9. *New gas-fired combustion turbine units*. For new and modified gas-fired combustion turbines, the Rule creates three subcategories. These subcategories are defined by a unit's "electric sales (*i.e.*, utilization) relative to the [unit's] potential electric output." *Id.* at 39908.

10. "Low load" units (those that sell "20 percent or less of their potential electric output") must comply with a standard of performance based on "lower-emitting fuels." *Id.* at 39917. "Intermediate load" units (those that sell 20-40% of their potential electric output) must comply with a standard based on "high-efficiency simple cycle turbine technology." *Id.* "Base load" units are those that supply greater than 40 percent of their potential electric output as net-electric sales. *Id.* These units must immediately comply with a multi-phase standard of performance. Phase I is based on highly efficient combined-cycle generation. *Id.* Phase II is based on 90% capture of CO 2 using CCS by January 1, 2032 (and is cumulative of Phase I). *Id.* Phase II requires units only to meet a stringent standard of performance, not to use any particular technology.

IMPACTS OF THE FINAL RULE ON CENTRAL ELECTRIC

11. As President and CEO of Central Electric, I am responsible for planning for the power supply needs of Central Electric and its members.

12. Central Electric has used several different sets of assumptions to project its system's demand for energy and capacity through 2050, all as part of its planning process. Regardless of the assumptions used, the projections show demand for capacity and energy will increase significantly. Central Electric anticipates that dramatic growth in near-term demand is likely, based on a number of announced manufacturing projects, a significant amount of which are electric transportation projects, including manufacturing plants to build electric vehicles and the batteries that will power those vehicles. Many, but not all, of these projects will be served by the electric cooperative members of Central Electric.

13. These major projects will generate smaller spin-off projects that will also be in territory served by electric cooperatives. These projects represent substantial investments in South Carolina that will produce high quality jobs, generate revenue for local governments and school districts,

and allow South Carolina to participate in "electrifying the economy"—thereby reducing carbon emissions. One such project, Redwood Materials, has announced it is investing $3.5 billion in an electric cooperative-served facility to recycle, refine and manufacture 100,000 MWh of cathode and anode components per year.

14. Data centers represent another industry driving the growing demand for electricity. Data centers consume large amounts of electricity and represent significant investment in the local economies where they operate. Central Electric's members have contracted to provide a significant amount of power to data centers to satisfy the ever-growing generation, use and storage of critical business information.

15. Specifically, QTS has announced a $1 billion investment in a facility under contract to be served with several hundred megawatts by York Electric Cooperative. Another data center project under contract to be served by Aiken Electric Cooperative will require an additional 200 MW. Manufacturing and data center projects currently actively considering locating or expanding in electric cooperative-served areas of South Carolina

would require more than 2,000 additional MW. However, to reap the benefits associated with these projects, Central Electric and its members must be able to commit to serve them with a dependable supply of reliable, firm electricity capacity.

16. Central Electric does not generate electricity. It contracts with wholesale suppliers of electricity on behalf of its member cooperatives to meet their short- and long-terms needs. The vast majority of its electric capacity is acquired through two long-term power purchase agreements with the South Carolina Public Service Authority ("Santee Cooper") and Duke Energy ("Duke"). Santee Cooper and Duke currently rely in part on coal-fired base load generation to meet the needs of their customers, including Central Electric. Both Santee Cooper and Duke have plans to retire existing coal generation plants and to replace the generation from those plants in part with natural gas fired combined cycle generating units. The Duke plan includes the retirement of 6.2 gigawatts ("GW") of coal generation and the replacement of that generation with a variety of cleaner assets, including 2.4 GW of combined cycle generation. Santee Cooper's retirement

of coal and addition of combined cycle generation is part of its plan to reduce its carbon emissions by the mid-2030s to 44% of its 2005 CO_2 emissions level.

17. The other major utility operating in the state, Dominion Energy South Carolina, is planning to close its two remaining coal plants by 2030 and to replace the generation provided by those units with a variety of cleaner generation units, including a critically important combined cycle plant. As discussed further below, CCS is not an option for these plants. And the Final Rule's non-CCS options would all add overwhelming expense to these plants (as would CCS itself, if it were even possible). Thus, regardless of what path these plants choose, they will face massive compliance costs, and they will need to pass those costs on to Central Electric and other buyers.

18. My staff and I at Central Electric have followed closely the efforts of our wholesale providers to manage their generation resources to retire coal generation and replace it with cleaner generation while maintaining the reliability and affordability of their service. We have reviewed regulatory filings made by the companies in their Integrated Resource Plans and other regulatory filings. Based on our review of their filings, we are aware that

Santee Cooper and Duke are planning, over the next few years, to greatly increase their deployment of, and reliance on, renewable resources. However, we are convinced that without the addition of the combined cycle units they plan to add, neither of our major wholesale suppliers will be able to: (1) retire existing coal generation on their planned schedules; (2) maintain the reliability and affordability of their service; and (3) meet the increasing demand for capacity and energy that they and Central Electric are facing. The combined cycle units will provide reliable and dispatchable base load generation that is simply not available from other resources.

19. South Carolina utilities, including the electric cooperatives, generally experience our highest electricity demands during the winter months due to a prevalence of heat pumps with auxiliary heat provided by resistance heating elements on the coldest days. Over the past several years, South Carolina utilities have struggled to supply sufficient electricity to loads during the coldest hours of winter. During Winter Storm Elliott in December 2022, Duke Energy Carolinas, Dominion Energy South Carolina,

and Santee Cooper all implemented rolling blackouts in order to match resources to high loads and avoid widespread cascading outages.

20. Given the recent addition of new loads and the anticipated addition of more new loads in the next several years, without the addition of new, always available generation, the utilities in South Carolina will likely be incapable of providing generation to match demand during peak periods. This failure to meet projected demand would cause rolling blackouts.

21. South Carolina has limited import capability for additional, firm electricity capacity and energy. Historically, utilities in the state have built, owned, and maintained their own generation resources with little reliance on imports of firm power from other, non-system resources. The availability of transmission import capability from adjacent systems coincided with the utilities' need to be connected to the North American power grid to provide real-time, reliable service. It was not intended to provide long-term, substantial import capability in lieu of in-state generation resources. Firm electricity imports have grown over the past several years such that additional firm import capacity is now limited.

22. South Carolina has experienced a substantial increase of solar photovoltaic generation over the past decade or more, and utilities have plans to install additional solar resources. However, land use concerns, supply chain delays, and solar energy's inherent mismatch with the timing of loads on the system make solar a valuable, albeit niche, resource. Solar energy can help offset fossil generation during opportune times, reducing carbon emissions, but it cannot currently provide the generation capacity required during cold winter morning peak periods in the state.

23. On-shore wind generation is not an option in South Carolina due to the lack of sustained, viable wind resources in the state. While offshore wind generation could be promising in the decades to come, it is not a viable, commercially available or reasonable alternative in the foreseeable future. Offshore wind also faces political opposition from state leaders who, recognizing that South Carolina's No. 1 industry is tourism, want to keep turbines away from the state's coast.

24. It is critically important that South Carolina's utilities move forward immediately with efforts to construct new combined cycle units.

The demand growth that Central Electric expects to experience requires that these utilities move with haste. The process of planning, siting and constructing these plants is difficult and time-consuming. It must begin in the very near future for the plants to come online in time to meet the demands of South Carolina residents and industry.

25. It is because of our understanding of the importance to our wholesale suppliers of their ability to add natural gas combined cycle generation that my team and I are so concerned about the Final Rule.

26. The adoption of carbon capture and sequestration ("CCS") as the "best system of emissions reduction" is flawed and could have devastating consequences for South Carolina electric utilities, including Central Electric and its member cooperatives.

27. My team has studied CCS and has concluded that while the technology may one day in the future be helpful in reducing carbon emissions, it is not remotely ready for deployment in South Carolina in a time frame necessary to meet our needs.

28. There are no CCS projects of any kind in our state or region, and there are no CCS projects for natural gas generation anywhere. No one has even seriously begun the process of determining whether CCS is feasible in our region. The most obvious hurdles are the lack of storage and the lack of transport. Because operators in our region view these challenges as insurmountable, they have not even investigated the technological requirements for CCS.

29. There is no existing infrastructure for CCS in South Carolina and no plan for the permitting and construction of the pipelines that would be necessary to transport carbon dioxide to locations where CCS is feasible, if such locations can be identified. Based on the limited information that is available, it appears that the geology of our area would not be suitable for CCS. Current CCS facilities in Louisiana and Mississippi are either at capacity or oversubscribed. Pipeline permits to any available CCS facility is very difficult to obtain, and it is unreasonable to expect such pipelines could be permitted and constructed in the required time frame.

30. We have no reliable information that we can use to calculate cost estimates for attempting to construct a natural gas CCS project, because one has never been constructed. Based on what we know, it appears likely that adding CCS to a natural gas generation project, if it is even feasible, would greatly increase the project's cost—thereby greatly increasing the impact on the people we ultimately serve, the members of Central Electric's member retail distribution cooperatives.

31. Our member cooperatives serve mostly rural parts of South Carolina, and many of their members live in poorly insulated homes and struggle to pay their current power bills. Central Electric is focused on providing those consumers electricity at reasonable rates. The requirement to implement CCS at this point in its development is irresponsible in its disregard for the likely financial impact on our end-user members.

32. The determination that CCS is the best system of emissions reduction and thus must be implemented for any new natural gas projects is flawed and unsupported by engineering and economic analysis. In addition, it will have adverse consequences for the efforts of South Carolina utilities

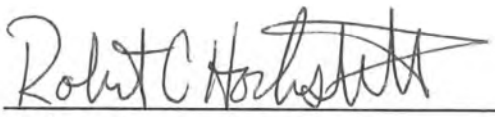
to reduce carbon emissions and will thwart the efforts of South Carolina to participate in transitioning to a cleaner economy with new electric vehicle and battery manufacturing projects. Without the ability to proceed now with planning and permitting new natural gas combined cycle projects, South Carolina utilities will not be able to move forward with plans to retire coal generation units and maintain the reliability of their service.

33. The uncertainty caused by the Final Rule will make it difficult for Central Electric and other South Carolina utilities to commit to serving the planned economic development projects, including electric vehicle and battery manufacturers, that continue to boost the state's economy.

* * *

I declare under penalty of perjury under the laws of the United States of America, pursuant to 28 U.S.C. § 1746, that the foregoing to be true and correct to the best of my knowledge.

Executed on this 9th day of May, 2024, in Columbia, SC.



Robert C. Hochstetler

EXHIBIT 24

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF WEST VIRGINIA, *et al.*,	§	
	§	
Petitioners,	§	
	§	
v.	§	No. 24-1120
	§	
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*	§	
	§	
Respondents.	§	

DECLARATION OF D. W. RICKERSON, P.E., SENIOR VICE PRESIDENT AND CHIEF OPERATING OFFICER FOR ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.

I, D. W. Rickerson, P.E., declare as follows:

1. I am the Senior Vice President and Chief Operating Officer for Electric Reliability Council of Texas, Inc. (ERCOT), where I am responsible for overseeing grid and market operations, system planning, and weatherization. I am providing this declaration on behalf of ERCOT.

2. ERCOT is the independent system operator (ISO) designated by the Public Utility Commission of Texas (PUCT) for the purposes of managing the operation and planning of the ERCOT transmission grid, which serves the majority of customers in the State of Texas. ERCOT is also responsible for operating the wholesale market for electricity in the ERCOT region and facilitating customers' choices of retail providers of electricity.

3. Texas law assigns ERCOT a number of critical functions, including the fundamental responsibility to "ensure the reliability and adequacy of the regional electrical network." Tex. Util. Code § 39.151(a)(2). ERCOT's most basic function in ensuring system reliability is to individually dispatch hundreds of generators located across the system to match the system demand at every moment of every day while observing both the physical and stability limits of the transmission network that transfers power from generators to consumers.

4. In its role as ISO, ERCOT also conducts forward-looking assessments to evaluate the adequacy of generation resources to serve future system demand and to identify and plan transmission lines and other facilities to ensure that power from generation facilities can be reliably transported to serve customer demand.

5. It is my understanding that the U.S. Environmental Protection Agency (EPA)'s final rule addressing carbon dioxide emissions from electric generating units (hereinafter, "the rule") was published in the Federal Register on May 9, 2024 and will become effective on July 8, 2024.

6. It is also my understanding that the rule requires each owner of one or more existing coal-fired electric generating units (EGU) to select one of the following three options: (1) commit to retire the EGU in 2032, (2) commit to meet an emissions standard based on co-firing with natural gas starting in 2030, which would allow the EGU to operate until January 1, 2039, or (3) commit to meeting an

emission standard based on installation of carbon capture and storage (CCS) with 90% capture of carbon dioxide by 2032, which would allow the EGU to operate indefinitely.

7. It is also my understanding that the rule requires owners of new gas-fired EGUs that will use combustion turbines operating with a capacity factor greater than 40% to comply with an emissions standard based on the installation of CCS with 90% capture of carbon dioxide by 2032.

8. I am providing this declaration to express my concerns that the rule will likely lead to retirements of coal-fired EGUs and that it will likely constrain the development of new, gas-fired combustion turbines that will be needed to ensure reliable, dispatchable power for the citizens of Texas.

9. In recent years, the ERCOT region has experienced significant growth of renewable generation, including wind and solar technologies. As of today's date, ERCOT is the national leader in utility-scale solar and wind generating capacity, with approximately 24,000 MW of solar capacity and 39,000 MW of wind capacity installed.

10. While solar and wind generation technologies provide significant amounts of low-marginal-cost power, they are not dependable sources because they produce power only in proportion to the amount of available sunlight and wind. ERCOT cannot dispatch solar generators at nighttime or wind generators when the

wind is not blowing. ERCOT must rely on other dispatchable generation resources to serve the system demand that cannot be consistently served by renewable sources of power.

11. One relatively new form of dispatchable power is electric energy storage, which typically exists in the form of utility-scale batteries. As with renewable energy, ERCOT has experienced a significant growth in the amount of battery storage in recent years, growing from approximately 150 MW in 2019 to over 6,000 MW today, with another 10,000 MW of batteries expected to be added by the end of summer 2025. ERCOT expects this long-term trend in battery storage growth to continue. However, unlike gas-fired and coal-fired generation sources, energy storage systems are inherently duration-limited because they can store only a finite amount of power. Even with a tripling of the current capacity, batteries will only be capable of supplying a small portion of the grid's energy needs for a few hours at a time. Consequently, ERCOT will continue to need to rely on gas-fired and coal-fired EGUs to generate electricity when energy from renewable sources and battery storage is insufficient to serve the grid.

12. While the rule does not prohibit operation of coal-fired and base load gas-fired EGUs, the rule's requirement that owners of these EGUs must install certain technologies that are not currently demonstrated at scale as a condition for operating beyond 2032 creates a risk that, if these technologies do not materialize

or are otherwise not feasible, owners of coal-fired EGUs may choose to retire those EGUs and new gas-fired EGUs may never be developed.

13. With respect to the option for coal-fired EGU owners to choose co-firing with natural gas as an option to operate through 2039, I do not believe this will be viable for most owners because most coal plants do not have natural gas pipelines of significant capacity serving them and because the greater marginal cost of producing electricity using steam created by a gas-fired boiler would almost certainly undermine the ability of coal-fired EGUs to run at sufficient frequency to justify their continued operation—especially considering the significant investment associated with building new natural gas transmission lines and retrofitting a coal plant to co-fire with natural gas.

14. I am also concerned that the still-nascent state of CCS technology will prevent owners of coal-fired EGUs from being able to commit to installing that technology by the time state plans must be submitted to EPA in May 2026, which is only two years from now.

15. At this time, CCS technology is not widely developed and has only been deployed in a very small number of cases. I am skeptical that CCS technology can be implemented on a scale sufficiently large to apply to the many EGUs in the United States that may be required by the rule to install this technology in future years as a condition for long-term operation. CCS technology requires

infrastructure for disposing of and transporting captured carbon dioxide that does not exist yet. Without that infrastructure in place by the time state plans must be submitted in May 2026, I believe the state of uncertainty in CCS technology will lead many coal-fired EGU owners to choose to retire their units rather than commit to installing CCS, as would be required under the rule for long-term operation. It is my understanding that commitments to retire EGUs reflected in state plans will be treated as binding, enforceable commitments.

16. Additionally, if CCS technology does not develop in time for new base load gas-fired EGUs to fully implement this technology by 2032, developers of those generation assets will not have pursued development of these generators by this time, endangering a potentially critical source of dispatchable generation capacity.

