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

NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, et al.	
Petitioners,	
v.	
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,	No
Respondent.	

DECLARATION OF LISA D. JOHNSON OF SEMINOLE ELECTRIC COOPERATIVE, INC. IN SUPPORT OF MOTION TO STAY

I, Lisa D. Johnson, declare:

- 1. I am the CEO & General Manager of Seminole Electric Cooperative, Inc. ("Seminole"). In that capacity, I supervise more than 500 employees at three principal locations in Florida. I am directly responsible to Seminole's Board of Trustees for overall Seminole operations.
- 2. I have worked for Seminole for two years, starting in July of 2013.

 Before joining Seminole, I was senior Vice President and Chief Operating Officer at Old Dominion Electric Cooperative in Glen Allen, Virginia. I hold a Bachelor of Science Degree in Mechanical Engineering and Materials Science from Duke University, and I have worked in the electric utility sector for over twenty years. I serve as a Director on the Florida Reliability Coordinating Council, as the

Secretary/Treasurer of the Florida Electric Power Coordinating Group, as a Trustee on the Board of Averett University, as a Director and as a member of the Executive Committee on the Board of the Florida Electric Cooperatives Association, as a director on the Board of the Electric Power Research Institute, and as Second Vice-President of the National G&T Managers Association. I was named one of Virginia's most "Influential Women" in 2012.

- 3. Seminole is one of the largest not-for-profit rural generation and transmission ("G&T") cooperatives in the country. Seminole has been in operation since 1948 and became fully operational as a G&T cooperative in 1976. Seminole and its nine Member-distribution cooperatives (collectively, "Seminole") serve approximately 1.4 million people and businesses in rural areas of Florida across 42 counties.
- 4. On August 3, 2015, the United States Environmental Protection Agency ("EPA") signed the final Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units ("111(d) Rule" or the "Rule").
- 5. The 111(d) Rule requires a drastic reduction in carbon dioxide ("CO₂") emissions from fossil fuel-fired generation, with a 32-percent reduction from 2005 levels required by 2030. The 111(d) Rule achieves those reductions through uniform CO₂ emission performance rates EPA has imposed on two

subcategories of existing power plants (coal- and natural gas-fired units), and statewide rate- or mass-based emissions goals that are formulated from the subcategory performance rates. States are required to formulate state plans for compliance and submit those plans to EPA for approval.

- 6. Although states must plan for compliance, affected units like those owned and operated by Seminole are responsible for compliance with the interim and final goals established in the Rule. Seminole cannot meet the new performance rates through any technological or operational changes at its existing units without curtailing generation or shuttering the plants, shifting generation to lower-emitting sources, and/or purchasing credits or allowances under a potential future trading program.
- 7. The 111(d) Rule could force Seminole to commit to curtailing coal and/or gas-fired generation or even shuttering all of its owned baseload and intermediate load electricity generating facilities, including both coal-fired units at Seminole Generating Station ("SGS") and the natural gas-fired combined-cycle unit at Midulla Generating Station ("MGS") by 2022 to comply with the Rule. Seminole will need to make planning and resource allocation decisions long before any final state plans implementing the 111(d) Rule are submitted to EPA for approval, before EPA's proposed Federal Plan and model state trading rules are finalized, and before this litigation is resolved. Because Seminole must make these

business decisions almost immediately to prepare to comply with the 111(d) Rule, Seminole and the communities it serves will incur imminent and irreparable consequences if the Rule is not enjoined until this Court has had a full opportunity for review.

Introduction to Seminole and its Generating Units

8. Like most electric cooperatives, Seminole serves rural areas that would not be profitable or feasible for other utilities to serve, and that such utilities historically declined to serve. As explained more fully in the Declaration of Kirk Johnson, filed on behalf of the National Rural Electric Cooperative Association, the principal purpose of rural electric cooperatives like Seminole is to provide affordable electricity to underserved rural and largely lower-income populations. To that end, Seminole provides essential electric service in primarily rural and lowincome areas of Florida stretching from west of Tallahassee to south of Lake Okeechobee. Approximately one-third of Seminole's residential customers have household incomes below the poverty level. Seminole serves an average of less than 10 customers per mile of electric line, whereas nationally, investor-owned utilities average 34 customers per mile and publicly-owned utilities average 48 customers per mile. Some of Seminole's Member cooperatives ("Members") serve as few as 4.6 customers per mile of electric line.

