration Rule and doesn’t constitute “new information,” nor does this information provide a “detail justification” for the Agency to change its position.

B. Pilot Applications

The Proposed Rule identifies three additional membrane pilot studies, as the basis for EPA’s membrane selection as BAT for FGDW.³⁶ As discussed in APPA’s comments on the Proposed ELG Reconsideration Rule, “pilot studies differ from commercial operations. Pilot studies are highly controlled, small-scale systems. Personnel monitoring the pilot system are often available to make real-time adjustments, often before problems arise, unlike in a full-scale wastewater treatment system. Moreover, a commercial operating system has much less ability to adjust its feed rate than a pilot and, therefore, less flexibility overall.”³⁷ EPA points to information from three domestic pilot projects not included in the 2020 ELG Reconsideration Rule, including a pilot project conducted by the Electric Power Research Institute (EPRI) of the Saltworks EDR Selective Technology.³⁸ As noted in comments by the Utility Water Act Group (UWAG), EPA fails to put the result of the EPRI report into perspective. There is no indication that the EDR technology can scale to meet the typical FGD purge flows of the 22 plants expected to meet the ZDL requirements. The pilot was small, only operating 264 to 763 gallons per day (gpd). A limited number of grab samples were taken during the pilot study. EPRI identified limitations with the quality of treated water entering the systems may require the addition of thermal evaporators and or crystallizer to reduce the amount of brine for encapsulation. Additionally, EPRI identified the system requires a high pH (pH of 11) physical/chemical treatment step to remove low-solubility metals, fluoride, and silica.³⁹ According to EPRI

³² EPA-HQ-OW-2009-9695.

³³ Fed. Reg. 18,839.

³⁴ *Id.*

³⁵ EPA-HQ-OW-0819-8887.

³⁶ 88 Fed. Reg.18,840.

³⁷ The American Public Power Association’s Comments on 2019 Proposed ELG Rule; EPA-HQ-OW-2009-0819-8324.

³⁸ Fed. Reg. at 18,840.

³⁹ EPRI, EPRI Comments on Proposed Effluent Limitations Guidelines Rule at 23 [Table 1-2] (May 26, 2023) (EPRI Comments).

achieving this high pH followed by an acidification stage would require additional equipment modification after each stage and that would be extremely costly.⁴⁰ Given these concerns, this pilot does not demonstrate that membrane filtration is BAT.

C. EPA Underestimates Membrane Filtration Retrofit Costs

EPA proposes to find the costs of membrane filtration for FGDW are economically achievable for the industry as a whole. EPA suggests that information collected from utilities in 2022 confirms what was shown in the 2020 ELG Reconsideration record: that is some cases, that technologies such as membrane filtration maybe be less costly than biological treatment at individual plans even where on average, they would be more expensive to the industry as whole.

APPA member Muscatine Power and Water (MPW) submitted a NOPP for the voluntary incentive program (VIP) under the 2020 ELG Reconsideration which established VIP based on membrane filtration with limitations for mercury, arsenic, selenium, nitrate-nitrite, bromide, total dissolved solids and allows for a permeate discharge.⁴¹

For the 2020 VIP option MPW prepared a site-specific rough engineering estimates in 2021 to evaluate and update the costs of compliance options; the estimates were developed using quoted budgetary equipment costs from equipment suppliers with typical scale up factors consistent with industry approach to estimating at the conceptual design phase. This site-specific estimate for the VIP option chemical precipitation + membrane filtration (CP+MF (reverse osmosis (RO)), including brine management showed the 2020 VIP option would require physical/chemical and MF/RO treatment steps with an installed capital cost of approximately \$23,560,000 and annual operations and maintenance (O&M) costs of \$554,000.⁴² Installation and capital requirements to complete a system design utilizing this technology for the VIP (still allowing permeate discharge) would require the following components:

- Equalization Tank;
- Reaction Tanks;
- Clarifiers;
- Sludge Tanks;
- Chemical Dosing Skids;
- Neutralization Tank;
- Bioreactors, Ultrafilters;
- Filter Presses;
- Pumps;
- Piping;
- Valves;
- Instrumentation Controls and;

⁴⁰ EPRI at 23.

⁴¹ 88 Fed. Reg. at 64,673.

⁴² Brine management technology is a cost driver in the engineering estimate since it has not been developed sufficiently.

- Building

The costs for the CP+MF/reverse osmosis (RO) with brine solidification and discharge of permeate, resulted in an engineering estimate of \$25,800,000 in capital and \$2,700,000 in O&M. While CP+MF/RO with spray dry evaporation resulted in an estimate of \$32,400,000 in capital and \$1,400,000 in O&M.

EPA's memo, *Generating Unit-Level Costs and Loadings Estimates by Regulatory Option for 2023 Proposed Rule* notes MPW's capital costs under the proposed regulatory option 3 is unrealistic given the result of their engineering analysis discussed above for a site that plans to discharge its' permeate.⁴³ The Memo cites the capital costs under EPA preferred option for ZLD FGDW treatment is \$2,107,305 and O&M costs of \$176,647. Further, the TSD has errors regarding the capacity of the affected units. There are three generating units located at MPW, unit number 4 is 175 MW not 904 MW as EPA describes in its TSD. The remaining two units filed NOPPs to permanently cease coal generation by 2028 under the 2020 ELG Reconsideration Rule.

D. Environmental Disbenefits of Managing the Byproduct of Treating FGDW with Membrane Technology

Applying membrane technology would result in a large amount of brine (a concentrated solution of pollutants separated from waste stream by the membrane) that must be appropriately managed or sent to disposal. Proper brine management requires mixing the brine with fly ash to absorb and stabilize the brine. EPA acknowledges in this proposal's preamble the possibility that using fly ash in this manner continues to be potentially the most substantial non-water quality environmental impact when considering whether membrane filtration is BAT. Nevertheless, EPA proposes to find that these impacts are acceptable because EPA finds that there is sufficient fly ash to accommodate both brine encapsulation needs and the beneficial use market.⁴⁴ EPA claims that the Agency's analysis supports a finding that there would be sufficient fly ash for 20 of the 22 plants that would be expected to make treatment upgrades to satisfy the proposed limits.⁴⁵ EPA also cites two studies that purportedly "confirm[]" that encapsulated FGD solids "meet solid waste leaching requirements, toxicity characteristic leaching procedures (TCLP), and other local landfill regulations."⁴⁶

⁴³ *Generating Unit-Level Costs and Loadings Estimates by Regulatory Option for 2023 Proposed Rule – DCN SE10381* - Table 4.0 Unit-Level Cost Estimates for FGD Wastewater Treatment Under Regulatory Option 3 (Memo Generating Units- Level Costs and Loading Estimates).

⁴⁴ *2021 Steam Electric Supplemental Proposed Rule: Fly Ash Availability* (SE10242).