17. Because a significant risk exists that many, if not all, coal-fired units in ERCOT will retire as a result of the rule, and that a sufficient amount of compliant, new base load gas-fired EGUs will not be developed as a result of financial risk imposed by the rule, I believe the rule increases the risk that the ERCOT region will experience energy shortages in the future.

18. ERCOT has already identified significant challenges in meeting its future demand without the additional impacts of the rule. ERCOT is in the midst of an explosion of new electricity demand, with average summer peak demand growth

of 7.8% since 2021, far exceeding average historical annual peak demand growth rates of approximately 1.5%. And load growth is now expected to rise even higher in the future. Based on recent utility demand forecasts, ERCOT now anticipates its peak load to exceed 152,000 MW by 2030, significantly outpacing its all-time peak demand record of 85,500 MW set in 2023 with an average annual rate of growth of 11.1% between now and 2030.

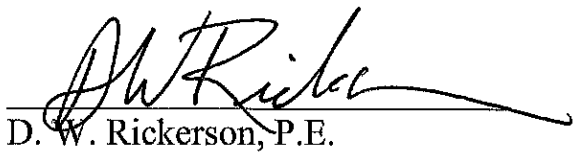
19. With these significant rates of anticipated demand growth, the ERCOT region will require even more dispatchable, unlimited-duration generation resources in the future, along with associated transmission infrastructure, to fill in gaps when sufficient renewable generators and battery storage systems are not available to produce energy. Even at this time, ERCOT is uncertain whether it will have enough generation resources to serve this future load. However, it is my view that eliminating coal-fired EGUs—which currently constitute about 14,000 MW of the limited dispatchable generation supply—and inhibiting the growth of new, gas-fired base load EGUs will only further impair ERCOT's ability to ensure sufficient generation supply to meet demand at all times. If insufficient generation is available at any time, ERCOT must direct utilities to disconnect customers from the grid. This can have significant consequences for consumers who depend on electricity for critical, life-sustaining functions during periods of extreme weather.

20. While EPA has provided several helpful reliability allowances in the rule, these flexibilities do not mitigate my concerns. For example, allowing EGUs to operate during a system emergency, and allowing EGUs up to a year of additional implementation time due to circumstances beyond their control will not have any material impact on a retirement decision. These allowances are also unlikely to have a material impact on decisions to develop new base load gas-fired EGUs if CCS does not materialize. Even with the allowances provided under the "remaining useful life and other factors" (RULOF) policy in the rule, it is my understanding that an EGU owner would not be excused from taking the significant steps to implement co-firing with natural gas or installing CCS if it intended to operate the EGU past 2032.

21. For these reasons stated above, I believe the rule poses an unacceptable risk to the reliability of the ERCOT System.

22. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on May 13, 2024.



D. W. Rickerson, P.E.
Senior Vice President and Chief Operating Officer
Electric Reliability Council of Texas, Inc.

EXHIBIT 25

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

West Virigina et al	)	
	)	
Petitioners,	)	
	)	
v.	)	Case No. _____
	)	
U.S. E.P.A.,	)	
	)	
Respondent.	)	

DECLARATION OF CHRIS PARKER IN SUPPORT OF

WEST VIRGINIA, UTAH ET AL'S PETITION FOR REVIEW

I, Chris Parker, hereby declare and state that the following is true and correct based on my personal knowledge and information provided by the Utah Division of Public Utilities ("Division" or "DPU") personnel. I am over the age of 18 years, and I am competent to testify concerning the matters set forth in this declaration.

PERSONAL BACKGROUND

1. My name is Chris Parker, and I am the Director of the Division. My business address is Heber Wells Building 4th Floor, 160 East 300 South, Salt Lake City, Utah 84111.

2. I became the Director of the Division in January, 2011. I also served as the Executive Director of the Utah Department of Commerce and as counsel to the Utah Legislature, through its Office of Legislative Research and General Counsel. There I served on various energy, environmental, and utility-related committees and task forces.

3. In addition to my duties as Director, I also serve as State Chair of the NorthernGrid Enrolled Parties and States Committee. NorthernGrid is the designated transmission planning and cost allocation organization for many of the utilities in the Northwest. It operates under FERC-approved federal tariffs. Additionally, I am a class representative for the Western Electricity Coordinating Council's (WECC) Member Advisory Committee. WECC plans and enforces reliability in the West under FERC and NERC authorities. Too, I serve as vice chair of the Western Resource Adequacy Program's Committee of State Representatives. Of note, I also serve as Chair of the Utah Grid Resilience Committee, which is tasked with making recommendations to Utah policy-makers about the security and resilience of the electrical grid.

4. I served as a law clerk to Justice Michael J. Wilkins of the Utah Supreme Court.

5. I have a Bachelor of Science in Political Science from Weber State University and a Juris Doctorate degree from Brigham Young University.

UTAH DIVISION OF PUBLIC UTILITIES

6. The Division's mission is to advocate the public interest in safe, adequate, and reliable public utility services at reasonable rates. The Division makes recommendations to the Public Service Commission of Utah ("Commission" or "Utah Commission") for rate-making purposes, applications, hearings, and other matters affecting utility service. The Division also handles and investigates consumer complaints and monitors regulated public utility operations to ensure compliance with Commission rules and orders. Additionally, pursuant to Utah Code Section 54-4a-1(1)(b), the DPU may represent the public interest in proceedings involving public utility regulation pending before the United States.

7. My duties as the Director are statutorily defined by Utah Code § 54-4a-2. I am appointed by the executive director of the Department of Commerce and am subject to the administrative authority of the executive director of the Department of Commerce. I am responsible for the administration and supervision of the Division to ensure it satisfies its statutory objectives.

UTAH'S ELECTRICITY SUPPLY

8. According to the U.S. Energy Information Administration, Utah's net summer capacity in 2022 was 9.627 megawatts. [1]

9. According to the U.S. Energy Information Administration, in 2022, Utah's ten largest electric power plants by capacity were:

	Plant	Primary energy source	Operating company	Net summer capacity (MW)
1	Intermountain Power Project	Coal	Los Angeles Department of Water & Power	1,800
2	Hunter	Coal	PacifiCorp	1,363
3	Lake Side Power Plant	Natural gas	PacifiCorp	1,176
4	Huntington	Coal	PacifiCorp	909
5	Currant Creek	Natural gas	PacifiCorp	524
6	Bonanza	Coal	Deseret Generation & Tran Coop	458
7	Gadsby	Natural gas	PacifiCorp	354
8	Milford Wind Corridor I LLC	Wind	Longroad Energy Services LLC	204
9	West Valley Generation Project	Natural gas	Utah Municipal Power Agency	185
10	Flaming Gorge	Hydroelectric	U S Bureau of Reclamation	152

10. According to the U.S. Energy Information Administration, in 2022, Utah's ten largest electric power plants by generation were:

	Plant	Primary energy source	Operating company	Generation (MWh)
1	Hunter	Coal	PacifiCorp	7,381,184
2	Lake Side Power Plant	Natural gas	PacifiCorp	6,578,673
3	Huntington	Coal	PacifiCorp	5,673,115
4	Intermountain Power Project	Coal	Los Angeles Department of Water & Power	5,510,314
5	Bonanza	Coal	Deseret Generation & Tran Coop	3,450,643

[1] https://www.eia.gov/electricity/state/utah/

6	Currant Creek	Natural gas	PacifiCorp	2,805,979
7	West Valley Generation Project	Natural gas	Utah Municipal Power Agency	500,948
8	Sunnyside Cogen Associates	Coal	Sunnyside Cogeneration Assoc	404,807
9	Flaming Gorge	Hydroelectric	U S Bureau of Reclamation	395,575
10	Nebo Power Station	Natural gas	Utah Associated Mun Power Sys	389,231

11. As these charts make clear, Utah's electric production is heavily dependent on coal and natural gas.

12. Historically, Utah has been a net electricity exporter, but production decreases in recent years have left Utah's electric production barely above electric consumption, and Utah has fallen from a net energy exporter to a net energy importer.[2] Coal supply issues caused by a mine fire and force majeure conditions recently limited the availability of coal for Utah's power plants, leading PacifiCorp to rely on significantly more expensive market purchases.[3] Small disruptions in availability, fuel supplies, and the like can require a utility to buy supplies in a market characterized by increasing prices and decreasing liquidity for critical supply periods not well-served by alternate sources. Utah's energy supply depends on a diversity of resources and losing

[2] Michael D. Vanden Berg, Utah's Energy Sector in 2023 and Outlook for 2024 (Mar. 2024) (available at https://d36oiwf74r1rap.cloudfront.net/wp-content/uploads/2024/03/Energy-RB-Mar2024.pdf)
[3] See Rocky Mountain Power's 2022 Energy Cost Adjustment Mechanism Confidential Investigative Report at 8-9, 14-17 (December 2023) (redacted version available at https://pscdocs.utah.gov/electric/23docs/2303501/331718RdctdRMPExhbtJP1RIDECAMInvstgtnRprt1-8-2024.pdf).

even one or two critical facilities for brief periods in critical times can jeopardize reliable service and increase expense.

THE FINAL RULE'S EFFECTS ON ELECTRICITY RELIABILITY

A. The Final Rule will Exacerbate Existing Reliability Concerns and Likely Lead to a Significantly Less Reliable Bulk Electrical System in the West.

13. WECC is warning of increasing risks to reliability in the west. As it said in its recent 2023 Western Assessment of Resource Adequacy:[4]

- "Resource adequacy risks over the medium and long term have increased significantly compared to last year's assessment."[5]
- "Supply chain disruptions, increasing costs, production obstacles, and an overwhelmed interconnection queue threaten industry timelines to build new resources. While entities are trying to account for these delays in their resource plans, those plans have no room for adjustment . . . ."[6]
- "Current resource plans are not sufficient to meet future demand over each of the next 10 years. . . . [S]tarting in 2026, the number

[4] 2023 Western Assessment of Resource Adequacy, Western Electricity Coordinating Council (November, 2023) (available at https://www.wecc.org/Administrative/2023%20Western%20Assessment%20of%20Resource%20Adequacy.pdf).
[5] Id. at 2.
[6] Id.

and magnitude of demand-at-risk hours increase by orders of magnitude."[7]

- "Supply chain disruptions remain an obstacle to building new resources on schedule, connecting customers, and maintaining system elements. Western entities have reported delays and, in some cases, an inability to expand service in capacity-constrained areas. Lingering effects from the COVID-19 pandemic, foreign manufacturing, and shipping congestion are the main causes of delays. Longer-than anticipated lead times for transformers, circuit breakers, conductors, and utility-scale solar panels have forced entities to revise near-term new resource timelines."[8]
- "Delays due to congestion in the interconnection queue jeopardize industry's ability to build planned resources. Continent-wide, the interconnection backlog increased by 40% in 2022. Wait times are expected to grow as the Inflation Reduction Act (IRA) spurs more variable energy resources (VER) . . . ."[9]
- "Variability represents the greatest risk to resource adequacy because variability increases uncertainty, and uncertainty creates

[7] Id. at 3.
[8] Id. at 10.
[9] Id.

challenges to planning, paying for, and building resources. As variable generation is added to the system, variability of the system increases. Wind and solar make up two thirds of the resources entities plan to add over the next decade. While this is a large amount of capacity (more than 60 GW), it also adds a great amount of variability to the system."[10]

- "Based on the resource planning information provided by BAs, and WECC's energy-based probabilistic analysis, demand-at-risk hours increase significantly over the next 10 years, indicating that resource plans are not sufficient to meet demand under the range of conditions the interconnection could face. In addition, the variability on the system has increased since the 2022 assessment. Variability continues to increase over the next 10 years. As a measure of risk on the system, increasing variability indicates increasing risk. For these reasons, resource adequacy remains a top interconnection-wide risk."[11]

14. Similarly, the North American Electric Reliability Corporation (NERC) warned in its 2023 Long-Term Reliability Assessment that there is

[10] Id. at 20.
[11] Id. at 23.

"clear evidence of growing resource adequacy concerns over the next 10 years."[12] Like WECC, NERC notes that this is due in large part to the pace of generators retiring exceeding the pace of replacement resources.[13]

15. NERC is the regulatory authority charged with assuring the reliability of the bulk electrical system in North America. WECC is designated as the coordinator for the West under NERC's auspices.

16. Critical to this litigation, NERC notes:

> In this LTRA, NERC accounted for over 83 GW of fossil-fired and nuclear generator retirements that are currently anticipated through 2033. An additional 30 GW of fossil-fired generators have announced plans to retire over the decade but have yet to enter deactivation processing with the planning authorities. These additional retirements can exacerbate energy, capacity, or ERS issues . . .[14]

17. As NERC intimates, additional plant retirements will increase the risk of inadequacy to the bulk electrical system. Whether because of supply chain disruptions, delays in federal permitting processes, or new impositions on existing fossil-fired generation, further retirements will be more costly than EPA accounts for in its rulemaking.

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[12] 2023 Long-Term Reliability Assessment, North American Electric Reliability Corporation (December, 2023) at 6. Available at https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2023.pdf.
[13] Id.
[14] Id. at 10.

18. In a recent development, participants in the Western Resource Adequacy Program (WRAP), a voluntary program to ensure member utilities have adequate resources and can share with other members to decrease reserve margins, announced they will not begin binding operations in 2026 as planned.[15] PacifiCorp, Utah's largest utility, is one of the planned participants in the WRAP. Participants indicated in the April 22 letter that, "Some WRAP participants have expressed concerns about their ability to meet WRAP forward showing requirements in the next few years. They are understandably concerned, due to the reasons outlined above, about moving into binding operations given the potential magnitude of deficiency charges currently included in the tariff."[16] In a great irony, the resource adequacy program will be delayed because not enough members have adequate resources according to the measures those participants established for themselves and that FERC approved in the WRAP tariff. The letter indicates some reasons for the inability to meet resource adequacy standards. It says, "we have encountered significant new headwinds in addressing resource adequacy challenges. Supply chain issues and other challenges have slowed our ability to deliver and interconnect

[15]See April 22, 2024 Letter from Members of the Resource Adequacy Participant Committee (RAPC) (Available at https://www.westernpowerpool.org/private-media/documents/WRAP_RAPC_Participant_Letter_4_22_24_final.pdf).
[16]Id.

new resources. Regional peak load is now growing faster than previously expected, driven primarily by electrification and data center expansion. Extreme weather events have further challenged our assumptions and expectations of the quantity of resources needed to maintain reliable operations."[17] In a response, Sarah Edmonds, the president of Western Power Pool, which houses the WRAP, said "There is a legitimate question about whether the West will have adequate resources in the years to come."[18]

19. For the utilities the Division regulates, we already see perilous signs of impending reliability concerns. In planning processes intended to guide utility procurement decisions that build an adequate portfolio, we see that utilities find it harder to procure power at key times of need when variable energy sources wane.[19] In other confidential proceedings, we see that such purchases have gotten significantly more expensive in recent years. Firm generation products in the marketplace are designed in a manner ill-suited to utilities' targeted needs, requiring the purchase of many hours of supply at high

[17] Id.
[18] Western Power Pool Statement in Response to WRAP Participant Letter to Stakeholders, Aprill 22, 2024 (Available at https://www.westernpowerpool.org/news/western-power-pool-statement-in-response-to-wrap-p).
[19] 2023 Integrated Resource Plan, Utah Public Service Commission Docket No. 23-035-10, Volume I at 124 (May, 31, 2023) (available at https://pscdocs.utah.gov/electric/23docs/2303510/3281812023IRPFnlVlml5-31-2023.pdf

prices even if the utility needs only a few hours of extra power on certain days to meet needs at critical times.

20. The tightness of the market for power in key periods is evidence of a dwindling supply of the power needed to ensure reliable service across the West at critical times.

21. I note that these concerns are amplified by the impact of other rules EPA has proposed or issued. EPA has publicly stated that the MATS Rule, for example, will impact the Colstrip power plant in Montana, the Jim Bridger power plant in Wyoming, and the Laramie River power plant in Wyoming.[20] Even assuming *arguendo* that no Utah power plants are affected by the MATS Rule, impacts in surrounding states will also impact Utah. And at the same time EPA regulations will force closure of major coal-fired power plants, EPA's demand-side efforts that effectively mandate electric vehicles will increase electric demand. Similar state mandates for electrification and increasing computing demands for data centers to support artificial intelligence operations also drive increased electric demand.[21]

[20] https://www.epa.gov/system/files/documents/2024-04/presentation_mats_final-2024-4-24-2024.pdf
[21] See, e.g. Air Conditioning and AI Are Demanding More of the World's Power—Renewables Can't Keep Up, Wall Street Journal, April 26, 2024 (Available at https://www.wsj.com/business/energy-oil/air-conditioning-and-ai-are-demanding-more-of-the-worlds-powerrenewables-cant-keep-up-987a58f3?mod=hp_featst_pos4).