- 9. The rural nature of Seminole's business means that fewer customers exist to share the costs of Seminole's energy infrastructure. Because Seminole is a not-for-profit cooperative, its costs are reflected directly in its rates for electricity.
- plant and the natural gas combined cycle ("NGCC") unit at MGS. Most of Seminole's generation occurs at SGS in Putnam County in northern Florida. SGS was constructed in the era of the "Powerplant and Industrial Fuel Use Act." The Act, which restricted new power plants from using oil or natural gas and encouraged the use of coal, was enacted in 1978, and was not repealed until 1987. SGS came online in 1984 and consists of two, 650-megawatt ("MW") coal-fired generating units. SGS has operated at an average capacity factor of 80 percent throughout the last 18 years. In other words, SGS is very heavily utilized. In fact, in 2014, SGS generated approximately 58 percent of the total energy Seminole provided to its Members. Seminole engineering and consultant analyses estimate that SGS has a remaining useful life of at least another 30 years.
- 11. Putnam County, Florida, in which SGS is situated, was identified by USA Today as the poorest county in the State of Florida in 2015. Putnam County

¹ The Poorest County in Each State, *USA TODAY* (Jan. 10, 2015), *available at* http://www.usatoday.com/story/money/personalfinance/2015/01/10/247-wall-st-poorest-county-each-state/21388095/ (last visited Aug. 26, 2015).

has limited financial resources and is striving to improve its business and tax base. Putnam County has been designated as a "Florida Rural Enterprise Zone," which provides for economic revitalization through tax incentives. The Governor also has designated Putnam County as a "Rural Area of Opportunity" because it is struggling to maintain, support, or enhance job activity, and to generate needed revenues for education, infrastructure, transportation, and safety. Portions of Putnam County also are within a U.S. Small Business Administration "Historically Underutilized Business Zone," which allows small businesses to gain preferential access to federal procurement opportunities to promote economic development and growth in distressed areas. These state and federal designations reflect the tenuous economic status of the County and its residents.

12. SGS is one of the few major employers in Putnam County. SGS directly employs more than 300 people, and it requires hundreds of additional skilled contractors that work at the plant during maintenance outages and capital project implementation. Between 400 and 650 contractors worked at SGS during maintenance outages from 2012 to 2014. SGS is the largest taxpayer in Putnam County, paying more than \$5 million in property taxes in both 2013 and 2014. If SGS is forced to close prematurely, or curtail its operations to comply with the 111(d) Rule, it will result in substantial layoffs. Putnam County will also suffer

substantial economic consequences due to those layoffs and due to the reductions in critical tax revenue.

- 13. Seminole also owns and operates MGS, an 810-MW (nominal) generating facility that burns natural gas as its primary fuel, with ultra-low sulfur fuel oil used as a back-up fuel. MGS began commercial operation in 2002 with a 500-MW NGCC unit, which consists of two natural gas-fired combustion turbines, two heat-recovery steam generators, and one steam turbine. In 2006, Seminole added 310-MW(nominal) of gas-fired peaking capacity, which can be operational in as few as eight minutes to meet state operating reserve requirements. In 2014, MGS' NGCC unit provided approximately 17 percent of Seminole's total energy needs. Like SGS, MGS has a remaining useful life of at least another 30 years.
- 14. MGS is located on the county line between Hardee and Polk counties in south central Florida, and employs 36 workers. Similar to Putnam County where SGS is located, Hardee County has been designated as a "Florida Rural Enterprise Zone" and as a "Rural Area of Opportunity." Portions of Hardee County also are within a U.S. Small Business Administration "Historically Underutilized Business Zone." Seminole paid more than \$3 million annually in property taxes to Hardee County in both 2013 and 2014.

Summary of the 111(d) Rule

- The 111(d) Rule establishes stringent CO₂ emission guidelines that 15. states must follow to reduce CO₂ emissions from existing fossil fuel-fired power plants. Specifically, the Rule establishes: (a) unachievable CO₂ emission performance rates for two subcategories of existing power plants – steam generating units (including coal-fired boilers) and stationary combustion turbines (including natural gas-fired combined cycle units) – that EPA has nonetheless determined represent the best system of emission reduction for existing fossil fuelfired power plants; (b) state-specific rate-based and mass-based CO₂ emission goals based on the unachievable subcategory rates and the state's 2012 generation mix; and (c) standards and requirements for the development, submittal, implementation, and enforcement of state compliance plans that establish emission standards or adopt other measures at least as stringent as the subcategory-specific performance rates or state goals. While the Rule's compliance period begins in 2022, and final standards must be achieved by 2030, regulated entities must begin taking steps well in advance of those deadlines – many immediately – if they are to comply by the specified deadlines.
- 16. As stated above, the Rule assigns a uniform performance rate for each existing coal-fired and natural gas-fired electric generating unit (except excluded combustion turbines) to reduce CO₂ from existing power plants, measured in terms

of pounds of CO₂ emitted for every net megawatt hour, or lbs CO₂/MWh-net. For existing steam generating coal-fired units like SGS, the performance rate is 1,305 lbs CO₂/MWh-net. For natural gas combined-cycle units like those at MGS, the performance rate is 771 lbs CO₂/MWh-net.