⁴⁵ Specifically, EPA's analysis finds that most of the power plants that would be expected to install membrane filtration have enough fly ash for encapsulation before accounting for reported fly ash sales, leaving only two plants without enough fly ash needed for the estimated encapsulation recipe (by approximately 240,000 tons of fly ash). After accounting for reported fly ash sales, EPA estimates that six power plants may not have enough fly ash available for encapsulation (by approximately 750,000 tons).

⁴⁶ *Technical Development Document for Proposed Supplemental Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category* (February 2022), (TDD) at 26, EPA evaluated alternative scenarios, including disposal of brine in a deep injection well and crystallization to a salt for disposal. The costs and non-water quality environmental impacts of these alternatives are presented in *Alternative Brine Management Methodology* (SE10243).

1. Uncertainty with Brine Management

Concerns remain about the effective ways to manage brine from membrane technology. Landfill applications are particularly problematic due to growing concerns that the brine contains a high salt content and given the natural solubility of the salt, would degrade a landfill liner. In addition, there are concerns about the long-term stability of crystalized brine due to its hygroscopic nature.

EPA envisions the brine produced from membrane filtration technology would be encapsulated by mixing fly ash and additives so the mixture can be pumped to an on-site landfill. In the alternative, the brine can be mixed with additives to produce a less viscous mixture to trucked to a disposal facility. However, the volume of fly ash necessary to mix with the brine for a more solid mixture is significant and will impact the transportation costs to dispose of the brine.

Continued research is necessary to fill the knowledge gaps in understanding the chemistry of paste encapsulation. Several critical research areas include expanding research on the chemistries of paste encapsulation in the long-term, examination of the implication of chemical softening and its effects on disposal, and long-term evaluation of the leachability of the material. While the technical questions remain, there are also the regulatory consequences of disposal in some areas of the country.

The disposal of solid waste varies across the country. However, most states regulate factors such as compaction and liquid content. Compaction may limit the amount of moisture added to fly ash sent to landfills because the moisture content required for compaction is less than the moisture needed for transportation to a landfill. To remedy this issue, utilities could put the mixture on a pad to dry, thus lowering the moisture content. However, the cost of the construction of the pad and transportation to and from the pad would need to be factored into EPA's Proposed Rule.

2. Fly Ash Availability

EPA's assumptions about the volume of brine and ash available are questionable. In comments submitted by EPRI, they recommend that EPA use the FGD purge flow for each plant, and the overall recovery rate, which can consistently be achieved to calculate the volume and mass of the brine generated and use those results to calculate the mass of fly ash and additives need to encapsulate the brine.⁴⁷ EPRI's analysis is more than ten times EPA's estimates. The mass of fly ash used to encapsulate the brine will significantly impact transportation and disposal costs and the economic achievability of membrane technology as BAT.

Many public power utilities beneficially use fly ash and sell the material in the market for concrete, soil amendment, and waste stabilization. EPRI estimates based on Energy Information Agency (EIA) data that 1.5 million tons of fly ash currently being beneficially reused by the 22 plants EPA has identified will be diverted to encapsulation.⁴⁸ While during the year 2018-2020, on average, 13 million tons were used for waste stabilization and in concrete. The removal of 1.5

⁴⁷ EPRI at 3-4.

⁴⁸ EPA Feb. 27, 2023, Fly Ash Memo at 5, EPA-HQ-OW-2009-0819-9685 (DCN SE10242).

million tons is significant and will impact the market and potential revenue of small public power utilities.

E. EPA Should Allow Regular or Intermittent Discharge from Membrane Filtration Technology If EPA Ultimately Selects the Technology as BAT

The 2020 ELG Reconsideration Rule already correctly identifies BAT for FGDW as CP + biological treatment. However, the Proposed Rule requests comment on potential alternative membrane filtration effluent limitations if comments can demonstrate that regular or intermittent discharge of FGDW is necessary for some facilities.⁴⁹ Allowing regular discharges from the membrane filtration system would support regular system maintenance and promote longevity. These regular discharges during maintenance would lessen the stringency of a ZLD requirement, while incentivizing proper maintenance of the system. Such discharges should be subject to total suspended solids (TSS) and oil and grease limits equal to current best practicable control technology (BPT) and to arsenic and mercury limits consistent with the use of chemical precipitation.

VI. Concerns with the Economic Achievability of a Completely Closed-Loop Recirculating BATW System.

EPA is proposing a dry handling or close loop system as the technological basis for BAT limits to control wastewater discharges of BATW. APPA believes EPA should maintain the 2020 ELG Reconsideration Rule's determination that a high recycle rate BATW system with a limited purge is BAT. The 2020 ELG Reconsideration Rule acknowledges that some wet bottom ash systems can operate as ZLD, most systems, however, require a discharge to manage scaling, precipitation events, water, and water chemistry imbalances.⁵⁰ Furthermore, the ability to blow down a small side stream from BATW recirculating system under limited conditions allows facilities to support system reliability and prevent premature equipment failure. EPA has not provided new information that justifies its change in position that dry handling or closed -loop systems represent BAT.

A. A Precipitation Discharge Allowance is Warranted

BATW system are designed to accommodate the extra capacity to handle rainfall and runoff from certain size precipitation events. However, these precipitation events more frequently occur back-to-back and with higher accumulation rates.⁵¹ A ten percent purge allowance has a minimal environmental impact. If the Agency doesn't maintain the volumetric purge, EPA should allow for an unlimited one-time purge because of a large precipitation event. EPA should equate the large precipitation event to a 10-year, 24-hour storm event.

⁴⁹ 88 Fed. Reg. at 18,840.

⁵⁰ 85 Fed. Reg. at 64,669.

⁵¹ 85 Fed. Reg. 64670n.76; 2020 UWAG Comments at 16-18.

B. Maintenance Event Purge

Maintenance event purges are not covered under the “minor maintenance event” exemption in the 2020 ELG Reconsideration Rule.⁵² Maintenance events like draining the remote drag train system to repair the drag chain or draining for an inspection, or other maintenance events require transporting water out of the equipment. If the Agency does not adopt a high-recycle rate system as BAT for BATW, then at a minimum, EPA should revise the definition of BATW to exempt maintenance events and eliminate the term “minor”. EPA seeks comment on expanding the exemption.⁵³ While maintenance events like emptying the BATW system may occur infrequently, these events should be reported in the discharge log describing the type of maintenance being performed. Maintaining a wet bottom ash system so there are no leaks or maintenance events is difficult as sluicing ash is a very abrasive process and regular maintenance is critical to keeping the system operating. Leaks from seals, connections, pipes, and pumps can occur; they are minimized with proper maintenance practices but not all occurrences can be prevented. For a small system a reasonable volume to exclude from definition of BATW would be 1,000 gallons (less than 0.5 % of a small system) or any water that is captured and returned to the bottom ash system for treatment before purging.

Expanding the exemption to cover other systems outside of the bottom ash system which are linked and could leak into the bottom ash system is warranted. Examples would include a boiler tube leak (unplanned maintenance) or other maintenance cleaning processes where the water can contact the bottom ash system but is not used to transport the bottom ash. Another example is quench water in a dry system, it is in contact with bottom ash but is included in the high recycle unit treatment system before being discharged as purge water.