22. Advanced technologies relied on by EPA are not ready for commercial operation. EPA's reliance on commercial carbon capture as a best system of emission reduction not only violates the law but illustrates the virtual impossibility of compliance.

23. It is highly unlikely that EPA's relied-on carbon capture technology will be commercially viable in the quantities and at the times and prices EPA projects. Indeed, EPA conceded its reliance on hydrogen technology as a BSER in the proposed rule needed to be withdrawn due to "uncertainties."

24. Utah's Commission recently addressed carbon capture resources in connection with PacifiCorp's biennial Integrated Resource Plan (IRP). While the Commission held that PacifiCorp should have treated carbon capture resources on a comparable basis to other resources in formulating its plans, it also recognized PacifiCorp's arguments that cost assumptions for future carbon capture resources are not based on commercial operation, that no coal plant retrofits to carbon capture exist worldwide, and projections about its feasibility and cost are highly speculative.[22] As the Commission noted, "The reasons PacifiCorp argues for rejecting CCUS, e.g., that cost assumptions are not based on bids and commercial operation is unproven, apply with equal, if not greater,

[22] Order, Docket No. 23-035-10, at 16-17, 20-21 (available at https://pscdocs.utah.gov/electric/23docs/2303510/3334322303510o4-17-2024.pdf.

force to the Natrium [nuclear] and non-emitting resource technologies [hydrogen-based] PacifiCorp includes in the P-MM Preferred Portfolio."[23] Even PacifiCorp admitted that "it does not limit resources to only those currently estimated to be commercially viable within the planning horizon."[24] Utah's Commission also noted that the inclusion of hydrogen assumes the continued availability of federal tax credits to minimize costs, a point that applies with similar force to carbon capture technologies.[25] Can a technology be said to be commercially available and viable if it depends for success on federal financial support? Ultimately, the Commission refused to acknowledge aspects of the IRP because the inclusion of these speculative resources was unreasonable when other proven resource types were not modeled or were artificially constrained in the modeling.[26] In other words, the option EPA focuses on in the Final Rule and new nuclear technologies all remain unproven options that cannot yet be relied upon in planning an adequate portfolio. The plants subject to the Final Rule, however, are proven resources.

25. EPA proposes to rely on the same unproven technologies with speculative pricing and operational information in order to justify significant

[23] Id. at 20-21.
[24] Id. at 15.
[25] Id. at 14, footnote 38.
[26] Id. at 39-40.

changes to the nation's fossil-fired generation resources. Failing the adoption of these highly speculative resources, plants will be forced into expensive changes to equipment or operations or into early retirements. These are the very same resources WECC and NERC warn are retiring more quickly than replacement resources can be built. There is also an increased realization that resources like wind and solar cannot support the grid's reliability needs. While battery storage resources are becoming less expensive and more sophisticated, supply chain issues and operational limitations for battery resources leave them unable to replace retiring baseload resources in the timelines the rule may require.

26. At a time when federally mandated reliability coordinators are warning about a near-term and long-term reliability crisis even with all planned additions, making changes that are likely to lead to additional retirements or increasing variability on the system is unwise. Yet that is what EPA now proposes.

27. In the near term, as WECC noted, [S]tarting in 2026, the number and magnitude of demand-at-risk hours increase by orders of magnitude."[27] As noted above, any supply limitation, whether caused by a facility closing, a

[27] Supra, note 7.

decrease in investment due to uncertainty surrounding the Final Rule's applications, or something else, can result in supply shortages and unreliability given the tight state of the western interconnection.

28. Long experience in the West also indicates that permitting new facilities in time to replace any retiring ones is likely to be nearly impossible, especially on the timeframes the EPA contemplates. With vast stretches of public land, nearly every one of these decisions will require an environmental assessment (EA) or an environmental impact statement (EIS). These permitting efforts would be imprudently undertaken if done before it is evident that EPA's alternatives form part of a least-cost, least-risk portfolio. They do not yet do that.

29. Further EAs or EISs might also be required to stabilize the grid in the areas where large generators are removed, as voltage and frequency variations from the loss of large generators are likely to occur when they are removed. Even diminishing generator use can require other investments to stabilize grid operations dependent on large spinning masses to provide quality, synchronous power. These effects are not likely to be fully known until replacement resources and their locations are identified. Given competitive bidding and other required regulatory processes, it is not known what resources might replace any retired ones.

30. Additionally, the closure of any of the plants in Utah subject to the Final Rule is also likely to diminish the fuel diversity of the system serving PacifiCorp's and other utilities' Utah ratepayers. While coal has not always been the cheapest fuel, it has been a relatively stable fuel source for PacifiCorp for many years. Long-term contracts and self-supply have insulated ratepayers' coal prices during times of gas price volatility. The increasing amount of variable generating sources backed by natural gas generators for reliability subjects ratepayers to greater volatility and to diurnal pricing differences as more departing solar generation each evening must be backed with a limited supply of natural gas generation. If natural gas generation is also constrained, the problem is even more acute, with a limited number of expensive or unproven solutions. Tepid investment in natural gas infrastructure is driven in part by the uncertainty of FERC and EPA treatment of new gas resources.

31. Some rule proponents argue reliability concerns are overstated,[28] but they unreasonably minimize current conditions and regulatory warnings. The author of the above-cited piece concludes that despite EPA's prior regulatory efforts being thwarted in the courts, the law's targets were met with

[28] See, e.g. Susan Tierney, Electric System Reliability and EPA Regulation of GHG Emissions from Power Plants: 2023. Analysis Group, November 7,2023 (arguing that industry concerns about reliability after past regulatory efforts never materialized). Available at https://www.analysisgroup.com/globalassets/insights/publishing/2023-tierney-electric-reliability-and-epa-ghg-regs.pdf.

no effects on reliability.[29] This was done as utilities and other operators retired facilities given the uncertainty of the legal landscape and potential limitations on recovering new investments in those plants. The author holds this up as evidence that regulatory approaches have not made the grid less reliable. However, the current WECC and NERC warnings, as well as past incidents like California's 2020 brownouts[30] were a direct result of, among other things, the too-rapid closure of baseload generation resources, such as the ones the current rule targets. The truth of early fossil fuel plant retirements is not that they have been made without reliability consequences, but that their retirements have significantly narrowed margins for error in the nation's grid. These retirements bear a large share of the blame for the peril in which we now find ourselves.

32. At a time of increased uncertainty and reliability warnings from regulators like WECC and NERC, EPA's Final Rule injects additional uncertainty about compliance technologies, pathways, timelines, and costs. These uncertainties impose their own economic and other costs on owners of resources subject to the Final Rule, even if the rules never take full effect. Those

[29] Id. at 4-5.
[30] See, e.g. Julie Cart, Answers to 7 Burning Questions About California's Rolling Blackouts, Cal Matters, August 19, 2020. Available at https://calmatters.org/environment/2020/08/california-2020-rolling-blackouts-explainer/.

costs ultimately threaten continued operation of those plants and, therefore, reliability in the West.

33. Because of its concerns over grid reliability, Utah has been compelled to strengthen its statutory provisions concerning baseload dispatchable resources.

34. In its recently concluded legislative general session, the Utah Legislature passed various bills addressing this topic directly. The Governor has signed them and they are effective May 1, 2024. Among other things, these bills create a pathway for Utah to assume larger shares of proven dispatchable resources as other entities vacate them,[31] provide guidance and resources to advocate for federal regulatory reform to ease development of needed resources,[32] require the Utah Commission to implement a higher standard of review before authorizing a utility to recover costs related to early closures of power plants,[33] and amend the state's energy policy to prioritize adequacy, reliability, and dispatchability.[34]

B. Supply-Side Impacts Will Be Worsened by Increased Demand.

35. EPA and the Biden Administration have stated they have adopted a "whole of government" approach to climate-change related policies. On the

[31] 2024 Utah Senate Bill 224 (available at https://le.utah.gov/~2024/bills/static/SB0224.html).
[32] 2024 Utah House Bill 48 (available at https://le.utah.gov/~2024/bills/static/HB0048.html).
[33] 2024 Utah House Bill 191 (available at https://le.utah.gov/~2024/bills/static/HB0191.html).
[34] 2024 Utah House Bill 374 (available at https://le.utah.gov/~2024/bills/static/HB0374.html).

supply side, there are multiple rules that may adversely impact electric production.

36. I am concerned that the supply-side impacts noted above will be worsened by increased demand from other administration policies, including policies that increase use of electric vehicles.

37. PacifiCorp's most recent IRP indicated "On average, forecasted system load is up 14.9 percent and forecasted coincident system peak is up 14.9 percent when compared to the 2021 IRP."[35]

C. The High Costs of EPA's Final Rule Will Be Passed on to Utah Ratepayers.

38. While EPA's Final Rule evaluates compliance costs, its evaluation is inadequate and ignores numerous costs ratepayers will bear regardless of a utility's means of compliance.

39. For the entities the Division regulates, I expect that the added pressure of the Final Rule on fossil-fired resources will impose at least the following potential costs and risks on the utilities and, ultimately, their ratepayers:

[35] 2023 Integrated Resource Plan at 15.

- Planning and evaluation costs bound up in highly speculative projections of costs for resources and their components not yet actually available;
- Additional planning expenses incurred for needed alterations to existing plant as generation resources shift in type and location;
- Increased short-term fuel costs for fossil fuel supplies for plant owners who lack the security to enter long-term agreements for fuel supplies as they assess pathways to compliance or closure;
- Increased fuel costs for natural gas and coal due to decreased investment by fuel providers uncertain about future demand justifying current and new investments;
- Increased risks to fuel supplies as suppliers of coal and natural gas face uncertainty about long-term viability of additional investment;
- Significant permitting costs and delays, largely federal, for any new generation resources that might be needed to comply with the Final Rule;
- Increased costs as utilities all seek in a short period of time the same finite set of resources, including raw materials, contractors, compliance consultants, equipment, and the like; and

- More expensive capital as early-retired plants remain on balance sheets for customers to pay while new resources are added through financing.

40. For my Division, we will be forced to expend staff time and financial resources to employ consultants in order to understand the rules' implications on the utilities we regulate. This work can occur in general rate cases, power cost reviews, IRP evaluations, or other proceedings. This will likely cost my agency at least hundreds of thousands of dollars, beginning with the current, ongoing IRP planning cycle. The Utah Commission and the Utah Office of Consumer Services are also likely to face similar costs to evaluate the rule and its affects.

41. Wholly apart from whether the EPA may properly rely on unproven control technologies to justify its rulemaking, EPA ignores many very real costs of compliance its rule will force on utilities. Limiting evaluation of costs to tenuous projections of technologies not yet in commercial operation without significant federal financial support, or to the cost of pollution control technologies like catalytic reduction or reductions in plant usage, inappropriately ignores real compliance costs in evaluating the rule's relative benefits.

42. It is likely that the rule will result in retirement of some fossil-fired generating resources because of its costs and uncertainties. Utility planning relies on long-term cost projections. EPA's rules will inject more uncertainty into the marketplace for raw materials, fuel supplies, and compliance strategies. The Final Rule is likely to weigh down fossil resources in planning processes, resulting in retirements.

43. When a plant retires early, cost recovery from ratepayers has especially acute effects. This is because remaining plant balances need to be recovered from ratepayers at the same time a new plant is added. In other words, if a plant scheduled to go offline in 2039 goes offline in 2030, regulators will likely authorize recovery of the dozens or hundreds of millions of dollars in remaining plant balances over some period of time during which the facility no longer provides any generation. Furthermore, ratepayers must also pay for the new resources to replace the retired capacity. Thus, for a significant period of time, ratepayers will be effectively paying double for the capacity used to serve them. This leads to intergenerational inequities as then-current ratepayers are effectively paying for past ratepayers' usage of a now defunct plant. It is expensive and unfair, even if potentially lower energy costs offset some of the added and remaining capital costs in rates.

44. Based upon past practices, it is likely that PacifiCorp will seek Commission approval to pass these additional costs to Utah ratepayers. It is likely to receive that approval.

45. Utah ratepayers represent roughly 44% of PacifiCorp's ratepayers, depending on the year and conditions. Under a prevailing allocation protocol negotiated and approved by most of PacifiCorp's states, including Utah, costs for generating plant and transmission are allocated consistent with states' shares of the system. Thus, under existing protocols, Utahns would likely bear 42%-46% of the additional costs of either compliance or replacement.

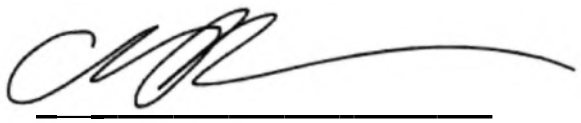
46. Quantifying the effects this will have on Utah is extremely complex because there are too many variables. The cost of compliance is unknown, as is the cost of any replacement power. Nevertheless, given that ratepayers would be either adding expensive emissions controls, reducing the productivity of existing plants, or procuring additional generation while paying off plant balances for retired generation, I expect Utah ratepayers would see significant rate increases regardless of the method of compliance. As noted earlier, given that PacifiCorp begins buying power and procuring physical resources years ahead of need, costs for some decisions related to the Final Rule will likely begin in the current calendar year, trickling into rates in various proceedings beginning next year.

47. Utility cost increases will likely begin immediately to some degree, and grow as time goes on. Without a stay of the rules, utilities will need to begin planning immediately. Planning costs are generally recovered from ratepayers. Power prices are also likely to rise as utilities look to lock in a tight supply of existing resources, which the rule contemplates tightening further. Utilities begin buying contract power years ahead of the need and add deals as operational periods near based on refined needs assessments and market conditions. So the market view of resource availability in two years will affect deals done now. Compliance strategies will necessitate relatively early decisions about plant closures or limitations that will drive development and procurement of new or supplemental generation sources. For Utah ratepayers of PacifiCorp's Rocky Mountain Power unit, these cost increases will be paid by ratepayers in an eventual Energy Balancing Account Filing.

48. Further declarant sayeth naught.

I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES OF AMERICA THAT THE FOREGOING IS TRUE AND CORRECT.

Executed on May _2___, 2024, in Salt Lake City, Utah.



Chris Parker

EXHIBIT 26

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF WEST VIRGINIA, et al., Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al., Respondents.	No. 24-1120

DECLARATION OF GLENN DAVIS

I, Glenn Davis, hereby declare and state under penalty of perjury that the following is true and correct to the best of my knowledge, based on my personal knowledge and information provided by Virginia Department of Energy (Virgina Energy) personnel:

1. My name is Glenn R. Davis, and my business address is 1100 Bank Street, Richmond, Virginia 23219. I am over the age of eighteen, have personal knowledge of the subject matter and am competent to testify concerning the matters in this declaration.
2. I have served as the Director of Virginia Energy since 2023. I served as a member of the Virginia General Assembly for ten years prior

to being appointed to this position, focusing on energy related issues. My job responsibilities as director include analyzing current and emerging power technologies, understanding current and future grid needs, and contextualizing information for policy makers about the broader power sector.

3. I am submitting this declaration in support of Virginia's action challenging the final rule adding Subpart TTTT of 40 CFR Part 60, Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units and amending Subpart TTTTa of 40 CFR Part 60, Standards of Performance for Greenhouse Gas Emissions for Modified Coal-fired Steam Electric Generating Units and New Construction and Reconstruction of Stationary Combustion Turbine Electric Generating Units, pre-publication version signed by the Administrator of the U.S. Environmental Protection Agency (EPA) on April 25, 2024 (Final Rule).

4. The provisions of the Final Rule relevant to this challenge consist of two principal parts: (1) Standards for Emissions Guidelines to be established by States within two years under § 111(d) of the Clean Air Act (the Act), 42 USC § 7401 et seq., to control emissions of

carbon dioxide from existing coal-fired power plants, and (2) amended New Source Performance Standards (NSPS) to control emissions of carbon dioxide from new natural gas-fired electric generating turbines under § 111(b) of the Act that are applicable immediately and directly enforceable by the EPA.