- 17. The Rule also sets forth statewide rate- and mass-based emission goals for each state calculated from the weighted aggregate of emission performance rates applicable to the state's existing coal-, gas- and oil-fired power plants. Florida's final rate-based CO₂ emission performance goal for 2030 is 919 lbs CO₂/MWh-net, and its mass-based goal for existing affected units is 105,094,704 short tons of CO₂.
- 18. Although the *final* state goals are not effective until 2030, the 111(d) Rule also establishes a "glide path" with increasingly stringent interim emission reduction requirements and average interim performance rates and goals for the 2022 to 2029 compliance period. Individual units must comply with both the interim and final requirements.
- 19. States may directly impose source-specific emission standards or requirements, or they may adopt other measures that achieve equivalent CO₂ emission reductions from the same group of existing electric generating units. Specifically, states may adopt an "emissions standards" plan that applies the source subcategory-specific performance rates to affected units or applies other rate or

mass-based standards to affected units that individually, or in the aggregate, achieve EPA's subcategory-specific performance rates, or state rate- or mass-based goals upon implementation. Affected units could pursue compliance measures such as heat rate improvements, investing in or transitioning generation to existing natural gas combined cycle, renewable, or nuclear electricity generation, or use of an emissions credit/allowance trading system. States also may adopt a "state measures" plan that includes, at least in part, measures imposed on entities other than existing electric generating units covered under the Rule, as well as a backstop of federally enforceable standards for individual power plants that are triggered if the state measures do not achieve the required emission reductions. States also may band together to adopt a multi-state plan applying either an "emissions standards" or "state measures" approach.

20. Regardless of which compliance approach states choose, emission reductions from affected electric generating units like those at SGS and MGS – individually, in the aggregate, or in combination with other measures taken by the state – must achieve the equivalent of the EPA-specified CO₂ emission performance rates by 2030, expressed via the state-specific rate- or mass-based goals. States must abide by the goals set by EPA; they are not free to adopt less stringent goals.

21. The apparent flexibility of the EPA process for crafting a state implementation plan creates the kind of uncertainty that is impracticable to plan for. Seminole is forced to make imminent planning decisions based on the most stringent, inflexible outcome possible, causing irreparable harm if other more flexible options become available at a later date under yet-to-be-determined rulemakings. States must submit at least an initial state plan to EPA by September 6, 2016. The 111(d) Rule allows states to seek an extension to September 6, 2018, to submit a final plan. EPA has pledged to review and approve state plans within a year of their submission. The State of Florida thus has until September 6, 2018, to submit a final plan so long as it submits an initial plan for compliance by September 6, 2016, and seeks an extension from EPA. It will not be clear what compliance methods will be ultimately adopted by the State – including whether a trading program will be established, the terms of any such program, or whether that program will be acceptable to EPA – until the plan is finalized and approved sometime in late 2018 or 2019. The State also has the discretion to choose not to adopt a trading program in favor of other methods of compliance. In short, there is likely to be no certainty about the shape of Florida's plan, whether trading will be available under it and, if so, on what terms trading will be available, for at least another four years.

The Rule's Effect on Seminole

- 22. Neither of Seminole's primary generating resources can meet the final 111(d) Rule's performance rate for existing steam generating coal-fired and natural gas combined cycle plants, nor can they meet the interim rate. As noted above, the performance rates are among the few key metrics finalized by EPA as of the August 3 signature. Accordingly, when dealing with forced current realities (i.e., required generation planning) as opposed to future possibilities under whatever type of plan Florida ultimately adopts, SGS would be permitted to emit no more than 1,305 lbs CO₂/MWh-net annually, and the MGS NGCC unit would be permitted to emit no more than 771 lbs CO₂/MWh-net annually, by 2030. The interim rates, which must be met by 2022, would permit SGS to emit no more than 1,534 lbs CO₂/MWh-net annually, and the MGS NGCC unit would be permitted to emit no more than 832 lbs CO₂/MWh-net annually. Over the past 5 years, SGS has emitted CO₂ at an average annual rate of 2,006 lbs CO₂/MWh-net, more than 700 lbs more per MWh-net than permitted by the 111(d) Rule when fully implemented. MGS has emitted CO₂ at an average annual rate of 905 lbs CO₂/MWh-net, more than 130 lbs more per MWh-net than permitted by the 111(d) Rule when fully implemented.
- 23. Because SGS and MGS cannot meet the uniform performance rates, the 111(d) Rule's strict requirements are placing all of Seminole's owned base-