To monitor and report maintenance water issues above 1,000 gallons, the facility could keep logs and report issues as follows:

- A log of maintenance water discharges >1,000 gallons could be maintained as a National Pollutant Discharge Elimination System (NPDES) permit condition.
- For reporting, a summary of such discharges could be submitted as part of NPDES reports.

C. Quench Water is Not “Bottom Ash Transport Water” or “Bottom Ash Purge Water”

APPA supports EPA’s position that bottom ash quench water is not used to transport bottom ash and is considered low-volume waste.⁵⁴ Affected facilities have relied on this interpretation since the 2015 and 2020 ELGs rules. A reversal would disadvantage those facilities that installed technologies that use smaller volumes of water than conventional BATW systems. EPA should maintain its position. EPA seeks comment on whether the Agency should continue to allow for a purge of both the contact water and transport water.⁵⁵ And seeks comment on whether

⁵² 40 C.F.R 423.11(p).

⁵³ 88 Fed. Reg at 18,845.

⁵⁴ 88 Fed. Reg. at 18,848.

⁵⁵ *Id.*

the purge of contact water, which is not covered by the definition of transport water in 40 C.F.R. §423.11(p) should be included as “bottom ash purge water” under §423.11(cc) and thus subject to BPJ analysis.⁵⁶ Quench water is not purge; therefore, it would be inappropriate for EPA to consider this water as bottom ash purge water. Quench water is generally a small amount of flow with low pollutant concentrations. Given the absence of data, any change in approach to consider quenching water as “transport water” is arbitrary. In addition, the costs of treating such as small wastestream is disproportionate to the environmental benefit.

APPA believed it would be considered disparate treatment to define treated purge water as BATW and allow quench water from dry systems to be called just contact water. Purge water leaving a high recycle system that has also been treated extensively is no worse than and likely better quality than quench water discharged from a dry bottom ash system. Purge water should continue to be distinct from BATW in a final rule. The record contains no data regarding total suspended solids (TSS) in quench water coming from a submerged grinder conveyer (SGC), submerged flight conveyors (SFC) and or a mechanical drag train system (MDS). It’s expected that the TSS in quench water is far higher than the TSS in purge water treated to remove TSS.

SFCs below a boiler are in contact with bottom ash, but also typically receive pyrites from the coal crushers, and some fly ash in the form of economizer ash. All systems are unique but it is common for the pyrites and economizer ash to have a smaller particle size than the bottom ash and these smaller particles can be carried away in the overflow from the SFC. In addition, SFCs, MDSs and SGCs are not designed to reduce the TSS of the overflow water like a high rate recycle system.

1. Minimizing the Purge for High Recycle Rate BATW Systems

The 2020 ELG Reconsideration Rule’s directs the permitting authority to determine the site-specific BA purge water volume.⁵⁷ To ensure the purge rate is minimized, a detailed site-specific study is developed based on the requirements in §423.19 (c)(3). As part of these existing requirements a final report is submitted to document the required discharge volume limits. An example site-specific purge rate based on such a site -specific study is shown below:

⁵⁶ *Id.*

⁵⁷ 85 Fed. Reg. at 64,707

Figure 1 Excerpt from a Draft Report BA Purge Calculation

Discharge Item	Avg Dail Vol., Gal	Avg % of BA System Volume	Frequency
Maintain water balance chemistry	25,900	8.4	Continuous
Precipitation Event	1,103	0.4	Intermittent, less than one time <u>during</u> 30 day rolling avg
Ash Hopper Overflow	225	0.1	Intermittent, less than one time <u>during</u> 30 day rolling avg
Overflow Tank Overflow	450	0.2	Intermittent, less than one time <u>during</u> 30 day rolling avg

For reporting and monitoring, reports of purge water overflows such as those described above could be included in the regular NPDES permit reports.

D. Cost Assumptions of ZLD BATW System Are Not Justified

The costs associated with complete recycle BATW systems are not justified under CWA § 304(b)(2)(B), 33 U.S.C. § 1314(b)(2)(B) (one of the factors for EPA to consider in setting BAT is “the cost of achieving such effluent reduction”). EPA asserts that dry handling and closed-loop systems are economically achievable without explaining what has changed since the 2020 ELG Reconsideration Rule that now supports that determination. Instead, EPA states “[it] never found that additional costs to achieve zero discharge were not economically achievable.”⁵⁸

The Proposed Rule uses the 2020 ELG Reconsideration Rule as a baseline in evaluating the costs of the Proposal even though some facilities are still in the process of installing the technologies required by the 2020 ELG Reconsideration Rule by their “as soon as possible” date. MPW has indicated that their compliance with the 2020 ELG Reconsideration rule is ongoing for their 175 MW unit. In fact, MPW operates an existing high recycle unit but has spent \$400,000 in capital so far to improve the high recycle process to minimize its purge rate and is scheduled to spend approximately \$1,000,000 in capital in the coming year for the same reason. In addition, the annual O&M costs to operate a high recycling system with a purge are estimated to be \$200,000. The following are costs estimates to convert a high recycle rate BATW system on a nominal 175 megawatt (MW) unit to various BATW ZLD technologies:

- MPW estimates the capital costs to convert their existing high recycle BATW system to a ZLD wet unit are roughly \$5,000,000 to \$10,000,000 in addition to

⁵⁸ 88 Fed. Reg. at 18,846.

installing a purge collection tank, pumps, piping, controls, and treatment system to use as FGD make-up water.

- MPW estimates the capital costs to convert a high recycle bottom ash system to a ZLD dry pneumatic conveying system would be on the order of \$25,000,000 to \$30,000,000. Conversion may be difficult due to the fact that the layout of the bottom of boiler has little space under the boiler to accommodate typical equipment. The foundation would have to be broken up and a pit installed, or a low-profile submerged chain conveyor system installed, or a dry pneumatic conveying system installed which would require modifying much of the bottom of the boiler beyond other typical dry conveying systems. In order to retrofit dry pneumatic conveying system, it would require new conveying blowers, grinders, boiler bottom hopper, piping, silos along with truck load out.
- MPW estimates to convert this high recycle bottom ash system to a below the boiler mechanical drag chain type system, the expected capital costs would be on the order of \$15,000,000 to \$20,000,000.

EPA estimates that the total annualized compliance costs for BATW ZLD would be \$45 million per year (pre-tax) as compared to \$3 million per year (pre-tax) for high recycle rate systems.⁵⁹ EPA's costs are wildly out of sync with the rough engineering estimates MPW has provided.

VII. Comments on the Proposed Combustion Residual Leachate (CRL) Provisions

APPA asks that EPA reconsider its proposal to apply a uniform BAT standard for the treatment of CRL discharges from all applicable facilities. APPA believes that the regulatory scheme should be redesigned in a manner so that it is equally applicable to CRL discharges from different types of facilities. Those facilities may include landfills and surface impoundments still in operation, landfills at closed facilities, future coal combustion residual reclamation operations for beneficial use, and landfills at retired facilities.