5. Virginia Energy's mission is to lead the Commonwealth to a reliable and responsible energy future.

6. Virginia Energy is a multifaceted agency that enforces safety and environmental regulations on coal, mineral and natural gas extraction sites across the Commonwealth, implements the Governor's Energy Plan while assisting with energy efficiency in public buildings, and is home to the geologic survey of Virginia.

7. Virginia Energy's efforts to date toward implementing the Final Rule, consist of (i) studying and understanding its contents and requirements; (ii) determining the number, location, and nature of all affected facilities; and (iii) planning ways to best implement mandatory statewide public outreach.

8. We believe that the Final Rule's Emissions Guidelines will apply to two Virginia coal-fired facilities; the Virginia City Hybrid Energy

Center (VCHEC) located in Wise County and owned and operated by Dominion Energy (Dominion), and the Clover Power Station (Clover) located in Halifax County, co-owned by Dominion and the Old Dominion Electric Cooperative and operated by Dominion, totaling a capacity of 1,516 MW. Clover Unit 1 entered commercial operation in 1995, Clover Unit 2 entered operation in 1996 and VCHEC entered operation in 2012. Virginia electric utilities also rely on West Virginia coal fired facilities to provide power. More broadly, Virginia is part of the PJM regional transmission organization which still operates a significant portion of coal fired facilities, approximately 24% of capacity as of December 31, 2022.

9. The Virginia Office of Attorney General, along with numerous other States, entered detailed comments to EPA on August 8, 2023, and December 20, 2023, explaining Virginia's objections to the Proposed Rule. Among the reasons stated in the previously submitted comment letters for which Virginia and the other States objected is that the Proposed Rule went far beyond EPA's statutory authority by setting unrealistic standards that will force nearly all coal- and

base-load natural gas-fired electric generating plants to close prematurely.

10. The Final Rule will very likely result in the closure of the VCHEC and Clover plants, possibly compelling closure by no later than 2032, well before 2045 when they are required to cease operation under the Virginia Clean Economy Act (VCEA), Chapter 1193 (2020) Acts of Assembly. Furthermore, regulatory uncertainty over the federal treatment of gas plants, coupled with Virginia's mandatory 2045 retirement for all fossil fuel facilities, will deter investment in adequate replacement resources.

11. For the VCHEC or Clover plants to operate beyond January 1, 2039, the Final Rule requires them to control 90% of their CO_2 emissions by some type of carbon capture and storage (CCS) system by 2032.

12. CCS is not a proven and commercially available technology for coal plants located in Virginia such as VCHEC and Clover. The Department of Energy's Pathway's to Commercial Liftoff: Carbon Management Report places carbon management technologies for coal powerplants in the longer-term opportunity category, which on

the report's website is categorized as ~2030 and beyond. Expecting a power plant to comply with a non-commercially viable technology and supporting infrastructure by 2032 is irresponsible policy making.

13. The Final Rule also ignores the carbon benefits that VCHEC produces through the combustion of waste coal. VCHEC entered commercial operation in 2012 with the purpose of combusting a byproduct of coal mining in Virginia, known as garbage of bituminous (GOB). GOB is an environmentally hazardous material that dots the coal region of Southwest Virginia, releasing methane, water and air pollutants. "The 1977 Surface Mining Control and Reclamation Act (SMCRA) acknowledges waste coal as a potential 'toxic forming material' because of its elevated sulfur levels, which contribute to acid drainage. Waste coal piles leach iron, manganese and aluminum pollution into waterways and cause acid drainage that kills neighboring streams. These piles also pose a risk of in-place combustion, releasing toxins and GHGs into the air."[1]

[1] Virginia Department of Energy, Virginia Department of Energy study on the economic and environmental impacts of eliminating waste coal piles in Southwest Virginia 4 (2024), available at https://www.energy.virginia.gov/public/documents/Public%20Meetings/Virginia%20Energy%20Study%20on%20Waste%20Coal%20Piles%20in%20SWVA%2020240129.pdf.

14. A 2024 Virginia Energy report found that GOB piles in the Commonwealth were potentially producing up to fourteen million tons of carbon equivalent (CO_2e) emissions annually and that combusting a ton of waste coal resulted in a lifetime reduction of CO_2e emissions of 52.6 tons. The material, which emits methane when left in situ, emitted less potent carbon dioxide when combusted at VCHEC. Methane is 28 times more potent as a greenhouse gas than carbon dioxide per the EPA. In 2022, VCHEC combusted 618,510 tons of waste coal, resulting in a lifetime emissions reduction up to 31.9 million tons of CO_2e. The Final Rule would penalize VCHEC based on carbon emissions ignoring the net greenhouse gas emissions reduction achieved by the plant.

15. The load demand required for the Dominion Load Zone is forecasted to grow at 5.6% annually, and this significant load growth will require a doubling of firm nameplate capacity by 2040. The forced retirement or limitation of either of these plants would limit forecasted economic growth opportunities.

16. Furthermore, Dominion and Appalachian Power rely on coal power plants in West Virginia. Dominion operates Mt. Storm and

Appalachian Power operates Amos and Mountaineer. In their 2023 Renewable Energy Portfolio Standard (RPS) filing, Appalachian Power reported that 61% of their 2022 capacity was coal-based resources. The total coal capacity for Virginia serving electric utilities is 7,413 MW.

17. Appalachian Power's Virginia service territory has recently been hit with multiple significant rate increases causing bills to rise drastically in an already energy burdened area. Effectively requiring the closure of the Amos and Mountaineer coal facilities would cause customers to pay for new generation facilities while still compensating the utility for prematurely closed facilities.

18. With respect to the Final Rule's amended NSPS applicable to new natural gas-fired electric generating turbines, Virginia believes it will prevent the construction and operation of necessary base-load natural gas generation due to its requirement that all such facilities control 90% of their carbon dioxide emissions by CCS by January 1, 2032.

19. The premature closures of the VCHEC and Clover power plants and the insurmountable impediments placed on the construction

and operation new base-load natural gas-fired electric generation inherent in the Final Rule's mandate for technologies that are simply not available to power plants in Virginia will result in significant, adverse impacts to the reliability of Virginia's electric system and the State's economy overall. See Commonwealth of Virginia, Department of Energy, 2022 Energy Plan.

20. Finally, the Final Rule is an unnecessary, piecemeal approach to controlling carbon pollution in Virginia and conflicts with the mandates of the VCEA. Unlike the Final Rule, the VCEA presents a comprehensive approach to controlling CO_2 emissions from the electric power sector in the State.

This the 9 day of May 2024.

Glenn Davis
Director
Virginia Department of Energy

EXHIBIT 27

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF WEST VIRGINIA, et al., Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al., Respondents.	No. 24-1120

DECLARATION OF MICHAEL G. DOWD

I, Michael G. Dowd, hereby declare and state under penalty of perjury that the following is true and correct to the best of my knowledge, based on my personal knowledge and information provided by Virginia Department of Environmental Quality (VDEQ) personnel:

1. My name is Michael G. Dowd, and my business address is 1111 East Main Street, Richmond, Virginia 23219. I am over the age of eighteen, have personal knowledge of the subject matter and am competent to testify concerning the matters in this declaration.

2. I have served as the VDEQ Director of the Air and Renewable Energy Division since 2008. I have a Bachelor's degree from Columbia University and a law degree from the Vermont Law School. My job responsibilities include overseeing the Virginia air quality program, the purpose of which is to protect human health and the environment by maintaining air quality standards, limiting harmful emissions, and providing transparent information to the public about air quality conditions.
3. I am submitting this declaration in support of Virginia's action challenging the final rule adding Subpart TTTT of 40 CFR Part 60, Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units and amending Subpart TTTTa of 40 CFR Part 60, Standards of Performance for Greenhouse Gas Emissions for Modified Coal-fired Steam Electric Generating Units and New Construction and Reconstruction of Stationary Combustion Turbine Electric Generating Units, pre-publication version signed by the Administrator of the U.S. Environmental Protection Agency (EPA) on April 25, 2024 (Final Rule).

4. The provisions of the Final Rule relevant to this challenge consist of two principal parts: (1) Standards for Emissions Guidelines to be established by States within two years under § 111(d) of the Clean Air Act (the Act), 42 USC § 7401 et seq., to control emissions of carbon dioxide from existing coal-fired power plants, and (2) amended New Source Performance Standards (NSPS) to control emissions of carbon dioxide from new natural gas-fired electric generating turbines under § 111(b) of the Act that are applicable immediately and directly enforceable by the United States Environmental Protection Agency (EPA).

5. VDEQ's mission is to ensure that all Virginians enjoy cleaner water, better air quality, and the productive reuse of land that was once contaminated. It is VDEQ's responsibility, among other things, to ensure that the air in Virginia meets public health and welfare standards established under the Act, including assuring that emissions from fossil fuel-fired electric generating facilities comply with such standards. It is furthermore VDEQ's responsibility to issue and enforce any air pollution control regulations and permits necessary to implement the Final Rule.

6. The procedures and requirements VDEQ must follow when issuing and enforcing air permits, as well as implementing regulations promulgated by the Virginia State Air Pollution Control Board, are set forth in the Air Pollution Control Law of Virginia (VA Code § 10.1-1300 et seq.), the Virginia Administrative Process Act (VA Code § 2.2-4000 et seq.), and the Administrative Code of Virginia.
7. The Virginia State Air Pollution Control Board (Board) is responsible for promulgating any regulations that also may be necessary to implement the Final Rule. The procedures and requirements the Board must follow when promulgating regulations are set forth in the Air Pollution Control Law of Virginia (VA Code § 10.1-1300 et seq.), the Virginia Administrative Process Act (VA Code § 2.2-4000 et seq.), and Executive Orders of the Governor. The timing requirements for developing regulations are also dictated by these state laws and policies.
8. Virginia's efforts to date toward implementing the Final Rule consist of (i) studying and understanding its contents and requirements; (ii) determining the number, location, and nature of

all affected facilities; and (iii) planning ways to best implement mandatory statewide public outreach.

9. We believe that the Final Rule's Emissions Guidelines will apply to two Virginia coal-fired power plants: the Virginia City Hybrid Energy Center (VCHEC) located in Wise County and owned and operated by Dominion Energy (Dominion), and the Clover Power Station located in Halifax County, co-owned by Dominion and the Old Dominion Electric Cooperative and operated by Dominion.

10. The Virginia Office of Attorney General, along with numerous other States, entered detailed comments to EPA on August 8, 2023, and December 20, 2023, explaining Virginia's objections to the Proposed Rule. Among the reasons stated in the previously submitted comment letters for which Virginia and the other States objected is that the Proposed Rule went far beyond EPA's statutory authority by setting unrealistic standards that will force nearly all coal- and base-load natural gas-fired electric generating plants to close prematurely.

11. The Final Rule does not alleviate these concerns and will very likely result in the closure of the VCHEC and Clover power plants

by no later than January 1, 2030, well before 2045 when they are required to cease operation under the Virginia Clean Economy Act (VCEA), Chapter 1193 (2020) Acts of Assembly.

12. For the VCHEC or Clover power plants to operate beyond January 1, 2039, the Final Rule requires them to control 90% of their CO_2 emissions by some type of carbon capture and storage (CCS) system by 2032.

13. CCS is neither a proven nor commercially available technology for coal plants located in Virginia such as the VCHEC and Clover power plants.

14. Even if, hypothetically, CCS were a proven and commercially available technology, it likely would be impossible to permit and construct the pipeline infrastructure necessary to transmit the CO_2 emitted by the VCHEC and Clover power plants from these facilities to the CO_2's ultimate underground storage location, perhaps hundreds of miles away, by the 2032 deadline for CCS application imposed by the Final Rule.

15. Alternatively, for the VCHEC or Clover power plants to operate through the end of 2038, they would have to undergo extensive

reconstruction to enable them to co-fire with 40% natural gas by January 1, 2030.

16. Due to the location of the VCHEC and Clover power plants in rural, rugged parts of Virginia, far from existing supplies of natural gas, it likely would be impossible to permit and construct the pipeline infrastructure necessary to deliver natural gas to either facility by the January 1, 2030, deadline for natural gas co-firing imposed by the Final Rule. Conversion to natural gas, therefore, does not appear to be a viable option for either the Clover or VCHEC power plants.

17. The Final Rule touts the "flexibility" allowed States in fashioning their Emissions Guidelines for coal-fired power plants to account for "Remaining Useful Life and Other Factors" (RULOF) and grid reliability. In Virginia's experience the term "guidelines" is a misnomer--EPA has never approved a State's Emissions Guidelines under § 111(d) of the Act that was even marginally different, let alone less stringent, than EPA's standards.

18. EPA states in the Final Rule that emissions trading and averaging will be allowed as flexibility mechanisms, "Provided they respect

the environmental integrity of the rule." However, as a practical matter it is difficult to imagine how such tools could be employed in Virginia's Emissions Guidelines regulation absent a commercially viable CCS technology, given the drastic carbon dioxide reduction requirements for coal-fired power plants in the Final Rule.

19. In addition, the two-year time frame imposed by EPA on States to develop Emissions Guidelines, combined with the Final Rule's broad yet vague public participation requirements for "meaningful engagement" and consideration of environmental justice, means that as a practical matter States will have little time or incentive to fashion innovative state plans that differ in any meaningful way the standards contained in the Final Rule.

20. Given both the Final Rule's strong emphasis on "meaningful engagement" and environmental justice and the extreme controversy that will surround all aspects of CCS projects such as the underground injection of carbon dioxide and construction of the pipelines necessary to transport it, the actual permitting and deployment of CCS will be impossible in most cases, even if CCS were an available technology.

21. As a practical matter, therefore, the Final Rule will force both the VCHEC and Clover power plants to close by 2030. By imposing the impossible requirement of CCS or compelling the conversion to natural gas regardless of feasibility or location by unimaginably tight deadlines, the Final Rule is an ill-disguised mandate outlawing nearly all coal-fired electric generation by 2030, cavalierly disregarding whatever adverse impacts to Virginia's electricity supply, grid resiliency, or overall economy may come.

22. With respect to the Final Rule's amended NSPS applicable to new natural gas-fired electric generating turbines, Virginia believes it will prevent the construction and operation of potentially necessary base-load natural gas generation due to its requirement that all such facilities control 90% of their carbon dioxide emissions by CCS by January 1, 2032.

23. As stated above, CCS is a technology currently unavailable to power plants in Virginia at any price; its application to natural gas-fired electric generation is as inappropriate as it is to coal-fired generation.

24. The premature closures of the VCHEC and Clover power plants and the insurmountable impediments placed on the construction and operation new base-load natural gas-fired electric generation inherent in the Final Rule's mandate for technologies that are simply not available to power plants in Virginia will result in significant, adverse impacts to the reliability of Virginia's electric system and the State's economy overall. See Commonwealth of Virginia, Department of Energy, 2022 Energy Plan.

25. Finally, the Final Rule is a piecemeal approach to controlling carbon pollution in Virginia and conflicts the requirements of the VCEA. Unlike the Final Rule, the VCEA presents a comprehensive approach to controlling CO_2 emissions from the electric power sector in the State. See Commonwealth of Virginia, Department of Energy, 2022 Energy Plan.

This the 8 day of May 2024.

Michael G. Dowd
Director, Air and Renewable Energy Division
Virginia Department of Environmental Quality

EXHIBIT 28

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF WEST VIRGINIA, et al. Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al., Respondents.	No. 24-1120

DECLARATION OF LAURA M. CROWDER IN SUPPORT OF PETITIONERS' MOTION FOR STAY PENDING REVIEW AND FOR AN ADMINISTRATIVE STAY

I, Laura M. Crowder, hereby declare and state under penalty of perjury that the following is true and correct to the best of my knowledge, based on my personal knowledge and information provided by West Virginia Department of Environmental Protection (WVDEP) personnel:

1. My name is Laura M. Crowder, and my business address is 601 57th Street SE, Charleston, WV 25304. I am over the age of eighteen, I have personal knowledge of the subject matter, and I am competent to testify concerning the matters in this declaration.

2. I have served as the Director of the West Virginia Division of Air Quality (WVDAQ) since May 11, 2019. I have an electrical engineering degree from

the West Virginia Institute of Technology. My job responsibilities include overseeing the West Virginia air quality program, the purpose of which is to protect human health and the environment by maintaining air quality standards, limiting harmful emissions, and providing transparent information to the public about air quality conditions.

3. My opinions in this declaration have been informed by briefings from the WVDAQ professional engineering, legal, and technical staff, meetings with other stakeholders concerning the proposed and Final Rule, and discussions with other West Virginia officials and employees.

