UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, *Petitioner*, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*, *Respondents*.	)	Case No. _____

DECLARATION OF ROBERT C. HOCHSTETLER

I, Robert C. Hochstetler, declare as follows:

1. My name is Robert C. Hochstetler. I am the President and Chief Executive Officer of Central Electric Power Cooperative, Inc. ("Central Electric"), and have held that position since July 2014. I hold a Bachelor of Science degree in Electrical Engineering and four Master's degrees in Business Administration, Statistics, Strategic Management, and Public Administration. I have been employed in the electric utility industry since 1990, working for investor-owned utilities and electric cooperatives. Over the course of my career, I have managed various electric utility generating

assets, including coal and natural gas units as well as renewable generation. I am over the age of 18 years, and I am competent to testify concerning the matters in this declaration. I have personal knowledge of the facts set forth in this declaration, and if called and sworn as a witness, could and would competently testify to them.

2. Central Electric is a member of the National Rural Electric Cooperative Association ("NRECA"). This declaration is submitted in support of NRECA's Petition for Review and Motion for Stay of EPA's final rule entitled *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*, 89 Fed. Reg. 39798 (May 9, 2024) (the "Final Rule" or "Rule"). I am familiar with Central Electric's operations, including power supply, transmission, compliance, workforce management, and electric markets in general. I also am familiar with how EPA's Final Rule will affect Central

Electric as well as its suppliers, members, members' consumers, and employees.

3. Central Electric is a not-for-profit generation and transmission cooperative owned by its members, the nineteen distribution cooperatives that operate in South Carolina. Central Electric provides wholesale electric service to its nineteen member cooperatives using more than 800 miles of transmission lines. Central Electric members provide service in all 46 of South Carolina's counties through 76,000 miles of distribution lines. Central Electric currently provides approximately 20,000,000 megawatt hours ("MWh") of energy to its members annually with a peak demand of approximately 4,600 megawatts ("MW").

OVERVIEW OF THE FINAL RULE

4. The Final Rule sets CO_2 emissions limits that States must apply to existing coal-fired steam units, under Section 111(d). 89 Fed. Reg. at 39840. The Rule also sets CO_2 emissions limits for new gas-fired combustion-turbine units, under Section 111(b). *Id.* at 39902. Both existing and new units must meet emissions limits roughly equal to what EPA says 90% carbon-

capture-and-sequestration can achieve. Existing units that cannot achieve this must shut down. New units that cannot achieve this must drastically reduce their output of electricity.

5. *Existing coal-fired units.* The Rule divides existing coal-fired steam units into three non-overlapping subsets: two are "subcategories" and one is an "applicability exemption." *Id.* at 39841. These subsets are defined by whether a unit has committed to permanently retire, and by the retirement date that a unit has committed to. *See id.* To be effective, these commitments must be included in State plans, which are due to EPA in 24 months. *Id.* at 39874. If a unit does not commit to retire, it is placed into the first subcategory by default. *See id.* at 39841.

6. The first subcategory is for "long-term" units, which EPA defines as units that plan to operate on or after January 1, 2039. *Id.* at 39801. EPA says that the best system for these units is CCS that captures 90% of the CO_2 from a unit. *Id.* at 39845. The first part of this "system" is the design and installation of CCS technology. *Id.* at 39846. After that, the captured CO_2 must be transported (usually via pipeline) to a sequestration site that can

permanently store it (usually underground). *See id.* EPA "assumes" that "work" toward "each component of CCS" will begin in June 2024, *id.* at 39874, and the Rule requires that work to be completed before January 1, 2032, *id.* at 39801.

7. The second subcategory is for "medium term" units: those that make a federally enforceable commitment to "permanently cease operation before January 1, 2039." *Id.* EPA's best system for this subcategory is "co-firing with natural gas[] at a level of 40 percent "—*i.e.*, transforming a coal unit into one that combusts both coal and natural gas. *Id.* EPA assumes that medium-term units will begin compliance work in June 2024, and the Rule requires those units to reach full compliance by January 1, 2030. *Id.* at 39893.

8. Third, units that make a federally enforceable commitment to permanently cease operating before January 1, 2032, have an "applicability exemption" and are not subject to the Rule. *Id.* at 39801. But "[i]f a source continues to operate past this date, it is no longer exempt," and is thus in violation of the state plan and the Clean Air Act. *Id.* at 39843; *see id.* at 39991.

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