There is ample evidence that the costs of treating CRL discharges from each of these facilities differ widely. Under EPA's proposal, all in-scope CRL discharges would need to be treated through the application of chemical precipitation technology. However, the amount of discharge and pollutant loadings at each of the facilities described above vary widely and impacts the cost-effective calculation of the treatment option. For example, UWAG's comments cite research that shows, the amount of pollutant loadings in combustion residual leachate at retired facilities is approximately 1/10 of an active landfill's load.⁶⁰ Additionally, landfills or impoundments nearing closure have substantially less flow and pollutant loadings than active landfills or impoundments. As a result, EPA's proposal to loop all of these different facilities under a uniform BAT standard would lead to inequitable results for owners or operators of landfills or impoundments at either facilities nearing closure or retired facilities. To remedy this result, we suggest that in a final rulemaking, EPA provide the ability for facilities nearing closure to postpone the treatment of CRL discharges for a few years to avoid the construction of such expensive treatment systems that would only last for a short period of time.

⁵⁹ See Regulatory Impact Analysis (RIA) at 3-7, Tbl. 3-2.

⁶⁰ UWAG's Comments at 101.

Alternatively, EPA could also provide a more flexible discharge limitation scheme for each of the different types of facilities.

EPA fails to fully recognize the additional costs of treating CRL discharges from landfills or surface impoundments at retired facilities. For example, to implement the chemical precipitation system at a retired facility, power would need to be brought on from an external source to the site because no power is generated onsite. In addition, the facility would need to expend resources to bring on an operator and staff to work exclusively at a retired facility. Finally, if the landfills at the retired facility are no longer used to accept CRL products, then those discharges would need to be hauled to an off-site to begin the treatment process. These additional fuel, personnel, and transportation costs were not adequately considered by EPA in the Proposed Rule.

A. Facilities That Co-Treat CRL and Stormwater Should Be Exempt

For many plants, CRL and stormwater are comingled prior to treatment and discharge, it would be very costly to separate CRL from stormwater.⁶¹ Leachate collection systems also collect low volume waste, stormwater, or other on-site streams making it difficult to separate or extract leachate from the system. Based on how some landfills are constructed, it is technically infeasible to collect only leachate.

EPA should exempt facilities that commingle their CRL or co-treated with stormwater, after large storm events from final CRL limits. Section 423.12(b)(10) establishes BPT limits for coal pile runoff and section 423.15 sets new source performance standards for coal pile runoff. Both provisions exempt any untreated overflow from facilities designed, constructed, and operated to treat coal pile runoff that results from a 10-year, 24-hour rainfall event. Where facilities are designed, constructed, and operated to similar standards, any overflow combined wastestream of CRL and stormwater should be exempt from any final CRL limits.

VIII. CRL Discharges via Groundwater Should Not be Subject to BAT Limitations

APPA does not believe that applying BAT limits for the treatment of CRL from functionally equivalent discharges is justified or appropriate in this rulemaking. APPA expects that, in the great majority of cases, releases of CRL from landfills and impoundments into groundwater (which are regulated under the Resource Conservation and Recovery Act (RCRA)) to surface waters do not amount to “discharges of pollutants” from point sources through groundwater to waters of the United States (WOTUS) that would qualify as the functional equivalent of a direct discharge under the *County of Maui*.⁶² The implications of the court’s decision in *Maui* extends to all point source discharges through groundwater that have the functional equivalent of a direct

⁶¹ The combined wastestream rule would apply in most circumstances to such comingled wastestreams. See 2015 TDD at 14-12 (citing 40 C.F.R. § 403.6(e)).

⁶² *County of Maui v. Hawaii Wildlife Fund*, 140 S. Ct. 1462 (2020).

discharge regardless of industry.⁶³ As such, functional equivalency determinations should be the subject of a separate rulemaking and the Agency should issue guidance applicable for all industries.

In the preamble of the Proposed Rule, EPA states that facilities with landfills and impoundments that may generate discharges of CRL which flow indirectly into a navigable source of water have a legal obligation under *Maui*, to treat those discharges that are the functional equivalent of a direct discharge.⁶⁴ According to EPA, “any discharge through groundwater that is the functional equivalent of a direct discharge under the *Maui* decision would be subject to the same BAT limitations as discharges that occur at the end of the pipe.”⁶⁵ EPA goes on to note that potential permittees or owners/operators of landfills and impoundments with *suspected* functional equivalent discharges have the obligation to produce data and documents so that the permitting authorities can decide if those discharges require NPDES permits. EPA goes so far as to “recommend that permit applications with *potential* CRL discharges through groundwater.....submit a permit application.”⁶⁶ EPA’s recommendation is outside the bounds of its authority and is premature given the absence of any promulgated rule or Agency guidance. The CWA does convey authority to regulate seepages of water from coal combustion residuals units into groundwater, whether the diffuse seepages ultimately reach a WOTUS.

EPA includes seven categories of general information, and fifteen categories of technical information EPA recommends facilities submit to the permitting authorities. The suggested categories of information are vast and would require considerable effort and cost to obtain, especially for public power utilities that have limited personnel and resources. For example, EPA recommends that facilities submit data that reflects the hydrology of their landfills and impoundments as it relates to groundwater flow. However, at the applicable landfills and impoundments, there are typically no identifiable outfall or discharge point, and it may not be possible to determine where the groundwater connects with navigable water. There may even be a reverse exchange of flow, where surface water flows back into the groundwater. As a result, it is very difficult for facilities to provide data on where the pollutant enters the groundwater and subsequently the surface water, or the amount and concentration of pollutants entering jurisdictional water, and etc.

It is clear from the preamble that EPA did not adequately consider all these concerns because the Agency merely speculates that “much of the supplemental data and information ... is already required and made publicly available under the CCR rule.”⁶⁷ Additionally, if this information is already publicly available under the CCR rule, the burden to reproduce the same documents should not fall on the potential permittees.

⁶³ *County of Maui* involved a citizen suit alleging that releases of sewage from the County’s wastewater reclamation facility through groundwater to the ocean constituted discharges of pollutants to navigable waters that required an NPDES permit. 140 S. Ct. at 1469.

⁶⁴ Fed. Reg. at 18,828.

⁶⁵ 88 Fed. Reg. at 18,850.

⁶⁶ Fed. Reg at 18,888

⁶⁷ 88 Fed. Reg at 18,889.

A. EPA Should Not Require Submission of Information Related to Functionally Equivalent Discharges of CRL through Section 308 Information Requests.