load and intermediate generating facilities at SGS and MGS in jeopardy of being curtailed, shuttered, and/or replaced. In 2014, these assets provided 76 percent of Seminole's total energy needs. They are outfitted with state-of-the-art emission control systems and, having reached approximately half of their expected useful lives, are relatively new facilities, yet they cannot even come close to meeting the EPA's stringent 111(d) emission limits. Seminole has invested more than \$530 million on state-of-the-art environmental control equipment at SGS since the plant came online in 1984 and more than \$262.4 million has been invested since 2006 alone. Should the plant be shuttered and/or replaced, these investments will be lost.

- 24. There is no viable, adequately demonstrated environmental control system that Seminole can install at SGS or MGS to meet the new performance rates. The only means for SGS and the MGS NGCC unit to achieve the Rule's emission rates are: (i) curtailment of operations and replacement of the lost generation with lower-emitting generation (e.g., natural gas-fired units and renewable generation) obtained elsewhere; (ii) closure of the facilities entirely and replacement of the units with new natural gas-fired units and renewable generation; or (iii) purchase of emission reduction credits or allowances through a trading system that *might* be established pursuant to the 111(d) Rule.
- 25. The first two options explained in the previous paragraph (curtailment and replacement, or closure and replacement) will require the premature closure

and/or curtailment of SGS, and possibly the NGCC unit at MGS, at extraordinary cost to Seminole and its Members. More specifically, Seminole does not currently have sufficient owned or contracted lower-emitting generation capacity to replace all or part of the generation provided by SGS and the NGCC unit at MGS. Even if the NGCC unit at MGS could meet EPA's emission limits, it does not have sufficient capacity to replace lost generation from coal-fired SGS. The MGS NGCC unit has operated at an average capacity factor of 62 percent since 2012; this capacity factor leaves little room for Seminole to ramp up output at MGS to offset curtailed generation from the SGS coal-fired facility, as contemplated by EPA with their imposition of a 75 percent capacity factor requirement for gas-fired facilities. Seminole could also construct additional renewable generation, but it is not feasible to replace the baseload and intermediate generation provided by SGS and MGS wholly with intermittent renewable generation resources given their unpredictability and low capacity factor.

26. To comply with the final 111(d) Rule, then, Seminole must choose to construct new generation facilities or to contract for purchased power supply from third parties. In addition, Seminole must contract for natural gas to be used to fuel its own generation and potentially must contract for natural gas to be used at its purchased power resource facilities. Under any option, Seminole must make these irrevocable decisions *soon* as explained in the next paragraph. In addition,

Seminole must decide by early 2016 if it will build replacement generation resources or enter into one or more purchased power agreements. Considering the uncertainty created by the 111(d) Rule throughout the electric generation industry, it is questionable whether Seminole will be able to obtain any purchased power resources. If Seminole must construct its own gas-fired power plants by 2022, it must decide in 2016 whether to replace all generation at SGS and MGS or some portion of these resources, which is prior to any final regulatory direction provided by EPA or the State of Florida. These investments must be funded by consumers, resulting in extraordinary rate increases. Seminole's Members and their end-use consumers cannot withstand this added financial burden. If the Court invalidates the Clean Power Plan, these new investments will not be needed but consumers will have already suffered from the unnecessary and irreparable rate-increases.

27. To replace SGS alone, Seminole would have to choose and evaluate potential sites and apply for the requisite environmental and local permits, at a cost of approximately \$2 million. As explained above, this irreparable effort and expense would need to begin by mid-2016. By the middle of 2018, Seminole also would have to contract to purchase generation equipment for the new plant at a cost of approximately \$375 million. If the decision is made to replace the MGS NGCC unit by constructing an equivalently-sized new gas-fired combined cycle facility, Seminole would be required to spend an additional \$150 million in the

same time frame.² Alternatively, if Seminole chooses to contract for the purchase of power and/or natural gas generating capacity, Seminole would have to negotiate and enter into the necessary contract(s) by mid-2018.