Purpose of Declaration

4. I am submitting this declaration in support of West Virginia's motion to stay the final rule, published by the Environmental Protection Agency (EPA) on May 8, 2024, titled "*New Source Performance Standards for GHG Emissions from New and Reconstructed EGUs; Emission Guidelines for GHG Emissions from Existing EGUs; and Repeal of the Affordable Clean Energy Rule*," 89 Fed. Reg. 39,798 (May 8, 2024) (Final Rule). The Final Rule is EPA's final action after it had published the May 2023 carbon dioxide (CO2) emissions standards for fossil fuel-fired EGUs under §111 of the Clean Air Act and reviewed comments from the WVDAQ and other stakeholders.

State Regulation

5. The mission and vision of the WVDAQ is to achieve and maintain such levels of air quality as will protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state, and facilitate the enjoyment of the natural attractions of this state.

6. It is the WVDAQ's responsibility to ensure that the air in West Virginia meets public health and welfare standards established under the federal Clean Air Act (CAA), including the relevant standards of performance for greenhouse gas (GHG) emissions for electric generating units promulgated by the EPA.

7. The GHG standards are promulgated by the EPA in 40 CFR Part 60 Subparts TTTT and UUUUa for new and existing affected sources, respectively, under the CAA.

8. The WVDAQ promulgates legislative rules pertaining to air quality standards, develops state implementation plans to meet the federal standards, works to obtain EPA approval of state plan elements, issues pre-construction and operating permits to stationary sources, and ensures compliance with state and federal air quality rules.

9. To date, the WVDAQ has begun evaluating the Final Rule, including estimating the number of electric-generating units affected by the Final Rule and has begun considering how to incorporate the Final Rule into legislative rules and a state plan.

10. The WVDAQ estimates that the Final Rule will affect 19 EGUs in West Virginia. Importantly, the WVDAQ doesn't know if any West Virginia coal EGUs have set retirement dates. Such plans are normally confidential business information and the WVDAQ only knows such plans once a public retirement announcement or a PJM request to deactivate are made. No deactivations of West Virginia generation assets are currently on file with PJM.

a. In regulatory filings with the Securities and Exchange Commission (SEC) in February 2024, however, FirstEnergy forecasted the Fort Martin facility to retire in 2035 and the Harrison facility to retire in 2040.

b. Grant Town's power purchase agreement with FirstEnergy expires by 2036. Grant Town management has stated FirstEnergy currently has no interest in renewing or extending the agreement. Without the agreement, Grant Town has no transmission path to the electrical grid.

c. American Electric Power has not publicly stated any intention to retire its John Amos, Mountaineer, and Mitchell facilities.

d. Dominion Energy has not publicly stated any intention to retire its Mount Storm power station.

e. Omnis Fuel Technologies recently acquired the Pleasants Power Station and plans to convert the facility boilers to burn hydrogen produced from a pyrolysis-based graphite production facility to be built on-site using a blend of coal and natural gas. This process would emit significantly less CO2 than the existing coal combustion configuration. If successfully constructed, such a facility would pose many questions concerning CO2 emission regulations in light of the Final Rule.

f. Longview Power has not publicly stated any intention to retire its EGUs.

11. All coal-fired EGUs are major sources with Title V Permits. WVDAQ has a commitment to EPA to inspect all major sources a minimum of every two years. CCS systems and their appurtenances will add to the permitting and inspection burdens.

12. In West Virginia, a state plan receives binding legal authority only once the West Virginia Legislature develops and passes a special kind of regulation called a legislative rule that adopts the emission guidelines. The Legislature meets for only sixty consecutive days of the year beginning in January (on gubernatorial years like 2025 it begins in February). The Legislature's legislative rulemaking process can

take up to 18 to 24 months. For the 2025 legislative session, draft DEP legislative rules are due to DEP General Counsel by May 10, 2024. The Final Rule was signed April 24, 2024, and did not include a federal model rule for states to adopt. It is not feasible to propose a legislative state rule for the 2025 legislative session. WVDAQ cannot propose a new legislative rule until the 2026 legislative session at the earliest with an effective date of June 2026 if passed by the legislature and signed by the Governor. Considering performance standards required by the Final Rule will likely require multiple enforceable retirement deadlines, I cannot predict whether the Legislature will pass a state rule.

13. West Virginia's state legislative rule for greenhouse gas emissions, which adopted EPA's Affordable Clean Energy (ACE) Rule, took 24 months to complete. The rule included time for stakeholder engagement during the drafting of the rule. It was later repealed based on court decisions.

14. While WVDAQ has the authority to promulgate an emergency rule, it requires an expiration date which renders it non-approvable for inclusion in a state plan. Additionally, emergency rules require a duplicative process and must pass exactly as proposed which would be unlikely because there is not a model rule to adopt.

15. West Virginia previously submitted a partial state plan for greenhouse gas emissions for one coal fired EGU and was the only state in the country to submit

a state plan. We estimated it took 5 full-time equivalent persons to develop the state plan over an 18-month period. This state plan relied on standards of performance developed and required under the DAQ construction permitting program as the legal authority. The state plan was later withdrawn by West Virginia following vacatur of the underlying federal ACE rule by the courts.

16. The resources to develop a comprehensive state plan to include 19 units located at nine sites, will be exponentially higher than the previously submitted partial state plan for one coal-fired EGU at one site. Each of the 19 units will need to be identified as either (a) a unit that will commit to cease operation by January 1, 2032 and willing to take a federally enforceable limit to permanently shut down prior to that date; (b) a "medium-term" unit which will take a federally enforceable limit to cease operation before January 1, 2039 and convert their operation to co-fire with natural gas by January 1, 2030; or (c) a "long-term" unit with a rate based on 90% capture of CO2, an unproven technology for coal-fired EGUs, by January 1, 2032. Like the ACE partial state plan, a case-by-case analysis of each EGU will be required to develop the standard of performance. I cannot predict with any certainty whether the Legislature will have the time or political will to pass a state legislative rule with forced permanent closure dates for coal-fired plants.

17. A state plan that receives EPA approval must :

a. Identify all affected EGUs and identify the subcategory for each EGU;

b. Include inventory data for each affected EGU including the nameplate capacity, the base load rating, and five years of CO2 emissions data provided on a quarterly basis;

c. Impose emission standards for each affected unit;

d. Establish enforceable requirements to permanently cease operations for certain subcategories;

e. Establish increments of progress (IOP), which include deadlines and reporting requirements corresponding to requirements for each subcategory. For the long-term subcategory using carbon capture, the IOP requires dates to submit a control plan by, completion of awarding contracts, initiation of on-site construction, completion of on-site construction, commencement of permitting actions, CO2 injection location, and compliance with the emission standard;

f. Establish reporting obligations and milestones for affected EGUs that will demonstrate compliance by permanently ceasing operations;

g. Identify all applicable test methods, monitoring, recordkeeping, and reporting requirements for each affected unit;

h. Describe the process, contents, and schedule for a state reporting to EPA;

i. Develop additional specific requirements for existing coal-fired steam generating EGUs;

j. Establish requirements for owners to establish a publicly accessible "Carbon Pollution Standards for EGUs Website" and post relevant documents;

k. Develop optional requirements which may include provisions for compliance date extensions, short-term reliability mechanisms, and reliability assurance mechanisms.

l. Conduct one or more public hearing(s);

m. Establish compliance schedules;

n. Conduct remaining useful life demonstrations for any affected unit with a less stringent standard and developing corresponding operating condition requirements;

o. Demonstrate legal authority for the State to implement the state plan

p. Correlate emission rates with the applicable performance standard;

q. Meaningfully engage with stakeholders. Stakeholder engagement is, of course, important. But it takes significant agency time and resources—especially because, here, the Final Rule is vague about exactly what constitutes meaningful stakeholder engagement;

r. Demonstrate the state plan is projected to achieve required emissions performance;

s. Show that each affected unit's emission standard is quantifiable, non-duplicative, permanent, verifiable and enforceable; and

t. Identify other specific requirements for the state plan.

18. To comply with the Final Rule's state-plan timeline, the WVDAQ will have to begin working—i.e., expending resources—immediately.

19. The WVDAQ works with complicated environmental laws and regulations every day. But this is one of the most complex, byzantine regulations the WVDAQ has been subjected to. Because of the breadth and complexity of the Final Rule, West Virginia's state plan will require unprecedented coordination between the WVDAQ, the West Virginia Governor, the West Virginia Public Service Commission, West Virginia's public utilities, and PJM, the regional transmission organization that coordinates electricity in all or parts of 13 states (including West Virginia) and the District of Columbia.

20. Storing CO2 in geological reservoirs requires Class VI injection wells, which are currently permitted only by the EPA (except in three states). EPA still has primacy over Class VI wells and regulated sources in West Virginia would therefore be required to obtain these permits from EPA.

21. To comply with the CCS mandate, it's almost certain that coal-fired EGU owners will have to secure state permits—for example, construction or environmental permits. The owners would be required to modify their existing air quality permit to add a new technology which could take 6 months. Updating these WVDAQ permits will consume WVDAQ resources. In addition to the WVDAQ permit, a pipeline permit for the CO2 line and a carbon injection permit would likely be required.

22. The WVDAQ does not have the resources to devote to drafting a state plan and corresponding legislative rule to comply with the Final Rule and its related regulations in the timeframe allotted. Currently, the WVDAQ has 75 employees. Based on its experience developing a GHG legislative rule and partial state plan for EGUs, the WVDAQ estimates that implementing the Final Rule within the proposed 24-month compliance period would take up to 95 full-time-equivalent persons, assuming all units are long-term. That's over double our current staffing levels and would cost approximately $9.67 million dollars—assuming we could fill the openings. West Virginia simply does not have the resources, money or prospective personnel.

23. Several questions need to be answered immediately. Initial involvement would include developing a survey to engage with the utilities to identify known retirement plans, capabilities for converting to natural gas co-firing,

and capabilities to meet the 90% carbon capture emissions rate to understand which subcategories of sources are needed to develop a state plan. Data will need to be reviewed to calculate base-line emission rates for affected EGUs to make decisions regarding developing emission standards, including whether to establish per EGU or on an aggregate basis. Drafting a state rule to implement the Final Rule will also be an early step; however, the rule may depend on decisions from utilities that may not yet be available.

24. Compounding these challenges, WVDAQ is going to be facing mounting costs from several other EPA regulations released in the past year or two. The WVDAQ is also required to implement a state plan to implement the GHG emission guidelines for the oil and gas industry (Methane Rule) which became final May 7, 2024, and implement the 2024 PM2.5 NAAQS during the same timeframe. We expect that total costs for implementing all of these EPA policies and the Final Rule in the timeframes allotted could total hundreds of millions of dollars and require hiring hundreds of new staff members.

25. These costs are higher than they should be because EPA promulgated this Final Rule before developing a model rule, which would normally allow States to implement the Final Rule more quickly, easily, and consistently.

26. The Final Rule was made public and signed after the end of the West Virginia 2024 legislative session. The Legislature was not aware of these expenses and did not budget for them with respect to the WVDAQ.

27. The WVDAQ submitted comments during the comment period, including the following critiques.

a. The Final Rule would weaken grid reliability and resiliency—especially in those generation markets with a high concentration of intermittent renewables. This is doubly concerning given EPA's push to electrify the national fleet and the looming retirement of existing fossil-fuel baseload units.

b. This appears to be the same sort of generation shifting—albeit, by another name—that the Supreme Court rebuffed in *West Virginia v. EPA*. Because WVDAQ is not aware of any proven, existing technology that will permit existing or new EGUs to meet the emission limits, it's my understanding that the ways electricity is generated, transmitted, and consumed in West Virginia will need to change. For existing units, presumptively approvable emission standards are calculated on a case-by-case basis in accordance with 40 CFR §60.5775b based on the EGU's subcategory, which is itself determined by the EGU's permanent retirement date. Emission rates for medium-

term coal-fired EGUs are based on 40% co-firing with natural gas, on a heat input basis. Emission rates for long-term coal-fired EGUs are based on 90% capture of CO2. Basing emission standards on permanent retirement dates requires generation shifting of the national electrical grid, as does the natural gas co-firing rate for medium-term coal-fired EGUs.

c. The chief proposed best system of emission reduction—carbon capture and sequestration—is beset with difficulties. It has never been successfully used at a commercial scale without enhanced oil recovery to help offset cost, and only when market oil prices are high enough to justify operation. The handful of successful demonstration projects are decades old, very small, rely on unique economic and geologic circumstances, and consume a significant percentage of the EGU's output. There is little to no evidence showing that the EPA's proposed storage or sale of CO2 is feasible.

d. The Final Rule fails to properly understand or take account of remaining useful life and other factors.

e. The Final Rule does not allow adequate time to develop and submit a state plan. Twenty-four months is grossly inadequate to establish a legally enforceable complex state plan.

f. Monitoring developed for trading programs under 40 CFR Part 75 are punitive and biased high by design and should not be required for monitoring performance standards under the emission guidelines.

28. The Federal Power Act and the Federal Energy Policy Act of 2005 govern the generation, transmission, and reliability of electric power. In West Virginia, the Public Service Commission is the state agency responsible for ensuring that consumers have reliable, low-cost electricity.

29. In conclusion, it is my opinion that implementing the Final Rule will require WVDAQ and other state agencies to immediately invest time, effort and resources to develop a state plan. In my experience, the Final Rule is unlike other CAA rules promulgated by the EPA that States must implement. It is remarkable for its scope and complexity and will require West Virginia to change the way it regulates emissions and the generation of electricity. To submit a state plan or seek a timely extension, and because there is no federal model rule, the WVDAQ and other West Virginia agencies must begin work immediately. Developing that state plan will require significant time, effort and resources and will require amending and modifying West Virginia's laws and regulations. West Virginia will not be able to recover these costs.

30. Unless a stay is immediately granted, the Final Rule will impose significant and irreparable harm on the State of West Virginia and its citizens

through direct and immediate financial means and a loss of sovereign authority—including that held by WVDAQ pursuant to the West Virginia and federal law.

Lack of Harms by Entry of Stay

31. Issuing a stay will cause no real harms—it would merely maintain the status quo. Emissions from coal-fired EGUs have been steadily declining nationwide since 2000. The emissions from West Virginia's EGUs has followed the same consistent downward trajectory. Based on current market and regulatory conditions, there is widespread consensus that that trend will likely continue. In short, I expect West Virginia's coal-based CO2 emissions to continue meaningfully declining even without the Final Rule.

32. Further, West Virginia's measures already control GHG emissions. New sources are subject to existing emissions limitations in 40 CFR 60, Subpart TTTT. The risk of state enforcement actions and national trend towards more responsible corporate citizenship provide strong incentives to source-owners to comply with existing regulations.

33. As always, technological improvements and advances in research and development produce modern equipment that is better at limiting GHG emissions.

34. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

_____

Laura M. Crowder
Director, Division of Air Quality
West Virginia Department of
Environmental Protection

Date: May 13, 2024

EXHIBIT 29

No. [##-####]

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

State of West Virginia, et al.,

Petitioners,

v.

Environmental Protection Agency and Michael S. Regan, in his official capacity, as Administrator of the U.S. Environmental Protection Agency

Respondents.

On Petition for Review of Action by the U.S. Environmental Protection Agency

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DECLARATION OF NICHOLAS S. PRESERVATI IN SUPPORT OF PETITIONERS' MOTION FOR STAY PENDING REVIEW AND FOR AN ADMINISTRATIVE STAY

I, Nicholas S. Preservati, make the following declaration pursuant to 28 U.S.C. § 1746:

1. I am the Director of the West Virginia Office of Energy. I have held this position from July 5, 2023, to present. Previously, I served as the co-chair of Spilman Thomas & Battle, PLLC's Energy & Environmental Practice Group, the

North American Energy Practice Group Chair for Lex Mundi, an international association of 150 independent law firms in over 125 countries, and as Regional Counsel for American Electric Power. I obtained a Bachelor of Arts degree from the University of Notre Dame in 1994, a Juris Doctorate degree from the University of Loyola Chicago School of Law in 1997, and a Master of Science degree in Energy Policy and Climate from the Johns Hopkins University in 2021. I am over the age of 18 and am competent to testify concerning the matters in this declaration based on my personal knowledge, my experience with the Office of Energy, and information provided to me by Office of Energy personnel.

2. The West Virginia Office of Energy is responsible for the formulation and implementation of fossil, renewable and energy efficiency initiatives designed to advance energy resource development opportunities and provide energy services to businesses, communities, and homeowners in West Virginia. As Director, I am charged with the responsibility of ensuring that West Virginia becomes and remains not only a national but a global energy power. By state statute, the Office of Energy is responsible for formulating the State's energy policy, which is to place a priority on developing new and *existing* sources of energy.