EPA solicits comments on the three recommend approaches to obtaining the information for permit writers to determine if CRL releases are functionally equivalent and require a NPDES permit. EPA’s approach to collecting this information is problematic as it can be construed as obfuscating formal administrative procedures and influence the state NPDES permit process under the façade of “informal recommendations”. As explained above, APPA does not agree that EPA should place the burden of submitting information related to functionally equivalent discharges of CRL on facility owners/operators. Moreover, the association does not agree that EPA should require the submission of such information through section 308 information requests under the Act. It is inconsistent for EPA to state that much of the information is already publicly available under the CCR rule and, at the same time, request comment on whether the Agency should use section 308 information requests to obtain such information. For public power utilities that are already burdened with an overwhelming amount of data and document requests under the NPDES permitting process, adding this burden is untenable. State environmental protection agencies filed an *amicus* brief in support of petitioner in the *County of Maui*, pointing to the real potential that “[he] load of NPDES permits may need to be issued and enforce by state agency is likely to increase astronomically” if the Supreme Court required permits for discharges of pollutants via groundwater to surface water and noted that “[h]ese increased burdens threatened to divert scarce resource away from state specific program that already protect the Nations waters....”⁶⁸ This burden would amplified if CRL releases were determined to be functionally equivalent.

B. The ELG Rule is an Inappropriate Regulatory Framework to Address the Issue of Releases of CRL to Groundwater.

The ELG Rule is not an appropriate avenue to address releases of CRL from landfills or surface impoundments to groundwater, and, subsequently, the surface water. There already exist many local, state, and other federal programs that regulate this particular issue. EPA’s proposal to address this issue under the ELG rule within the NPDES permitting process would only create uncertainty through the potential adoption of conflicting or contradictory requirements.

For example, there are already extensive state-led enforcement regulatory schemes that cover releases in groundwater. If EPA were to attempt to regulate the releases of CRL to groundwater through the ELG rule, the Agency would be intruding in a regulatory area that should be left mostly to the states as envisioned under the Clean Water Act. The Supreme Court also recognized the autonomy and responsibility of states to regulate groundwater pollution and non-point source pollution.⁶⁹ Consistent with the Congress’ intent, this issue should be left largely to states to regulate and enforce.

⁶⁸ See Brief of *Amici Curiae* State of West Virginia et al. in Support of Petitioner, *County of Maui v. Hawai’I Wildlife Fund*, No. 18-260, at 29 & n.8 (May 16, 2019) (citing EPA ICR No. 0229.21 Supporting Statement, Information Collection Request for National Pollutant Discharge Elimination System (NPDES) Program (Renewal), EPA ICR at *17, tbl. 12.1 (Dec. 2015), <https://www.reginfo.gov/public/do/DownloadDocument?objectID=60917402>)).

⁶⁹ *County of Maui v. Hawaii Wildlife Fund* 140 S. Ct. at 1471.

In addition to the pre-existing local and state regulatory schemes, at the federal level, the RCRA regulations already provide important federal protection for groundwater near landfills and surface impoundments. For example, the CCR regulations subject applicable landfills and surface impoundments to groundwater monitoring and require corrective actions for contaminated groundwater.⁷⁰

Regardless, if EPA still desires to address this issue within the NPDES permitting process, such regulatory action should be conducted separately. In such an action, EPA should consider revising its NPDES rules to deal more holistically with this complex topic.

C. EPA Fails to Address the Threshold Issues of How the NPDES Program Would Apply to CRL Release Via Groundwater to a WOTUS.

The Proposed Rule fails to address the fundamental definitions underlying the CWA, such as a “point source” or the “discharge of a pollutant,” because EPA contends that “such issues are outside the scope of this rulemaking.”⁷¹ Understanding these definitions as defined under the CWA is integral to grasping how permitting authorities would apply the NPDES program to the potential release of CRL from CCR landfills or impoundments through groundwater to a WOTUS. If EPA fails to address these threshold definitions meaningfully, any final rule will cause great uncertainty for permittees and permitting authorities.

In the *County of Maui*, all parties agreed that the wells at issue fell within the definition of a point source. This proposal fails to clearly define what a “point source is.” The CWA defines a “point source as “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stack ... *from which pollutant or maybe discharged.*”⁷² This definition expressly requires a “discernible, confined discrete conveyance,” something that carries an object to a particular place from another.⁷³ The point source conveyance must be the means by which pollutants are transported to and deposited into navigable water, and the discharge of pollutants occurs only at the outfall where the conveyance adds pollutants to navigable waters. This conveyance is not present when, for example, leachate seeps from a CCR surface impoundment to groundwater.

The Fourth Circuit Court of Appeals in *Sierra Club v. Virginia Electric & Power Co.*, 903 F.3d 403, 410-411 (4th Cir. 2018) (*VEPCO*), held that diffuse seepage of pollutants through the bottom of the company’s ash pond and landfill did not qualify as the sort of “confined, discrete conveyance” required by the CWA’s definition of “point source”. Sierra Club argued that the settling ponds were “point sources,” because they were “containers ... one of the facilities included as examples in the definition of a point source.” But the court rejected this position, noting that:

in so arguing, Sierra Club would have us read the critical, limited word ‘conveyance’ out of the definition. Regardless of whether a source is a pond or some other type of container, the source must still be functioning as a conveyance

⁷⁰ 40 C.F.R. §§ 257.90(b)(1) & (b)(2), §257.98(a).

⁷¹ 88 Fed. Reg. at 18,850

⁷² 33 U.S.C §1362(14).

⁷³ *Id.*

of the pollutant into navigable waters to qualify as a point source. In this case, the diffuse seepage of water through the ponds into the soil and groundwater does not make the pond a conveyance any more than it makes the landfill or soil generally a conveyance.

While, *VEPCO* predates the *County of Maui*, the Supreme Court's decision in *Maui* doesn't overturn this point source issue in *VEPCO*, because both parties concurred in the *County of Maui* that the wells at issue were within the definition of a "point source" and that groundwater was a nonpoint source. Nothing in the *County of Maui* decision, therefore, affects the Fourth Circuit's determination that diffuse seepage from an ash pond or landfill is not itself a point source.

EPA fails to address the practical consideration of time; *when* a pollutant released from a point source that reaches WOTUS through groundwater is a functional equivalent of the direct discharge and, therefore, subject to the NPDES program. A release of CRL into groundwater is not regulated under the CWA *unless* it is released from a point source and travels through groundwater to WOTUS in a manner that is the functional equivalent of a direct discharge to WOTUS under the *County of Maui*. "Time and distance will be the most important factors in most cases, but other relevant factors may include, e.g., the nature of the material through which the pollutant travels and the extent to which the pollutant is diluted or chemically changed as it travels."⁷⁴

CWA provisions recognize that not all pollution is point source pollution measurable through effluent limitations, including the release of pollutants into groundwater.⁷⁵ In 1972, Congress enacted 1314(f), directing EPA to issue "guidelines for identifying and evaluating the nature and extent of *nonpoint* source of pollutants," as well as "process, procedures, and methods to control pollution" from "subsurface excavations" that potentially discharge pollutants to groundwater.⁷⁶ Likewise, in § 208(b), Congress required states to develop waste management plans to include "a process to control disposal of pollutants on land or in *subsurface excavations* within such areas to protect *ground and surface water quality*."⁷⁷ It is also instructive to review provisions of §319, which set out a framework for identifying navigable water impaired by nonpoint sources and controlling those sources. Further, §319 includes express provisions allowing state grants for protection of groundwater where the Administrator determines that the activity is warranted to advance the objective of the nonpoint source program- *i.e.*, protection and improvement of navigable waters.

