BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1297 DOCKET NO. E-7, SUB 1268

In the Matter of: Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC, 2022 Solar Procurement Pursuant to Session Law 2021-165, Section 2(c) RESPONSIVE COMMENTS OF THE SOUTHERN ALLIANCE FOR CLEAN ENERGY, SIERRA CLUB, AND NATURAL RESOURCES DEFENSE COUNCIL

Pursuant to the *Order Requiring Answers to Commission Questions and Establishing Additional Procedural Deadlines* issued by the North Carolina Utilities Commission ("Commission") on April 25, 2022, intervenors Southern Alliance for Clean Energy, the Sierra Club, and the Natural Resources Defense Council (collectively, "SACE, et al.") respectfully submit these Responsive Comments on the April 29, 2022 Response to Commission Order Requiring Answers on 2022 SP Program Petition ("Response") filed by Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, Inc. ("DEP") (collectively, "Duke Energy" or "Duke").

I. ENCOURAGE SOLAR + STORAGE

The Commission's first question asked why Duke proposed to exclude bids for solar + storage from the 2022 procurement. In its Response, Duke gave three reasons for excluding solar + storage: streamlining evaluation, facilitating the volumetric adjustment mechanism, and allowing more time to develop an appropriate contract structure for solar + storage. Response 1.

Due to the time constraints on the 2022 Solar Procurement Program, SACE, et al. do not oppose the decision to exclude solar + storage from the 2022 procurement. However, as the Commission's own question suggests, solar + storage offers substantial benefits and

the Commission should ensure that future procurements include incentives for the technology. These "hybrid" facilities are more dispatchable, flexible, and reliable, enhancing their value to the grid, 1 and they are increasingly capable of displacing even fossil gas generation with clean zero-emissions solar energy. 2 The Commission should ensure that the challenges Duke identified in evaluating solar + storage bids, and any other challenges related to opening a solar + storage procurement, are overcome before the 2023 solar procurement opens.

II. PURPA ADMINISTRATIVE AVOIDED COST RATES ARE NOT IMPLICATED

The Commission's sixth question asked whether the 2022 Solar Procurement Program potentially could allow Public Utility Regulatory Policies Act ("PURPA") qualifying facilities ("QFs") to be compensated at a rate that is in excess of the administratively determined avoided cost rate—and if so, why the Commission should allow it.

¹ See U.S. DEP'T OF ENERGY, Hybrid Energy Systems: Opportunities for Coordinated Research iv (2021), https://www.nrel.gov/docs/fy21osti/77503.pdf; E. Minear, Elec. Power Res. Inst., Solar Plus Storage Cost Assessment and Design Considerations: Executive Summary slides 18-19 (2019), https://www.epri.com/research/products/00000003002016637 (explaining that adding storage allows providing firm capacity outside of solar production hours and shifting the time for providing energy to the grid).

² See Bloomberg NEF, How PV-Plus-Storage Will Compete With Gas Generation in the U.S. (2020), https://assets.bbhub.io/professional/sites/24/BloombergNEF-How-PV-Plus-Storage-Will-Compete-With-Gas-Generation-in-the-U.S.-Nov-2020.pdf (finding solar-plus-storage a "zero-emissions threat to gas"); Colleen Leuken, Beyond Peaker Replacement: Solar+Storage Finds a New Job, Fluence (Apr. 18, 2019), https://blog.fluenceenergy.com/fluence-energy-storage-solar-storage-mid-merit-utility-scale-asset; see also Xi Lu, et al., Combined solar power and storage as cost-competitive and grid-compatible supply for China's future carbon-neutral electricity system, PROC. OF THE NAT'L ACADEMY OF SCI. OF THE U.S. OF AM. (Oct. 19, 2021), https://www.pnas.org/content/118/42/e2103471118.

This is not a problem for three reasons. First, as Duke explained in its Response, it considers the 2022 Solar Procurement Program to be an alternative PURPA program, and under PURPA as long as a state provides QFs the opportunity to enter into long-term legally enforceable obligations at avoided cost rates, it may also maintain alternative programs that utilities and QFs may agree to participate in. Response 6; 18 C.F.R. § 292.301(b); see Otter Creek Solar LLC, 143 FERC ¶ 61,282, 62,969 (2013) (upholding optional program available to certain small renewable QFs). In addition, solar procured under the 2022 Solar Procurement Program will include curtailment rights and environmental attributes.