3. I am providing this declaration in support of the State of West Virginia's motion for a stay of the Final Rule published by the U.S. Environmental Protection Agency ("EPA") titled "New Source Performance Standards for Greenhouse Gas

Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule," promulgated to regulate West Virginia's fossil-fuel fired power plants. The Final Rule would require these plants (except for those slated for retirement before 2039) to eliminate 90% of their greenhouse gas emissions by 2032.

4. The Final Rule will burden West Virginia, its ratepayers, and its vertically integrated electric utilities that own and operate electric generation facilities—both by destabilizing the power grid and by making electricity less affordable. The West Virginia Office of Energy questions the federal policy of increasing electricity demand through electrification and the adoption of electric vehicles, while at the same time, decreasing supply through the removal of reliable baseload generation from the grid. Such a policy will make the electric grid less reliable, thus placing businesses, jobs and even human health in jeopardy.

5. I am aware that EPA published the Final Rule following EPA's Proposed Rule issued on May 23, 2023. *See New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule*, 88 Fed. Reg. 33,240 (May 23, 2023).

6. The Final Rule's restrictions will make future investment in new natural gas power plants less likely because the Final Rule places burdensome requirements on such plants that make them substantially more expensive to build and operate. The State and utilities will have to quickly evaluate if the EPA's CCS requirements are remotely feasible for their facilities and operating conditions.

7. West Virginia has seven (7) coal-fired power plants that are not scheduled to close until at least 2040. The Final Rule places these plants in jeopardy because CCS is not an available option for these plants. The Final Rule acknowledges that neither option may be appropriate for existing coal-fired plants and exempts such plants from the rule so long as they close by 2032—and sets a less burdensome but still cost- and technology-prohibitive requirement for plants slated to close by 2039.

8. The Final Rule will require West Virginia's coal-fired plants to close at least seven years prematurely. West Virginia's utilities are vertically integrated and regulated by the West Virginia Public Service Commission. The construction and operating costs of these coal-fired powered plants have been amortized and funded by the West Virginia ratepayers.

9. West Virginia ratepayers have paid to build these coal plants and will continue to pay for them through at least 2040 regardless of whether they are operating. The Final Rule will place an undue burden of West Virginia ratepayers,

who already have one of the highest energy burdens in the country, by requiring them to continue paying for coal plants that will not be operating and that will not be providing them with electricity.

10. By making West Virginia's coal plants close prematurely, the Final Rule will cause West Virginia ratepayers to bear the cost of not only the non-operating plants, but also the new sources of generation necessary to replace the closed coal plants. In other words, the Final Rule is going to at a minimum double West Virginia ratepayers' bills for years, as they will be required to pay for two sources of electric generation while only being able to utilize one of those sources.

11. In addition to potentially doubling West Virginia ratepayers' electricity bills, the Final Rule will put many West Virginians out of work. Fossil power generation in West Virginia employes over 3,000 individuals who earn over $93,000,000 in annual wages.

12. This shift of generation will also be expensive. If the Final Rule puts significant quantities of thermal generation resources out of business, replacing each MW of thermal generation with multiple megawatts of intermittent and limited-duration resources, such as wind and solar, will have major cost implications and major impacts on electricity rates.

13. West Virginia has over 13,000 MWs of coal fired capacity that will be retired prematurely as a result of the Final Rule. The Longview Coal Plant is the

only plant that may have the potential to utilize CCS and not be forced to retire by 2032. Longview has a capacity of 710 MWs, which means that if it were able to utilize CCS and not be forced to retire, approximately 12,500 MWs of coal fired capacity would still be retired prematurely because of the Final Rule. Per the Final Rule, West Virginia would have to replace that capacity by 2032, which is less than a decade away. One 300 MW small modular nuclear reactor (SMR) is estimated to cost $3 billion dollars. To replace West Virginia's coal-fired generation by 2032, West Virginia would have to construct 43 SMRs in nine years at a total cost of $129 billion.

14. Solar costs approximately $0.90 to $1.30 per watt and requires 6-8 acres per MW. In order to replace West Virginia's coal-fired generation by 2032 with solar, it would require over 25,000,000 solar panels be installed over 78,000 to 104,000 acres at a cost of $11.7 billion to $16.9 billion. Given that the EPA has estimated that solar has a 16% capacity factor in West Virginia, the above figures would not produce 13,000 MW, but instead, only 2,080 MW. In order to produce 10,400 MW of generation from solar in West Virginia, it would require 125,000,000 solar panels over 390,000 to 520,000 acres at a cost of $58.5 billion to $84.5 billion.

15. According to estimates, it costs approximately $3 million to construct a 2.5 MW wind turbine. Each MW of wind requires approximately 60 acres of land. In order to replace West Virginia's coal-fired generation with wind, it would require

5,200 wind turbines (2.5 MW each) installed over 780,000 acres at a cost of approximately $15.6 billion. Assuming a capacity factor of 40%, it would require 13,000 wind turbines over 1,950,000 acres at a cost of $39 billion.

16. The WVOE is working with regulated utilities and other entities to secure funding/grants for approximately $170 million worth of upgrades to six (6) coal-fired plants in West Virginia. These upgrades will increase operating efficiency and reduce emissions at these plants in addition to creating 100's of well-paying jobs in West Virginia. The contemplated upgrades include turbine replacements, condenser tube replacements, superheater outlet replacements and cooling tower improvements and the majority of the proposed upgrades have projected start dates of 2024-2025. If these plants have to close by 2032 due to the Final Rule, the contemplated upgrades will not be made as they cannot be justified for such a small operating period. As a result, not only will numerous well-paying jobs be lost, the Final Rule will cause these plants to operate with a reduced efficiency and with higher emissions over the next eight (8) years.

17. Thus, under the Final Rule, West Virginia ratepayers will be harmed as existing coal-powered plants close and new gas-powered plants are never built. The resulting harm to West Virginians will be real and lasting. It will hit households in a state with some of the lowest average incomes and oldest populations in the United

States. The Final Rule is thus inappropriate as it forces retirement of reliable energy sources and imposes unreasonable costs without any clear benefit.

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I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed on this 2nd day of May, 2024, in Charleston, West Virginia.

Nicholas S. Preservati
Director
West Virginia Office of Energy

EXHIBIT 30

No. 24-1120

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

State of West Virginia, et al.,

Petitioners,

v.

Environmental Protection Agency and Michael S. Regan, Administrator, Environmental Protection Agency

Respondents.

On Petition for Review of Action by the U.S. Environmental Protection Agency

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DECLARATION OF CHARLOTTE R. LANE IN SUPPORT OF PETITIONERS' MOTION FOR STAY PENDING REVIEW AND FOR AN ADMINISTRATIVE STAY

I, Charlotte R. Lane, make the following declaration pursuant to 28 U.S.C. § 1746:

1. I am the Chairman of the Public Service Commission of West Virginia (PSCWV). I have held this position from July 1, 2019 to present and from 1997 to 2001. I served as Commissioner from 1985 to 1991. I served on the International Trade Commission from 2003 to 2011. I have also served for several years in the West Virginia House of Delegates. I served as President of the Mid-Atlantic

Conference of Regulated Utility Commissioners as well as a member of the Board of Directors of the National Association of Utility Regulatory Commissioners. I practiced law in State and Federal Courts in West Virginia for many years. I was awarded the Justitia Officium Award from the West Virginia College of Law and the Distinguished Alumnus Award from Marshall University. I am also a Fellow of the American Bar Foundation and the West Virginia Bar Foundation. I am over the age of 18 and am competent to testify concerning the matters in this declaration based on my personal knowledge, my experience with the PSCWV, and information provided to me by PSCWV personnel.

2. The PSCWV is responsible for regulating the service and rates of utilities, including vertically integrated electric utilities serving retail customers in West Virginia. As Chairman and a member of the PSCWV, I am charged with the responsibility for evaluating and balancing the interests of current and future utility service customers, the general interests of the state's economy, and the interests of the utilities subject to PSCWV jurisdiction in its deliberations and decisions, including matters relating to PJM Interconnection, LLC (PJM) and the Federal Energy Regulatory Commission (FERC).

3. I am providing this declaration in support of the State of West Virginia's motion for a stay of the Final Rule published by the U.S. Environmental Protection Agency (EPA) titled "New Source Performance Standards for GHG

Emissions from New and Reconstructed EGUs; Emission Guidelines for GHG Emissions from Existing EGUs; and Repeal of the Affordable Clean Energy Rule," 89 Fed. Reg. 39,798 (May 9, 2024), promulgated to regulate West Virginia's coal-, natural-gas-, and oil-fired power plants. The Final Rule establishes a series of unrealistic required carbon emission reduction target dates and unrealistic, and unachievable, technologies that are erroneously (and contrary to law) considered by the EPA to be the Best System of Emission Reduction (BSER) for coal-fired power plants. The targets and technologies mandated by the Final Rule are an obvious pernicious effort to ensure the shutdown of coal-fired power plants in less than six years when they could otherwise operate for sixteen years or more. The effective date of the Final Rule is July 8, 2024. *Id.*

4. I am aware that EPA published the Final Rule following EPA's Proposed Rule issued on May 23, 2023.[1] On August 8, 2023, the PSCWV submitted comments on the Proposed Rule.[2]

[1] *See New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule*, 88 Fed. Reg. 33,240 (May 23, 2023).

[2] *See* EPA Docket EPA-HQ-OAR-2023-0072-0598.

5. The Final Rule is expected to reduce coal-fired steam generating unit capacity from 181 gigawatts (GW) in 2023[3] to 52 GW in 2035, of which 11 GW includes retrofit carbon capture and storage (CCS). Generation from coal-fired steam generating units is projected to also fall from 898 thousand gigawatt-hours (GWh) in 2021[4] to 236 thousand GWh by 2035. This change in generation reflects the anticipated continued decline in projected coal-fired steam generating unit capacity as well as a steady decline in annual operation of those coal generating plants that remain online, with capacity factors falling from approximately 48 percent in 2022 to 45 percent in 2035 at facilities that do not install CCS. According to dramatic, but still overly optimistic EPA estimates of the ability to meet the Rule's requirements, by 2050, coal-fired steam generating unit capacity is projected to diminish further, with only 28 GW, or less than 16 percent of 2023 capacity (and approximately 9 percent of the 2010 capacity), still in operation across the continental U.S.[5] In my position as a utility regulator, I believe that any expectation of existing coal-fired power plants staying online beyond 2038 is not realistic, and

[3] *See* U.S. Energy Information Administration (EIA), Preliminary Monthly Electric Generator Inventory (based on Form EIA-860M as a supplement to Form EIA-860), December 2023 (released Jan. 24, 2024), https://bit.ly/3QGslLQ.

[4] 1 U.S. Energy Information Administration (EIA), Electric Power Annual, Table 3.1.A, November 2022 (released Oct. 19, 2023), https://bit.ly/3UE8Uo2.

[5] *See* 89 Fed. Reg. at 89,822-23.

shutdown of those plants by 2030 is the clear goal, and my expected outcome, of the Rule.

6. The Final Rule mandates a 90 percent reduction in carbon emissions from coal-fired power plants that choose the use of CCS technology which the EPA incorrectly assumes is the BSER. If, as I expect, we determine that required carbon emission reductions cannot be economically achieved, significant expenditures to comply with other EPA rules applicable to coal-fired power plants, including investments required to meet Effluent Limitations Guidelines (ELGs) and Coal Combustion Residuals requirements, would be rendered uneconomical because of the reduced life of the power plants brought on by the Final Rule. This will likely result in foregoing further investments in those environmental controls, leading to shortening of timelines for premature retirement of coal-fired power plants. The Final Rule does not simply encourage, but effectively mandates, early retirement of coal-fired, baseload, dispatchable generation that is necessary to maintain the reliability and resilience of the electric power grid. The Rule does this by requiring that any existing coal-fired power plant that proposes to operate beyond 2038 must commit to achieving 90 percent carbon emission reductions through the use of CCS by January 1, 2032. The limited data on utility-scale CCS, which can be best described as an experimental unproven technology, when applied to West Virginia's large baseload power plants reveals that implementation of CCS is neither

technically possible nor affordable. Moreover, CCS is not considered to be BSER by the PSCWV or any responsible utility company or utility regulator.

7. Even if a rapid and unprecedented breakthrough in equipment technological advancement were to occur to enable carbon capture at the scale required for large base-load power plants, sequestration itself is an even bigger problem. The EPA did not consider CCS from the standpoint of the physical locations and underground rock formations in proximity to the West Virginia coal-fired power plants that EPA seeks to burden with non-existent BSER. Sequestration is not simply drilling a hole in the ground under an existing power plant and pumping carbon dioxide into that hole. The idea of committing to 90 percent CCS by January 1, 2032 and committing the billions of ratepayer dollars necessary to install unproven CCS equipment to even remotely make such a target achievable is ludicrous. It is clear that if the Rule goes into effect, any hope that ratepayer financed coal-fired power plants can be used to supply base load, dispatchable energy needed for grid reliability until the end of the plants' useful lives, which, with proper maintenance, could be 2040 or beyond, is illusory, wishful thinking.

8. After mandating a non-existent CCS BSER that would theoretically, but not realistically, allow West Virginia coal-fired power plants to operate beyond 2038, the Rule sets a second natural gas co-firing standard that, if used, would allow ratepayer-financed coal-fired power plants to operate only to the end of 2038. To

achieve that 2038 deadline the PSCWV must commit by 2029 to utility installation of boiler modifications and natural gas pipelines as well as utility contracts for adequate firm gas supply to co-fire 40 percent natural gas at the existing coal-fired power plants. Although West Virginia is located on or near deep natural gas shale deposits, to achieve 40 percent gas cofiring, natural gas pipeline capacity will have to be evaluated, planned, and constructed. The five-year window during which West Virginia plant owners would have to commit to, and for the PSCWV to approve, massive investments in boiler modifications and pipeline construction programs, even if a firm natural gas supply could be achieved, is unrealistic. The PSCWV would have to commit ratepayer dollars for massive expenditures almost immediately with no assurance that the plants could obtain firm pipeline capacity, construct new pipeline capacity, or obtain necessary firm gas supplies by 2029.

9. After establishing technically impossible CCS BSERs and financially infeasible co-firing standards, the Rule then reveals its true goal which is the shutdown of other coal-fired power plants in West Virginia and elsewhere by 2031. The Rule does that by allowing coal-fired power plants that commit to permanently cease operations before January 1, 2032, to operate for the next six and a half years without any carbon emission restrictions or commitments. The prospect of shutting down West Virginia power plants with over fifteen years of remaining life, and having billions of dollars of stranded investment that must be paid by West Virginia

ratepayers—and then on top of that adding billions of dollars in new investment or purchased power exposure, all of which will be added to the rates of West Virginia ratepayers—is shocking. The shock is compounded by the fact that without steam-powered generation to provide the dispatchable base load power supply to assure constant and consistent electricity supplies twenty four hours a day, year around, the entire interconnected electrical system will be relying on unreliable intermittent generation sources that cannot be dispatched because they the sun does not shine and the wind does not blow 24 hours per day, 365 days a year.

10. The Final Rule will burden West Virginia, its ratepayers, and its vertically integrated electric utilities that own and operate electric generation facilities by destabilizing the power grid and by making electricity less affordable.

11. West Virginia has historically exported a large percentage of the power it produces. As a result, West Virginia is a net supplier of electricity to the regional grid and is historically near the top of all States in the percentage of its power generation that is exported to neighboring states. In fact, West Virginia has historically been the State with the second-highest percentage of its power generation being exported to neighboring States. On average, over the last five years, only Wyoming exported a larger percentage of its in-state electricity generation to neighboring states. Thus, the premature retirement of West Virginia coal-fired generation forced by the Rule has a significant impact on the reliability

and resilience of electrical supply not only in West Virginia, but in neighboring states, that rely on the interconnected bulk power system.

12. The Final Rule's restrictions will make electricity less reliable in West Virginia and throughout the electricity grid by forcing the retirement of baseload, fuel-reliable, always-available, fossil fuel-fired thermal generation resources, including the most fuel-reliable of the fossil fuel plants—coal-fired plants—which can store fuel supply on-site and remain available for extended operations when needed to back up less reliable generation resources.