1. The NPDES Program Is Not Designed to Regulate Pollutants Released via Groundwater to WOTUS

Fundamentally the NPDES program is focused on treating end-of-pipe discharges directly into surface waters.⁷⁸ For a permit writer to establish effluent limitations requires

⁷⁴ *County of Maui*, 140 S. Ct. at 3.

⁷⁵ *Catskill Mountains Chapter of Trout Unlimited, Inc. v. EPA*, 846 F.3d 492,529-30 (2nd Cir. 2017).

⁷⁶ 33 U.S.C. §1314(f).

⁷⁷ 33 U.S.C. §1288(b)(2)(K).

⁷⁸ 40 CFR 122.45(a) (requiring the effluent limitations, standards, and prohibitions be established "for each outfall or discharge point of the permitted facility").

identifiable discharge points where the pollutant being added “into” navigable water can be measured. This can occur only if pollutants are added into navigable waters by a “discernible, confined and discrete conveyance.”⁷⁹ Typically there is no identifiable outfall or discharge point that can be used to develop permit conditions where there is an addition via groundwater rather than an addition from a point source. It may be impossible to determine with specificity where the groundwater connects with navigable water, as the NPDES rules anticipate. That complex hydrology of groundwater confuses the application and enforcement of NPDES effluent limits and monitoring requirements. Permitting releases via groundwater to surface waters would not be workable or realistic in most circumstances. It would raise implications far broader than establishing ELGs, which are not within the scope of this rulemaking.

2. Other Environmental Statuses May be Better Suited to the Treatment of CRL Releases via Groundwater

RCRA is a comprehensive environmental statute that governs the treatment, storage, and disposal of solid waste and hazardous wastes. Congress specifically created RCRA to avoid, minimize, and remediate releases to groundwater, including those that affect or could affect surface water.⁸⁰ In fact, RCRA and CWA *cannot both* apply to releases to surface water via groundwater, as point source discharges subject to CWA §402, they are statutorily excluded from the definition of “solid waste” under RCRA. Therefore, point source discharges subject to NPDES permitting requirements are not subject to regulations under any rule promulgated under RCRA. This statutory exclusion, known as the “industrial wastewater exclusion,” is designed to avoid duplicative regulations of point source discharges under the CWA and RCRA.

In 2015, EPA promulgated a rule under RCRA designed, in part, to control and remediate groundwater discharges from coal ash impoundments: The Coal Combustion Residuals Rule (CCR Rule).⁸¹ The CCR Rule’s extensive groundwater monitoring and corrective action requirements were designed specifically to address risks from coal ash disposal, including impacts to downgradient surface water.⁸² The CCR Rule includes a comprehensive groundwater protection program to “ensure that groundwater contamination at new and existing CCR units will be detected and cleaned up as necessary to protect human health and the environment.”⁸³ The CCR rule requires monitoring of the constituents found in coal ash. If groundwater contamination is identified over background concentrations, facilities must perform more “directed” groundwater monitoring to determine whether the constituents of concern are above the CCR Rule’s groundwater protection standard.⁸⁴ If the groundwater protection standard is exceeded, corrective action must be taken to remediate all contaminants until they are below the standard.⁸⁵ Under the CCR Rule, most groundwater protection standards are set at the maximum

⁷⁹ 33 U.S.C. § 1362(14).

⁸⁰ *Meghriq v. KFC W., Inc.*, 516 U.S. 479,483 (1996).

⁸¹ 80 Fed. Reg. 21,302 (April 17, 2015).

⁸² 80 Fed. Reg. at 21322 (noting that EPA’s risk assessment developed for the CCR Rule included consideration of the “potential impact from the “potential interception of contaminated groundwater plumes by surface water bodies”).

⁸³ *Id.* at 21,396.

⁸⁴ 40 C.F.R. §257.95 (a).

⁸⁵ *Id.* at §257.96(a) and §257.98(c).

contaminant level (MCL). The MCL is a drinking water standard set by EPA. For constituents without an MCL, the groundwater protection standard is set at the background level for the site.

The CCR Rule's corrective action requirements are triggered upon the detection of an exceedance of a groundwater protection standard. The potential corrective action must not only attain the groundwater protection standard, but also (1) protect human health and the environment, (2) control the source(s) of the release to reduce or eliminate further releases of CCR constituents from the CCR unit, (3) remove from the environment as much of the contaminated material that was released from the CCR unit as possible, and (4) comply with all applicable RCRA requirements for the management of wastes.⁸⁶ The corrective action provision in the CCR Rule requires the remediation of groundwater impacted by releases from CCR units and abatement of future groundwater contamination and any resulting downgradient impacts to surface water.

The CCR rule is a more appropriate regulatory regime to identify and remediate groundwater releases if they are functionally equivalent to discharges to surface waters. EPA has extensive knowledge and has previously considered issues such as differentiating between naturally occurring pollutants and pollutants added by leachate and the proper technique for groundwater treatment in the CCR rule. If EPA were to address the release of CRL via groundwater to a WOTUS in any final ELG rule, the Agency should find that the groundwater monitoring, reporting, and treatments are BAT for CRL release into WOTUS that occur via groundwater.

IX. Comments on the Legacy Wastewater Provisions

EPA should retain the current definition that legacy wastewater consists of only those wastewaters that are generated after the applicability date of the new more stringent limits established by the permitting authority. New ELGs should not apply retroactively to discharges associated with wastewater that was generated prior to the time the new ELGs become effective.

A. Applicability of Part 423 to Inactive/Retired Plants

EPA is proposing to clarify that part 423 applies to discharges of proposed decant and dewatering at inactive retired power plants because the discharge of these wastewaters “result[s] from the operation of generating unit.”⁸⁷ EPA goes on to reason “that discharges resulting from the operation of a generating unit,” under 40 C.F.R § 423.10, “means that the discharges of legacy wastewater that occur after the unit has ceased generation still results from the operation of the generating units because, *but for* the operation of the generating units, there would be no subsequent discharges.”⁸⁸ EPA's interpretation of applicability is far too broad and would bring in all wastestreams discharges as at inactive or retired facility with the exception of stormwater and subject these discharges to ELG requirements for the life of the discharge. APPA believes that wastewater generated from the operation of the generating unit should be subject to ELG upon retirement or decommissioning if such wastewater is discharged to surface water. Legacy

⁸⁶ 40 C.F.R. § 257.97(b).