28. The total cost to Seminole of replacing 1,800 MW of capacity generated by SGS and the MGS NGCC unit is expected to be at least \$1.8 billion. Replacing SGS's output would cost Seminole approximately \$1.3 billion, and the cost of replacing the MGS NGCC unit's output would be approximately \$500 million. These figures could be even higher if the gas-fired equipment and construction markets surge in response to the 111(d) Rule. Seminole would have to obtain financing, starting with powertrain payments of \$525 million (\$375 million to replace SGS and \$150 million to replace the MGS NGCC unit) that would be made in mid-2018. Because Seminole will be carrying approximately \$836 million in outstanding debt (as of December 2021) associated with the prematurely-retired SGS and MGS units when it obtains that additional financing, its credit rating also may be negatively affected. Credit rating downgrades extend across all aspects of a utility, negatively affecting contracts, financing, and rates. Seminole would have to accelerate the depreciation schedule for SGS from a 30-year remaining life to a significantly shorter useful life. Seminole's rates would be forced to increase to

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² These costs represent only the initial power train equipment purchases that must be made by mid-2018, not the cost to replace SGS and MGS entirely.

cover the costs of new gas and/or renewable generation while continuing to pay for the sunk costs and outstanding debt associated with SGS and MGS.

- 29. Seminole also must decide before the end of 2016 whether to forgo planned investments in SGS, which are intended to maintain its efficient and environmentally-responsible operations. The uncertainty created by the 111(d) Rule thus creates another "roll of the dice" decision that must be made by Seminole. Seminole must choose now whether to spend additional money on improvements and risk losing the investments if the facility is prematurely retired, or choose not to spend the money and forgo the environmental benefits and efficiency gains that could be achieved.
- 30. Regardless of whether Seminole constructs new generation or enters into purchased power contracts with others to achieve compliance, Seminole would need to contract to increase its gas transportation capacity (via pipeline) before the end of 2016. The cost of constructing a gas pipeline to serve new gas-fired units is estimated to cost more than \$80 million, \$8 million of which may need to be paid before the end of 2016 to initiate the construction process. The enormous cost of the required investments completely unnecessary and imprudently made if the Rule is eventually overturned would be unrecoverable from the United States even if the 111(d) Rule is vacated. It is important to note that all of the additional

costs described above are on top of and in addition to the costs required to meet expected future demand for our Members.

- 31. The third option for compliance described above purchase of emission reduction credits or allowances under a 111(d) Rule-compliant trading program will not even be available to Seminole *unless* Florida adopts such a system. Seminole will not know with any certainty whether such trading will be available until late 2018 or in 2019, because the state plan requires development and EPA approval, both of which are time consuming. As noted above, Seminole will need to make decisions and commit to significant expenditures starting in 2016 regarding the generation resources that will be online in 2022 and beyond. It does not have the luxury of waiting to see if Florida adopts a trading program or if that program will provide sufficient credits or allowances, at economic prices, to allow the continued operation of SGS and the NGCC unit at MGS.
- 32. Seminole is a not-for-profit cooperative that cannot absorb the enormous costs of constructing a lower-emitting generating facility or contracting for lower-emitting generating capacity without passing along those costs to its Members. Premature closure of SGS, and potentially the NGCC unit at MGS, and the inability of Seminole to replace that generating capacity at a cost that would be affordable to Seminole's Members will have significant detrimental impacts on Seminole and its Members' consumers: (1) SGS's approximately 300 employees

will lose their jobs (and hundreds of contract-work opportunities will also be lost);

(2) Seminole will no longer operate in its current form, having lost its principal generating unit(s); (3) Seminole will lose an annual multi-million dollar revenue stream from a contract with Continental Building Products ("Continental"), under which Continental purchases synthetic gypsum (a byproduct of combustion, produced by SGS's environmental control systems) and recycles that product to make wallboard; (4) Seminole's rates will increase and may no longer be competitive with other utilities in the state, driving much needed economic development out of Florida's rural areas; and (5) the entire objective of the federally-crafted rural cooperative structure will be undermined.³

33. Unless the 111(d) Rule is stayed pending judicial review, Seminole must take the immediate and irreversible steps described above causing Seminole and its Members' consumers to suffer immediate and irreparable harm. If the 111(d) Rule is later invalidated, without a stay, Seminole will have already committed to a combination of the following irreparable actions: premature closings and/or significant curtailment of its operating power generation facilities, significant expenditures on natural gas and/or renewable generation facilities, and

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³ See Kirk Johnson Decl., $\P\P$ 6-9, 11 (discussing the purpose and formation of rural electric cooperatives).

new gas pipeline construction and/or purchase contracts.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed: October 12th , 2015

Lisa D Johnson