13. Under the Final Rule, we believe that no West Virginia coal-fired generation will be able to achieve or even attempt to achieve the CCS alternative by the end of 2031. CCS is simply not a feasible system of emission reductions at the scale required for our large coal-fired power plants, let alone being the fiction espoused by the EPA that it is BSER. Moreover, considering the uncertainty of pipeline capacity and the cost of boiler modifications to achieve the 40 percent co-firing required by 2029 it is likely that the Rule will require West Virginia coal-fired power plants to immediately begin planning to shut down before 2031.

14. A decision to shut down a plant before 2031 because of the impossible targets set by the Rule and the erroneous assumptions of the EPA about BSER will effectively start the ball rolling to planned shutdowns. Once that occurs, decisions to invest in upgrades and technology necessary to meet other EPA Rules relating to

non-carbon aspects of the generating plants will be modified because such investments will not be economical with the premature retirement dates caused by the carbon emission rule. Those decisions will accelerate the necessity to shut down the power plants even before the short timelines provided by the carbon emission rule. Therefore, it is more likely than not that if the Rule is allowed to go into effect West Virginia is facing the planned shutdown of 10,500 Megawatts (MW) of utility-owned coal-fired power plants and 2,000 MW of Independent Power Producers coal-fired power plants even before the premature retirement date in 2030.

15. The shutdown of 12,500 MW of coal-fired power will have a debilitating impact on the economy of the State of West Virginia and on the communities in the vicinity of the plants and the coal mines that supply the coal to these plants. While coal usage at the plants varies from year to year depending on the dispatch status of the plants, we estimate that between 22 to 31 million tons of coal, much produced in West Virginia, will be put out of business by the Rule. That coal has a value of between $1.5 billion to $2.2 billion dollars. Moreover, to meet the needs of our generation plants, the coal mines supplying those plants must plan on huge capital expenditures to maintain existing production capability and open new mining locations. As the premature end of life of the coal-fired power plants draws nearer, those coal mines will be disincentivized from maintaining and expanding their coal production capabilities. If the Rule goes into effect, I envision

nothing other than an increasing downward spiral to premature retirement of coal-fired plant power plants and coal supplies that count on those power plants. This future is extremely alarming considering the well-documented warnings coming from the Regional Power Market and Transmission Planners (PJM for West Virginia and twelve other Mid-Atlantic and Midwestern states plus the District of Columbia) and the North American Reliability Corporation (NERC). These organizations have recently issued reports that intermittent power supply resources such as wind and solar facilities cannot reliably replace dispatchable, base-load steam power plants.

16. Indeed, PJM has recently warned in a February 2023 report on the risks relating to energy resource transitions that a movement away from base load dispatchable generation will cause capacity deficiencies and reliability degradation as dispatchable thermal plants are retired prematurely. In that report, PJM stated:

> The composition of the PJM Interconnection Queue has evolved significantly in recent years, primarily increasing in the amount of renewables, storage, and hybrid resources and decreasing in the amount of natural gas-fired resources entering the queue…
>
> By the 2028/2029 Delivery Year and beyond, at Low New Entry scenario levels, projected reserve margins would be 8%, as projected demand response may be insufficient to cover peak demand expectations, unless new entry progresses at levels exhibited in the High New Entry scenario. This will require the ability to maintain needed existing resources, as well as quickly incentivize and integrate new entry[.] …
>
> Thermal generators are retiring at a rapid pace due to government and private sector policies as well as economics …

> PJM's interconnection queue is composed primarily of intermittent and limited-duration resources. Given the operating characteristics of these resources, we need multiple megawatts of these resources to replace 1 MW of thermal generation.[6]

17. This shift of generation to intermittent, less reliable resources will also be expensive. PJM's report indicated that PJM requires multiple MW of intermittent and limited duration resources to replace one MW of thermal generation. If the Final Rule puts significant quantities of thermal generation resources out of business, replacing each MW of thermal generation with "multiple megawatts" of "intermittent and limited-duration resources" will have major negative implications for reliability and resilience of the grid, and major impacts on utility costs and electricity rates.

18. Much more recently, after the EPA announcement of its Proposed Final Rule, PJM repeated the same dire warnings. On May 8, 2024, in a statement following the EPA's issuance of the Rule, PJM warned:

> Although we appreciate EPA's adoption of certain flexibility measures in response to our proposals, areas of concern remain related to ensuring reliability given the impact of the Final EPA Rule[, including]:
>
> - The new rules governing both existing coal and new natural gas are premised on EPA's finding that carbon capture and sequestration (CCS) technology represents the "best" system of emissions reduction, which will be commercially available at a reasonable cost. However, the availability of CCS is highly dependent on local

[6] *Energy Transition in PJM: Resource Retirements, Replacements & Risks*, 1, 10, 16 (Feb. 24, 2023), https://bit.ly/3D0BRlP.

topology, such as salt caverns available to sequester carbon and the availability of a pipeline infrastructure to transport carbon emissions from individual generating plants to CCS sites potentially hundreds of miles away. There is very little evidence, other than some limited CSS projects, that this technology and associated transportation infrastructure would be widely available throughout the country in time to meet the compliance deadlines under the Rule.

- The Final Rule imposes the most stringent requirements on new gas and existing coal units that operate as baseload units. Although EPA has focused on these units given that they have greater emissions, these baseload units provide a critical reliability role. We are seeing vastly increased demand as a result of new data center load, electrification of vehicles and increased electric heating load. The future demand for electricity cannot be met simply through renewables given their intermittent nature. Yet in the very years when we are projecting significant increases in the demand for electricity, the Final Rule may work to drive premature retirement of coal units that provide essential reliability services and dissuade new gas resources from coming online. The EPA has not sufficiently reconciled its compliance dates with the need for generation to meet dramatically increasing load demands on the system.

- The Final Rule is premised on the availability of increased access to natural gas infrastructure to support the Rule's "co-firing with gas" compliance option for existing coal units. The present gas pipeline system is largely fully subscribed. Moreover, given local opposition, it has proven extremely difficult to site new pipelines just to meet today's needs, let alone a significantly increased need for natural gas in the future. The Final Rule, which is premised, in part, on the availability of natural gas for co-firing or full conversion, does not sufficiently take into account these limitations on the development of new pipeline infrastructure.[7]

[7] https://bit.ly/3UTo4ao (attached as Exhibit A).

19. The replacement of thermal generation with new generations that are not at the same locations as the prematurely retiring plants will require extensive costly transmission system modeling and ultimately billions of dollars of new transmission built in the PJM footprint alone. For example, the recent announcement of a shutdown of two relatively small generation plants in eastern PJM resulted in the need for a multi-billion dollar upgrade of the transmission system that could not possibly be accomplished in the limited timeline for those plant shutdowns. PJM determined that reliability needs could not allow the shutdown and directed the plants to plan for being placed into a "must-run" status. This micro-scenario of the problems with the shutdown of base load dispatchable steam-powered generation plants will be played out at critical macro levels in the immediate future if the EPA Final Rule is allowed to go into effect and more and more base load, dispatchable generation announces that they cannot economically consider anything other than premature retirement. PJM described the pervasive and severe reliability violations in Maryland and throughout the PJM network of a relatively small shutdown of dispatchable generation compared to what we will face under the Final Rule:

> [T]he retirement of the Brandon Shores and Wagner facilities introduces reliability concerns that are present even at today's load levels, let alone in 2025 or even 2028 when the system overall load is expected to grow by an additional 7,500 MW within the greater area of concern surrounding and including the BGE system. …
>
> The reliability violations are pervasive and severe in nature, *which could lead to a potential voltage collapse in the entire BGE system as*

> *well as multiple overloads throughout the BGE system and the larger PJM network.* The analysis also indicates that without a transmission solution, both Brandon Shores and Wagner will be required to maintain reliability prior to complete energization of the planned transmission reinforcements in the area. [8] (emphasis added)

20. The Rule will accelerate reliance on intermittent power supply resources that cannot be relied on to be available 24 hours a day, 365 days a year. Only dispatchable base load steam-driven power plants can provide that needed reliability and the Rule will cause the premature retirement of coal-fired generation which is the second-most fuel-reliable of the steam-driven power plants with inventories of on-site fuel. Only nuclear power plants can offer such fuel security and dispatchability. The chance of new nuclear plants taking up the slack for prematurely retiring coal-fired power plants is zero. The coal-fired power plants, their supported mining operations, and other local economy businesses supporting the power plants and mining operations represent thousands of jobs in West Virginia. Those are jobs that West Virginia cannot afford to lose considering the fact that the average household income in West Virginia is the second lowest of any State, and is only 65 percent of the national average.

21. Decisions about whether plants can continue to operate efficiently or shut down prematurely cannot be delayed. If the Final Rule is not stayed, the hope,

[8] PJM, *BESS Technical Viability – Wagner and Brandon Shores Retirements PJM Transmission and Operations Planning*, May 3, 2024, https://bit.ly/3UUm8yu.

or even expectation for a favorable future court ruling will not delay the need to begin planning for compliance and premature retirements and immediately expending resources in time and money. Without a stay the installation of equipment and construction timelines require immediate decisions that will have long-term debilitating consequences for ratepayers even if the Rule is eventually overturned by the courts.

22. Alternative decisions to forego the installation of equipment required to comply with the New Rules will likewise have to be made quickly and once made will have long-term consequences that cannot be reversed. If the decision is made to retire the plants prematurely, generation owners must notify PJM of the planned retirement and plan for replacement capacity. Generators in PJM have already committed the generation units in a three-year forward capacity market. When PJM is notified of the pending retirement (presently only 90 days' notice) PJM will conduct a retirement study to determine whether transmission system upgrades will be needed due to the redistribution of electricity flows across the PJM system. If transmission upgrades are required, they could be very expensive and involve transmission construction in surrounding states.

23. Absent a stay, the Final Rule will force West Virginia to make extensive expenditures of time and resources designing a State Implementation Plan. To participate in the design of any West Virginia plan, the PSCWV will need to conduct

detailed analyses and then consult with various stakeholders to determine what changes can plausibly be made for sufficient natural gas generation to offset the intermittent unreliability of renewable energy generation. However, this effort to maintain reliability with alternative steam-driven baseload natural gas units will be economically questionable and dangerous due to the expectation that natural gas generation is at or near the top of EPA's list of most likely targets for aggressive carbon restriction regulation. This is not mere speculation. The EPA removed natural gas-fired facilities from the present rule that targets only coal-fired generation, but in doing so it stated that it would address natural gas-fired generation holistically later this year. The EPA already floated CCS as BSER for natural gas units and any such rule would doom natural gas generation in the same way that the current Final Rule, unless stayed, will doom coal-fired generation.

24. The PSCWV expects the development of any West Virginia Implementation Plan along with the requirement to develop alternative electric power supply plans will require multiple PSCWV staff employees for two to four years plus the expenditure of resources for meetings and hearings. And, as indicated above, we will not have the luxury of "wait and see." The two-pronged effort, participating in the State Implementation Plan process, and PSCWV proceedings related to utility resource planning, certification, and siting, is expected to require the PSCWV to expend over a million dollars from its existing budget resources for

the current legislative period. Existing staff, which is already heavily burdened with normal utility cases processed by the PSCWV every year, will be unable to drop what it is doing to respond to the new responsibilities that the Rule will drop on us. We will have to choose between hiring additional employees or contracting for advice and assistance on the new Rule workload. Either will be expensive. West Virginia's Legislature meets only once a year for a 60-day session and concluded its last session earlier this year. EPA's Final Rule was made public and signed after the end of the West Virginia 2024 legislative session. The legislature was not aware of these expenses and did not budget for them for the PSCWV.

25. The PSCWV's substantial expenditure of human and fiscal resources associated with implementing the Final Rule—including the task of processing utility plans and formal case filings for replacements of power supply for our vertically integrated electric utilities, will immediately distract the PSCWV from serving its full regulatory mission, as directed by the West Virginia Legislature.

26. The forced premature retirement of West Virginia utility-owned power plants brought on by the Final Rule will require replacement capacity supplied by less reliable sources, and that, in turn, will increase utility costs and electricity rates while destabilizing the grid. The PSCWV and West Virginia electric generators will not have the luxury of waiting for future developments before making decisions that will lead to expensive construction of compliance equipment or the acquisition of

replacement capacity for a prematurely retired unit. Evaluation of alternatives, filings with the PSCWV, evidentiary proceedings and decisions by the PSCWV, and implementation of the selected compliance strategies will take time and cannot be delayed.

27. I cannot overstate the reliability concerns that are just as critical as the concerns over the costs heaped on West Virginia ratepayers if the Final Rule is allowed to go into effect, along with its erroneous and illegal assumptions of BSER. In addition to the cost of compliance, the Final Rule is problematic because it will place increased reliance on intermittent (wind-powered and solar-powered) electric generation resources within the region that includes the electric grid operated by PJM—the regional transmission and supply organization responsible for transmission adequacy and power supply markets in the region encompassing West Virginia, twelve other states, and the District of Columbia. The EPA's downplaying of the problem notwithstanding,[9] this move to intermittent resources will be unsafe and unreliable without online reserve resources necessary to provide the constant

[9] *See* 89 Fed Reg. at 39,811 n.62 (acknowledging the serious problems inherent to "intermittent renewable energy" yet stating without sufficient explanation that "[a]s more renewable energy is added to the electric grid and generation forecasts improve, the intermittency of renewable energy is reduced"); *see also id.* ("Many projections show this share" of "overall net electricity supply" attributed to "renewable technologies" "growing over time."); *see generally id.* at 39,816-39,817 (summarizing "[b]road [t]rends [w]ithin the [p]ower [s]ector").

balance of supply to load when wind and solar resources are intermittent; that is, when the wind is not blowing (or is blowing unevenly) or the sun is not shining (or is shining unevenly).

28. Solar and wind resources are not less expensive relative to thermal resources. First, the thermal resources that are affected by the Final Rule are legacy, up-and-running generation units that have embedded ratemaking values that are much lower than the cost of new capacity. And second, it will take multiple times as much replacement generation capacity to replace thermal generation capacity with intermittent and limited-duration wind and solar generation resources. PJM has quantified the ability of wind and solar resources to serve load for delivery years 2026/27 through 2034/35: replacing 1,000 MW of coal-fired capacity will require either 4,200 MW of onshore wind, 2,500 MW of more expensive offshore wind, 21,400 MW of fixed solar, or 15,500 MW of more expensive tracking solar.[10]

29. Thus, even if a megawatt of new wind or solar capacity is "cheaper" to *construct* than a thermal facility, that advantage is offset, again, by the need to construct "multiple megawatts of these resources to replace 1 [megawatt] of thermal generation."[11] And, again, these multiple MW are still not consistent and certain—

[10] *See* PJM, *Preliminary ELCC Class Ratings for period Delivery Year 2026/27 – Delivery Year 2034/35*, https://bit.ly/4dxOrKq.

[11] *Energy Transition*, *supra*, at n.6.

they produce energy only when the wind is blowing or the sun is shining. From the perspective of a regulatory body responsible for assuring that adequate, reliable, safe and affordable utility services are available to the citizens of West Virginia, I cannot imagine a worse plan for providing adequate, reliable, safe and affordable electricity service than the premature retirement of reliable base load dispatchable steam-driven power plants and substituting for that lost capacity and energy up to ten time more megawatts of less reliable intermittent power supplies as will result from the EPA Final Rule.

30. The Final Rule will cause not isolated, but wide-spread and coincidental, premature retirements of fossil fuel thermal units. This, in turn, will accelerate the closing of the baseload coal-fired generation, leaving our State and regional grid unnecessarily vulnerable to brownouts and blackouts.

31. West Virginia has approved plans to allow utility-owned thermal resources to comply with other EPA rules in place prior to this Final Rule that, although expensive, were determined to be necessary to preserve the availability of base load coal-fired thermal generation units which are the critically needed units that can provide electricity reliability and resilience with an onsite, multi-month fuel source. The Final Rule, if not stayed, will pull the rug out from under those efforts and render investments made to comply with other EPA rules related to coal-fired power plants as unnecessary white elephants burdening the ratepayers of West

Virginia for no good reason other than the EPA being intent on shutting down coal-fired generation plants well in advance of their useful, productive lives.

32. West Virginia ratepayers will be harmed by the uneconomic premature retirement of thermal power plants that will be caused by the EPA's Final Rule. West Virginia's generating utilities have billions of dollars invested in base load thermal units—an investment that grows monthly as the utilities spend money on construction necessary to meet previously finalized EPA rules. If the Final Rule forces those generating units to retire prematurely, the utilities will expect West Virginia ratepayers to both (1) help recover the unrecovered investments in these facilities, and (2) shoulder the additional cost of replacement capacity. In effect, West Virginia ratepayers will be expected to pay for unreliable capacity that would not be needed but for the unreasonable early retirement of our existing, reliable generation resources forced by the Final Rule.