⁸⁷ 88 Fed. Reg. at 18, 854

⁸⁸ *Id.*

wastewater generated during and from the operation of a generating plants, and discharged to surface waters should be distinguished from other wastewaters, such as CRLs. CRL first generated after the retirement of a generating units cannot be said to resulted “from the operation of a generating unit.” Rather CRL is generated from “liquid ... that has percolated through waste” after generation and disposal in a CCR unit.⁸⁹

B. EPA Should Not Set a Uniform BAT Standard for Legacy Wastewaters

In the Proposed Rule, EPA does not propose to establish a BAT standard for the treatment of legacy wastewaters. Instead, the Agency proposes to allow the permitting authorities to set facility-specific treatment standards on a BPJ basis. In addition, EPA proposes to create new categories of discharges of legacy wastewaters to enable the permitting authorities to establish different treatment standards for each category, if needed.

APPA agrees that establishing a uniform BAT standard for the treatment of legacy wastewaters is unjustified. In addition to the factors that EPA highlighted in the preamble of the Proposed Rule, APPA would point out that the costs to implement such a technology for the treatment of legacy wastewaters would not be acceptable for most public power utilities. For example, due to the impending closure deadlines in the CCR rule, the majority of legacy wastewater in landfills or surface impoundments would be completely discharged before the finalization of the ELG rule. As a result, for facilities with landfills or surface impoundments where the legacy wastewater has already been mostly discharged, implementing an entirely new technology to treat such wastewater would be cost-prohibitive. Similar to our arguments above on EPA’s proposal to require the use of chemical precipitation technology to treat CRL discharges, a requirement to use such technologies to treat legacy wastewaters would provide unequitable and cost-ineffective results for many facilities.

C. EPA Should Also Refrain From Creating New Definitions of Legacy Wastewaters.

The Proposed Rule seeks to create new categories of legacy wastewaters, distinguished by their generation date or their location within the different layers of a closing surface impoundment’s wastewater. EPA proposes to create these new categories to allow the permitting authorities to have the option of designating different treatment standards based on a separate BPJ analysis for each waste stream. However, APPA believes that EPA’s proposal is not founded on science and may only create more confusion for the regulated community.

For example, EPA proposes to define legacy wastewaters differently based on their generation and discharge date and suggests that this would allow the permitting authorities to potentially designate more stringent treatment standards for the newly defined legacy wastewaters. In particular, EPA notes that wastewaters that were generated and discharged to a pond after the publication of the 2015 or 2020 rule, but before the compliance date specified in the permit under those rules would be defined differently from the legacy wastewaters that had already accumulated over time in a surface impoundment. APPA does not believe that this separation is necessary or ideal. For facilities that plan to cease coal combustion soon or have

⁸⁹ §423.11(r) (definition of combustion residual leachate).

recently ceased combustion, treating legacy wastewater in the first bucket would be just as costly and difficult as treating legacy wastewaters that have accumulated for a number of years.

Even without these proposed definitions or categorization, permitting authorities already have the use of BPJ analysis factors to assign different treatment standards for streams of legacy wastewaters. For example, the permitting authorities may consider the category of the origin wastewater (BATW, FGDW, or FATW), the quantity of flow, or whether the wastewater comingles with low volume wastes or stormwater. Therefore, EPA should not attempt to divide legacy wastewaters into two distinct categories.

In addition, EPA's proposed categorization of the decant wastewater and dewatering wastewater only creates additional confusion due to ambiguous terms within their definitions. For example, EPA does not clarify exactly what body of legacy wastewater would qualify as decant wastewater. The proposed definition only states that decant wastewater includes waters down to the level "sufficiently above" any CCRs that, when drained, do not resuspend the CCRs. The term "sufficiently above" creates significant uncertainty and does not help the regulated community form a reasonable expectation of which wastestreams may form the decant wastewater.

D. EPA Should Not Establish Additional Factors that Permitting Authorities Must Consider When Establishing BPJ Limits.

In addition to allowing the permitting authorities to establish a facility-specific treatment standard for legacy wastewaters under the BPJ basis, EPA should also allow permitting authorities to conduct their BPJ analysis based on the pre-existing factors as specified in 33 U.S.C. § 1314(b) and 40 C.F.R. § 125.3(d). APPA does not believe that EPA should mandate additional factors that permitting authorities must consider when conducting their BPJ analyses. If the Agency were to specify factors that the permitting authorities must consider in addition to the factors that already exist, it would complicate and slow down the current BPJ determination process. For example, many permitting authorities already struggle to perform timely BPJ analyses due to a lack of resources and an overabundance of applicants. However, if EPA were to further complicate this process by adding more factors that these authorities must consider, the permitting process would be more inefficient.

X. 2020 ELG Reconsideration Rule Subcategories

A. APPA Supports Maintaining the 2020 ELG Rule Voluntary Incentive Program and Cessation of Combustion Subcategories.

According to EPA, the proposal "would not impact dischargers choosing to meet the 2020 VIP effluent limitations for FGD wastewater."⁹⁰ APPA agrees that this is the right approach. At least 12 EGUs (at four plants) have requested participation in the 2020 Rule VIP.⁹¹ EPA should maintain the 2020 Rule's VIP option for compliance with FGDW limits.

⁹⁰ 88 Fed. Reg. at 18,887.

⁹¹ 88 Fed. Reg. at 18,837.

We also agree that EPA should maintain the 2020 ELG Reconsideration Rule’s permanent cessation of coal combustion subcategory for FGDW and BATW requirements. The rationale for developing the subcategory in the first instance remains true today, if not more so; public power utilities are transitioning to cleaner energy sources at a pace that ensures, our customers benefit from affordable electricity rates and grid reliability. According to EPA, 74 EGUs (at 33 plants) have requested participation in the permanent cessation of coal combustion subcategory.⁹² The subcategory affords sufficient time to plan, construct, and obtain permits and approvals for replacement generating capacity, which is critical to support the industry’s transition. EPA correctly recognized in the 2020 ELG Reconsideration Rule that technologies other than surface impoundments were not BAT for this subcategory “due to the unacceptable disproportionate costs they would impose; the potential of such costs to accelerate retirements of EGUs at this age of their useful life; the resulting increase in the risk of electricity reliability problems due to those accelerated retirements; and the harmonization with the CCR rule.”⁹³

B. APPA Oppose Eliminating the Low Utilization Subcategory.

EPA proposes to eliminate the low utilization subcategory because only one plant has expressed interest in the subcategory, and EPA’s rationale for creating the subcategory is no longer present for that facility.⁹⁴ EPA acknowledges it did not perform an extensive search for NOPPs.⁹⁵ Removing a flexibility because EPA is unaware of how many facilities submitted a NOPP is not a sufficient justification for proposing the elimination of the LUEGU subcategory. As discussed earlier, the ability to provide a dispatchable peaking resource is invaluable to the electric grid in times of severe weather events or disruption.

⁹² *Id.*

⁹³ 85 Fed. Reg. at 64,682.

⁹⁴ 88 Fed. Reg. at 18,855.