Second, the 2022 Solar Procurement Program need not be considered a PURPA program—and therefore the entities that participate in it do not need to be considered QFs. The only time that Session Law 2021-165 mentions PURPA is in Section 6.(a), concerning the "blend and extend" program for existing QFs. Nothing in the language of the section establishing the 2022 Solar Procurement Program, Section 2.(c), indicates that it must be considered a PURPA program.³ The section refers simply to directing procurement of solar energy facilities and this type of state-law program is explicitly authorized under PURPA. 16 U.S.C. § 2627(b); see FERC v. Mississippi, 456 U.S. 742, 750 (1982). Accordingly, if the Commission is concerned about complying with PURPA notwithstanding the first point above, it could consider the 2022 Solar Procurement Program to be a simple directed

³ The section reads as follows:

SECTION 2.(c) The Commission is authorized to direct the procurement of solar energy facilities in 2022 by the electric public utilities if, after stakeholder participation and review of preliminary analysis developed in preparation of the initial Carbon Plan, the Commission finds that such solar energy facilities will be needed in accordance with the criteria and requirements set forth in Section 1 of this act to achieve the authorized carbon reduction goals.

Session Law 2021-165, Section 2.(c), https://ncleg.gov/Sessions/2021/Bills/House/PDF/H951v6.pdf.

procurement under state law, outside of PURPA. However, doing so would bring the rates and terms of procurement, and project interconnections, within FERC's jurisdiction.

Third, as discussed in SACE's Initial Comments in the 2021 avoided cost proceeding, as a result of Session Law 2021-165 the "peaker method" of calculating avoided costs is increasingly divorced from the actual costs that utilities avoid by purchasing from QFs and it will be necessary to reevaluate how to calculate avoided cost rates. Accordingly, the present administratively determined avoided cost rates are not an accurate benchmark for the appropriate cost of new solar resources procured under the 2022 Solar Procurement Program. Furthermore, procurement of new solar resources under the 2022 Solar Procurement Program serves the carbon-reduction mandates in Session Law 2021-165, which requires using a least-cost path to achieve those mandates but does not establish a cost cap.

III. AVOID THE INTERCONNECTION COMPLICATIONS OF DUKE'S LIMITED TERMINATION RIGHT THROUGH PROACTIVE TRANSMISSION PLANNING

In its eleventh question, the Commission asked for workarounds or alternatives short of Duke exercising its limited termination right in the event that network upgrade costs increase substantially during the interconnection study process.

Duke has acknowledged that if it chooses to exercise this contractual right then the cost of a necessary network upgrade would be borne by the remaining projects in the cluster study (assuming the upgrade is still needed), having the cascading effect of potentially jeopardizing those projects. Response 10. Duke has clarified that this could even result in

⁴ Initial Comments of the Southern Alliance for Clean Energy at 5, Biennial Determination of Avoided Cost Rates for Electric Utility Purchases from Qualifying Facilities – 2021, Docket No. E-100, Sub 175, (N.C.U.C. Feb. 24, 2022), https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=7df995a6-5f77-47af-a439-9a72f688a145.

procuring less than the minimum 700 MW of new solar proposed in its Petition for Authorization of 2022 Solar Procurement Program. *Id*.

The most effective alternative that would avoid this risk is proactive transmission planning based on the recognition that North Carolina's electric grid needs substantial upgrades in order to meet the requirements of Session Law 2021-165 and that the cost of these upgrades should not be the sole responsibility of clean-energy developers, nor should they be the result of a purely reactive planning process driven by the siting choices of developers. A forward-looking planning process could identify efficiencies and save customers money while improving resilience and hastening carbon reduction.

CONCLUSION

SACE, et al. thank the Commission for considering these Responsive Comments and continue to look forward to a robust 2022 solar procurement.

Respectfully submitted this the 6th day of May, 2022.

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CERTIFICATE OF SERVICE

I hereby certify that all persons on the docket service list have been served true and accurate copies of the foregoing filing by hand delivery, first class mail deposited in the U.S. mail, postage pre-paid, or by email transmission with the party's consent.

This the 6th day of May, 2022.

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