33. West Virginia is the nation's fifth largest energy producer.[12] The West Virginia coal industry employs about 13,000 workers.[13] West Virginia has a population of about 1.77[14] million people, with only 736,000 households.[15] The

[12] EIA, West Virginia Profile Analysis (January 2024).

[13] EIA, Annual Coal Report 2022.

[14] US Census Bureau, West Virginia data.

[15] EIA, West Virginia Profile Analysis (January 2024).

decimation of the West Virginia coal industry would have a severely disproportionate effect on the State's residents and economy. It is also important to note that the additional costs of complying with the new rules, which will be paid by so few households, will be crushing at a time when power plant jobs, coal jobs, and thousands of jobs in the related supply chain decline.

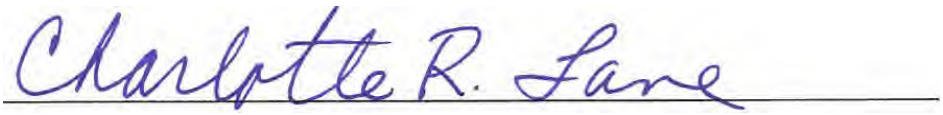
34. The resulting harm to West Virginia ratepayers, West Virginia workers, West Virginia tax revenues, education facilities dependent on those tax revenues, and government supplied infrastructure and services dependent on those tax revenues will be real and lasting. It will hit households in a state with some of the lowest average incomes and most elderly populations in the United States. But the negative impact will not be limited to rate impact, negative employment impact, and negative impact on the general economy in West Virginia. We will also be facing degraded, unreliable electric service.

35. This is neither the time nor the place for an over-the-top regulation like the Final Rule to force premature retirement of the very resources that are needed for reliability in the face of accelerated growth in less reliable intermittent solar and wind resources.[16]

[16] *See generally Energy Transition*, *supra*, at n.6 (PJM report discussing the risks from the pace of additions intermittent resources and accelerated retirements of thermal resources).

36. The mandates in the Final Rule frustrate the authority of the PSCWV and constrain its ability (and duty under West Virginia law) to serve the citizens of West Virginia. Unless a stay is immediately granted, the Final Rule will result in significant and irreparable harm to the State of West Virginia and its citizens through direct and immediate financial means and a loss of sovereign authority—including that held by the PSCWV pursuant to West Virginia and federal law.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed on this 10th day of May, 2024, in Charleston, WV.



Charlotte R. Lane
Chairman
Public Service Commission of West Virginia

EXHIBIT A

DECLARATION OF CHARLOTTE R. LANE

FOR IMMEDIATE RELEASE

PJM Statement on the Newly Issued EPA Greenhouse Gas and Related Regulations

(Valley Forge, PA – May 8, 2024) – PJM provides this statement concerning the EPA rule on New Source Performance Standards for Greenhouse Gas Emissions and the other EPA regulations promulgated on April 25, 2024.

PJM has the responsibility to ensure both short- and longer-term reliability for the 65 million people we serve in a region spanning 13 states plus the District of Columbia. "Reliability" in this context refers both to the day-to-day work of managing the grid to keep the system in balance as well as ensuring that, looking forward, there are adequate resources available and committed to serve the expected demand for electricity in future years.

Because of these unique responsibilities, PJM and other affected RTOs have been extensively involved in EPA rulemakings dating back to the Mercury and Air Toxics Standards rule promulgated on Dec. 16, 2011. Our role in these rulemakings has been to ensure that, in developing proposed environmental rules, EPA has appropriately taken into account the reliability needs of our respective grids.

Consistent with this past level of involvement, PJM worked cooperatively with MISO, SPP and ERCOT (the RTOs most affected by the EPA rule) to craft a set of detailed comments to EPA raising our collective reliability concerns with EPA's initial proposed greenhouse gas (GHG) rule. Our comments and subsequent meetings with EPA were focused on:

- Educating EPA as to the reliability needs of our respective systems and the potential impact that the then-proposed GHG Rule could have on both day-to-day reliability and resource adequacy; and
- Providing to EPA constructive proposals to help mitigate, from a reliability perspective, potential adverse impacts of the then-proposed Rule with a particular focus on ensuring adequate flexibility within the Rule for grid operators to be able to address both short-term reliability issues and resource adequacy within their regions.

– MORE –

Noting the RTO Comments, in its Final Rule issued on April 24, 2024, EPA made certain adjustments to its initial proposal. Those adjustments altered the resources impacted by the rule and provided additional tools that can help provide flexibility to address reliability issues. PJM is appreciative of EPA's acknowledgment of the importance of the existing resources to reliability, of the need for more flexibility, and its consideration of the Joint RTO Comments. The specific adjustments that were grounded in the Joint RTO Comments and adopted in the Final Rule included:

- **Treatment of Existing Gas Resources** – Removing existing gas from this rulemaking to be addressed holistically in a separate rulemaking
- **State-Specific Compliance Flexibility** – Availability of flexibility for the states to address reliability issues, taking into account the remaining useful life and other factors that affect needed units
- **Averaging** – Allowing unit owners to average their compliance obligations over multiple units to ensure least-cost compliance
- **Emissions Trading –** Authorizing states to utilize allowance trading to minimize compliance costs and burdens
- **Mass-Based Programs –** Authorizing states to potentially utilize an emissions cap rather than controlling the rate of emissions from each affected unit
- **Short-Term Reliability Mechanisms** – Allowing needed units to operate for emergencies without jeopardizing compliance with the rule
- **Timeline Extensions** – Providing extensions for retiring units needed for reliability and units needing more time to install controls, with state discretion for longer periods

PJM's Continuing Reliability Concerns

Although we appreciate EPA's adoption of certain flexibility measures in response to our proposals, areas of concern remain related to ensuring reliability given the impact of the Final EPA Rule:

- The new rules governing both existing coal and new natural gas are premised on EPA's finding that carbon capture and sequestration (CCS) technology represents the "best" system of emissions reduction, which will be commercially available at a reasonable cost. However, the availability of CCS is highly dependent on local topology, such as salt caverns available to sequester carbon and the availability of a pipeline infrastructure to transport carbon emissions from individual generating plants to CCS sites potentially hundreds of miles away. There is very little evidence, other than some limited CSS projects, that this technology and associated transportation infrastructure would be widely available throughout the country in time to meet the compliance deadlines under the Rule.

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- The Final Rule imposes the most stringent requirements on new gas and existing coal units that operate as baseload units. Although EPA has focused on these units given that they have greater emissions, these baseload units provide a critical reliability role. We are seeing vastly increased demand as a result of new data center load, electrification of vehicles and increased electric heating load. The future demand for electricity cannot be met simply through renewables given their intermittent nature. Yet in the very years when we are projecting significant increases in the demand for electricity, the Final Rule may work to drive premature retirement of coal units that provide essential reliability services and dissuade new gas resources from coming online. The EPA has not sufficiently reconciled its compliance dates with the need for generation to meet dramatically increasing load demands on the system.

- The Final Rule is premised on the availability of increased access to natural gas infrastructure to support the Rule's "co-firing with gas" compliance option for existing coal units. The present gas pipeline system is largely fully subscribed. Moreover, given local opposition, it has proven extremely difficult to site new pipelines just to meet today's needs, let alone a significantly increased need for natural gas in the future. The Final Rule, which is premised, in part, on the availability of natural gas for co-firing or full conversion, does not sufficiently take into account these limitations on the development of new pipeline infrastructure.

- EPA has left many issues for development in individual state implementation plans. Although this is appropriate and in keeping with the structure of the Clean Air Act, each of the multi-state RTOs like PJM operate a single dispatch. As a result, states will need to coordinate and work closely together to ensure that the individual state plans work well on a regional basis. As a result, the need for regional coordination of individual State Implementation Plans is more important than ever. PJM values its continued collaboration with the other affected RTOs (MISO, SPP and ERCOT) and looks forward to working with the U.S. EPA, individual states and affected stakeholders as this process continues.

PJM Interconnection, founded in 1927, ensures the reliability of the high-voltage electric power system serving 65 million people in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia. PJM coordinates and directs the operation of the region's transmission grid, which includes 88,115 miles of transmission lines; administers a competitive wholesale electricity market; and plans regional transmission expansion improvements to maintain grid reliability and relieve congestion. PJM's regional grid and market operations produce annual savings of $3.2 billion to $4 billion. For the latest news about PJM, visit PJM Inside Lines at insidelines.pjm.com.

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EXHIBIT 31

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF WEST VIRGINIA, et al., Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al., Respondents.	Case No. _____

DECLARATION OF TODD PARFITT

I, Todd Parfitt, declare as follows:

1. I am the Director of the Wyoming Department of Environmental Quality. I received a bachelor of science in natural resources and a master of public administration with an emphasis in environmental policy from the Ohio State University. As part of my duties, I am responsible for overseeing the Department's regulatory programs, including its implementation of federal Clean Air Act regulations.

2. I have been employed by the Wyoming Department of Environmental Quality for almost thirty years. During that time, I have overseen numerous facets of the Department's regulatory programs. I have served as the Director for twelve years. I also served as Deputy Director for seven years, Administer of the Industrial Siting Division for seven years, Interim Administrator of the Abandoned Mine Lands Division two different times, and manager of the Department's Clean Water Act pollution discharge permitting program for seven years. I also spent four years working in the Department's Resource Conservation and Recovery Act programs related to hazardous and solid waste and leaking underground storage tanks. In these positions, I regularly reviewed federal and state regulatory program requirements. I also worked with the Wyoming legislature on multiple matters related to the Department's regulatory programs. I have also served in the role of President of the Environmental Council of States from 2017-2018. Because of my experience, I am well versed in state implementation of environmental regulatory programs.

3. Based on my professional experience, education, and preliminary review of the Environmental Protection Agency's ("EPA") finalized but not yet published *New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric*

Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule ("Final Rule"), and supporting technical documents, I have the personal knowledge to understand what steps Wyoming will likely need to undertake in response to the rule, including preparing a state plan. Under the Final Rule, Wyoming must submit a plan or a negative declaration letter no later than twenty-four months after the Final Rule's publication in the Federal Register.

4. Based on my evaluations of EPA's requirements for Wyoming in the Final Rule, I have determined that implementing the rule presents a complicated endeavor necessitating immediate investment of significant Department resources. This will result in taking resources from other Department programs including Clean Air Act initiatives and commitments. Specifically, creating a plan of the type envisioned under the Final Rule would require years of effort that will be particularly complicated for at least the following reasons.

5. There are significant changes from the proposed rule to the Final Rule that we have not had time to fully identify or understand at this early stage of Final Rule review. These significant and substantial changes include but are not limited to: the removal of low-GHG hydrogen co-firing, fewer subcategories

for existing coal-fired steam generating units, and the compliance date extension for existing coal-fired steam generating units due to the implementation of carbon capture and storage.

6. The Department is in the process of reviewing the 1020 pages of the pre-publication version of the Final Rule, in addition to other associated documents, which only became available to Wyoming on April 25, 2024. Considering the voluminous nature of these documents and the significant changes from the proposed rule to the Final Rule, this review process will take staff several months to fully comprehend if and how Wyoming can comply with the Final Rule.

7. Implementing and enforcing the unusual control measures in the Final Rule would require the Department to coordinate with other agencies, including the Wyoming Public Service Commission, which regulates public utilities in Wyoming, and the Wyoming Game and Fish Department, which, along with federal agencies, manage wildlife in Wyoming's renewable energy development corridors. Preparing a plan to meet the requirements of the Final Rule would require considerable collaboration and buy-in to align the differing missions of these agencies with the Final Rule. For example, to meet EPA's goal, utilities in Wyoming would likely have to retire coal-fired power plants. To do that, consultation would have to occur with the Public Service

Commission, to evaluate the financial impacts that plant shutdowns would have on electricity consumers under Wyoming's system of public utility regulation. Plant shutdowns would also warrant the Department's consultation with public utility regulators in other states whose citizens pay for Wyoming-generated electricity.

8. The Final Rule also requires the construction and operation of new renewable electricity projects to meet the State's goal. Many of the lands necessary to construct renewable energy projects are located within sensitive areas and habitat for certain wildlife, like greater sage grouse. As a result, developing a plan to generate more wind and/or solar energy consistent with the proposed rule would require intensive coordination with State game and fish agencies, which oversee sage grouse and other sensitive wildlife conservation efforts. Wyo. Exec. Order 2019-3, at Appendix E, p.2-7 (Aug. 21, 2019). The Order expressly provides that wind and solar development "is not recommended in Greater sage-grouse Core Population Areas[.]" *Id.* at Appendix E, p.12. Deploying enough new wind energy to comply with EPA's Final Rule also would require consultation and negotiation with the private parties that own a substantial amount of the Wyoming lands suitable for wind energy projects. Lines to transmit wind energy generated by those projects will most likely have to cross federal lands, thereby implicating the regulatory interests of

federal land managers, and requiring compliance with the National Environmental Policy Act. Coordinating these differing regulatory and private interests quickly enough to develop a state plan on EPA's proposed timeline could only be possible with an immediate re-allocation of a substantial portion of the Department's resources and commitments from federal agencies outside the Department's control.

9. Wyoming is a net-exporter of energy from both fossil-fuel and renewable sources. Because Wyoming delivers energy to eleven different states, from California to Minnesota, complying with the Final Rule would most likely require Wyoming to enter into one, if not several, multi-state or regional agreements with states that consume power generated in Wyoming. Negotiating and executing those agreements in time to submit a plan on EPA's timeline would require a significant investment of Department resources. The effort will be complicated by the fact that other states with which Wyoming will likely have to collaborate are located in different EPA regions than Wyoming, which will in turn require plan approvals from different EPA regional offices.

10. Developing a plan to comply with the Final Rule will require the Department to recruit new resources. In some cases, the rule implicates subjects outside the Department's normal area of pollution control expertise, like reliability of

electricity availability and delivery. Likewise, the rule would create significant new workloads. For example, negotiating and administering complex multi-state and regional emissions allocation agreements and facilitating interagency coordination. Hiring new staff implicates the Department's budget, which the legislature must approve every two years.

11. As a practical matter, Wyoming must now begin expending substantial resources to attempt to comply with the two-year deadline for state plan submission under the Final Rule. This expenditure of resources will need to include consultation with Wyoming energy producers and consumers of Wyoming-produced energy, coordination with multiple stakeholders, state agencies and federal land managers, passing new state legislation, promulgating new regulations, and conducting public outreach. Those staff will need to be pulled from their normal responsibilities, which includes implementing the Department's normal Clean Air Act programs, like Prevention of Significant Deterioration and Title V. In sum, EPA's proposed rule and Final Rule will consume considerable limited Department resources that would otherwise be dedicated to other regulatory efforts.

12. Furthermore, the Department has already spent time and resources: (1) meeting with the Wyoming Public Service Commission and the electricity generators; (2) meeting with Wyoming's elected representatives and other

Wyoming regulatory agencies; (3) meeting with regulators from other States, including through the Environmental Council of States, Western Regional Air Partnership, the Western States Air Resources Council, the National Governor's Association, and the Center for New Energy Economy; (4) participating in webinars hosted by EPA, the Association of Air Pollution Control Agencies; and (5) researching and evaluating the rule internally. All of these efforts have been necessary to comprehend the bases for the Proposed and now the Final Rule, the prospects for interstate and regional cooperation, and the feasibility of crafting a Wyoming plan to meet the requirements of the rule.

13. The Department expects to take further steps in the coming months as a direct result of the Final Rule. The Department will continue to confer with the Wyoming Public Service Commission, electricity generators, other state agencies, states that receive electricity produced in Wyoming, and the public. The Department will also continue to dedicate internal staff resources to evaluating the practical, technical, and economic implications of creating a state plan to meet the rule's requirements. And, the Department will initiate "meaningful engagement" with Wyoming's energy workers and affected communities, consumers and other pertinent stakeholders in development of

a state plan. Those efforts will require continued investments of Department resources that would otherwise support other priorities.

14. If this Court holds that EPA now lacks authority to regulate power plans under the Clean Air Act, Wyoming will immediately halt the above-described expenditures on the Final Rule.

I declare under penalty of perjury that the foregoing is correct. Executed on this 6th day of May at 1:00 pm, 2024.

Todd Parfitt
Director
Wyoming Department of Environmental Quality