⁹⁵ *Id.*

XI. Implementation of 2020 and Proposed Rule

A. While EPA Is Considering Further Action on LWW and CRL, EPA’s 1982 Rule Controls.

Under current law, while EPA is considering further action on LWW and CRL, EPA’s 1982 Rule controls. In *Sw. Elec. Power Co. v. EPA*, 920 F.3d 999, 1027 (5th Cir. 2019) (*SWEPCo*), the Fifth Circuit Court of Appeals vacated the EGLs for CRL and LWW, the relevant provisions of the 1982 Rule were reinstated.⁹⁶ As a matter of law, when a regulatory determination is vacated and remanded, the previous regulatory determination controls and is automatically reinstated.⁹⁷ Therefore, until EPA completes its rulemaking Best Practicable Control Technology Currently Available (BPT) limits and its BAT and Best Conventional Pollutant Control Technology (BCT) determinations in the 1982 rule control.

B. Proposed ELG Website Reporting Requirements

The 2015 CCR rule established that the requirements for affected facilities to post information on their processes in self-implementing the CCR rule. EPA proposes a comparable website for ELGs. Specifically, EPA proposed that all reporting and record-keeping information not be retained by the regulated facility and provided to the permitting authority but also requires the information be posted to a publicly available website for ten years or the length of the permit plus five years.

We believe EPA’s proposed website reporting requirements are unnecessary and would be overly burdensome. As public power utilities, we are subject to extensive disclosure requirements in various states’ sunshine laws. Therefore, information about a NOPP and the proposed Annual Combustion Residual Leachate Monitoring Reports would be available to the public if the permitting authority determined the CRL release via groundwater was functionally equivalent to a discharge to a WOTUS.

Posting information would be duplicative of the requirements under the CCR rule. Creating two websites with substantively similar information or, in some cases, identical

⁹⁶ *SWEPCo*, 920 F.3d at 1021

⁹⁷ *See, e.g., Paulsen v. Daniels*, 413 F.3d 999, 1008 (9th Cir. 2005) (“The effect of invalidating an agency rule is to reinstate the rule previously in force.”); *see also Ala. Envtl. Council v. EPA*, 711 F.3d 1277, 1292 (11th Cir. 2013) (“Because the April 6, 2011, final rule is vacated, the October 15, 2008, final rule approving the revisions stands as the last final action taken on the proposed revision.”); *Council Tree Communs., Inc. v. FCC*, 619 F.3d 235, 258 (3rd Cir. 2010) (“Vacating the 10-year-hold rule will simply mean that [designated entities’] repayment obligations will once again be governed by the ... 5-year schedule” from the previous rule.); *Action on Smoking & Health v. Civil Aeronautics Bd.*, 713 F.2d 795, 797 (D.C. Cir. 1983) (“[B]y vacating or rescinding the recissions [*sic*] proposed by [a final rule], the judgment of this court had the effect of reinstating the rules previously in force ... a fact which the [agency] appears to concede....”).

information is inconsistent with the principle of the Paperwork Reduction Act (PRA).⁹⁸ EPA should clarify how the data proposed to be included on the public website differs from what is required under 40 C.F.R §§257.91-95. Furthermore, requirements for ELGs are regulated under state permitting authorities through an NDPES permit which holds the permittee accountable for non-compliance.

C. State Permitting Authorities are Better Suited to Address PFAS Issues.

EPA has issued guidance to address per- and polyfluoroalkyl substances (PFAS) in EPA-issued NPDES permits and issued similar guidance to states for issuing state NPDES permits to address PFAS discharges and to collect more information through monitoring.⁹⁹ PFAS monitoring or restrictions is not warranted given EPA's acknowledgment that the steam electric power sector has not been identified as a top PFAS discharge and is not covered by EPA's PFAS roadmap. Nevertheless, EPA has identified that PFAS may be present in the electric power sector due to the use of firefighting foams that contain perfluorooctanoic acid or perfluorooctane sulfonate.

APPA recommends that EPA continue the approach identified in EPA's guidance, which properly recognizes that permitting authorities are best positioned to determine whether PFAS monitoring, and any restrictions are appropriate for a particular facility.

XII. Modeling Impacts of Infrastructure Law is Premature

It would be premature for EPA to model the estimated impacts of the Inflation Reduction Act (IRA) and incorporate such modeling into the regulatory impact analysis for the final Steam Electric ELG rule. The "analysis" of the IRA conducted by the Department of Energy (DOE), which EPA cites and extrapolates from in the Proposal Rule is a "preliminary assessment" that considers the IRA "in combination with other enacted policies and past actions."¹⁰⁰ DOE concedes that these are "preliminary estimates" that are "not intended to be comprehensive." EPA postulates based on this preliminary, non-comprehensive assessment, that "the DOE analysis suggests the IRA may reduce the number of coal-burning power plants in operation," despite the fact that DOE's preliminary assessment does not even attempt to assess coal plant retirements.¹⁰¹

EPA should not speculate about the impacts of the IRA, then use that speculation to change baseline assumptions or justify the costs of the final Steam Electric ELG rule. How IRA funds will be awarded, to whom, by when, and for what purpose are all current unknowns; on a

⁹⁸ 44 U.S.C. § 3506(c)(3)(B), "[w]ith respect to the collection of information and the control of paperwork, each agency shall ... certify (and provide a record supporting such certification, including public comments received by the agency) that each collection of information ... is not unnecessarily duplicative of information otherwise reasonably accessible to the agency."

⁹⁹ Fed. Reg. at 18,892.

¹⁰⁰ 88 Fed. Reg. at 18,833-34 & n.15.

¹⁰¹ *Id.* at 18,834.

programmatic level, the IRA simply has not yet matured to the point where it should be the basis of a regulatory cost-benefit analysis at this time. For example, the ability for public power utilities, rural electric cooperatives, and other tax-exempt entities to make use of IRA's refundable direct pay tax credit regime requires meeting domestic content requirements, unless the project qualifies for certain waivers. As a result, fundamental decisions about asset ownership and even the basic economics of a facility hinge on how these requirements and waivers are implemented, not on the credit amounts for which the project might otherwise qualify. However, just recently released draft proposed domestic content rules, Treasury Notice 2023-29 include a regime that would appear to be quite challenging to implement, while guidance providing waivers to such requirements has not been released at all.¹⁰² These are points worth underscoring: meeting domestic content requirements is an existential question for public power ownership of qualifying facilities; initial draft proposed rules call into question whether those requirements can reasonably or economically be met and there has been no indication of guidance for potential waivers for those requirements; and, yet, EPA is proposing to speculate about the effects of IRA on public power.

XIII. Conclusion

APPA appreciates the opportunity to provide these comments on the Proposed Rule. Compliance with the 2020 ELG Reconsideration Rule is ongoing. EPA should ensure the investments made to comply with this the 2020 Rule are not wasted. The recommendations provided in the above comments seek to inform the Agency's deliberative process and ensure that a final rule does not divert time and money to a mid-course change unlikely to yield benefits commensurate with its costs. If you have any questions regarding APPA's comments, please contact Ms. Carolyn Slaughter via email at CSlaughter@PublicPower.org or call (202) 467-2900.

¹⁰² Internal Revenue Service and U.S. Department of Treasury; Energy Community Bonus Credit Amounts under the Inflation Reduction Act of 2022; Notice 2023-29 (April 4, 2023).