

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-2, SUB 1297
DOCKET NO. E-7, SUB 1268**

In the Matter of)	
Duke Energy Carolinas, LLC, and)	INITIAL COMMENTS OF
Duke Energy Progress, LLC 2022)	NCSEA
Procurement Pursuant to Session)	
Law 2021-165, Section 2(c))	

INITIAL COMMENTS OF NCSEA

I. INTRODUCTION

Pursuant to the *Order Opening Separate Dockets and Establishing Procedural Deadlines* (“Order”) issued by the North Carolina Utilities Commission (“Commission”) on March 11, 2022, the North Carolina Sustainable Energy Association (“NCSEA”), an intervenor in this proceeding, submits the following comments on the *Duke Energy Carolinas, LLC and Duke Energy Progress, LLC Petition for Authorization of 2022 Solar Procurement Program* (“Petition”) filed by Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP”) (DEC and DEP, collectively, “Duke”) on March 14, 2022.

The Petition requests the Commission authorize a 2022 solar generation procurement program pursuant to Section 2.(c) of North Carolina Session Law 2021-165 (“HB 951”). As set forth below in its limited initial comments, NCSEA supports an expedited rollout of a 2022 solar procurement program. NCSEA looks forward to reviewing the initial comments of other intervenors and where necessary providing response via reply comments.

II. NCSEA SUPPORTS THE REQUEST FOR EXPEDITED COMMISSION AUTHORIZATION

NCSEA agrees with Duke in that expeditious Commission review and approval of a 2022 solar procurement program (“2022 SP RFP”) is necessary. The 2022 Definitive Interconnection System Impact Study (“DISIS”) Cluster enrollment window closes on June 29, 2022 and DISIS phase 1 study work begins on August 29, 2022. As noted by Duke in its January 10, 2022 *Letter re Planned Stakeholder Engagement and Procedural Plans for Potential Commission-Directed 2022 Solar Procurement* filed in Commission Docket E-100, Sub 179, there is a need for the 2022 SP RFP to align with the 2022 DISIS Cluster, otherwise it will be forced to move to 2023 per the yearly DISIS cluster enabled by the recent interconnection procedure modifications.¹ Not only does HB 951 specifically authorize the Commission to approve a 2022 solar procurement,² but practically speaking North Carolina cannot wait until 2023 to begin procuring large amounts of solar generation resources if the state intends to adhere to the 2030 carbon reduction goals mandated by HB 951.

For all these reasons, NCSEA’s supports Duke’s request for expedited review to allow the 2022 SP RFP to align with the 2022 DISIS timing.

III. DUKE HAS NOT PROVIDED EVIDENCE SUPPORTING A 700 MW FLOOR

In the Petition, Duke proposes a 700-megawatt (“MW”) floor for the 2022 SP RFP: “First, the Companies are at this time requesting Commission authorization to launch the

¹ *Order Implementing Queue Reform*, Docket No. E-100 Sub 101 (August 19, 2021).

² “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.” SL 2021-165, Section 2(c).

RFP with a target minimum quantity of 700 MW.”³ NCSEA does not oppose the concept of a floor for the 2022 solar procurement but believes any such floor should be based on evidence. NCSEA appreciates Duke’s attempt to balance the need to add immediate and significant solar generation to its resource mix to meet the 2030 carbon reduction mandate against existing system limitations and possible network upgrade costs. NCSEA also recognizes that some network upgrade inefficiencies might be avoided by utilizing other carbon-free generation resources identified through the carbon plan process in Docket No. E-100, Sub 179 or by utilizing updated transmission planning procedures. However, the procurement floor of 700 MW is not supported in the Petition by evidence of what can and should be efficiently done in the 2022 SP RFP.

As noted in the Petition, “[...] current interconnection construction timelines estimate 2022 DISIS projects coming online in 2026 at the earliest, there may only be four DISIS clusters for new generation facilities to both complete the interconnection study process and complete construction to come online by 2030.”⁴ With such few clusters available prior to 2030 and a massive need for new clean generation,⁵ Duke should err on the side of a much higher procurement floor. While there is a danger of network upgrade costs associated with the 2022 SP RFP, Duke has not presented evidence in its Petition to show that the proposed 700 MW procurement number is associated with any network upgrade cost assumptions. Moreover, there are likely network upgrade costs associated with any new generation build on the North Carolina grid. Unfortunately, North Carolina

³ Petition, p. 4.

⁴ *Id.* at 8.

⁵ For example, a study filed by NCSEA and other intervenors in Duke’s 2020 integrated resource planning proceeding called for 17.8 gigawatts of new utility scale solar by 2035. *See, Second Corrected Report of Synapse Energy Economics, Inc.*, p. 1, NCUC Docket No. E-100, Sub 165 (May 27, 2021).

does not yet have a grid planning process that shows the most efficient way to build clean energy generation on the grid. There is still much work to be done in the carbon plan docket and elsewhere to establish an improved process for transmission planning and for injecting new clean energy resources into the North Carolina electric grid. Therefore, without evidence of risks from a larger procurement, NCSEA does not believe the arbitrary 700 MW floor is sufficiently well-developed. In fact, the only clear data point known is that massive amounts of clean energy generation must be built to meet the HB 951 carbon reduction mandate, and, accordingly, Duke’s procurement floor should reflect that data and likely be higher than 700 MW.

Duke and others may ask why a “floor” matters, given that the carbon plan and further transmission planning might eventually allow for a much larger 2022 total solar procurement number. As has been well-established in the Competitive Procurement of Renewable Energy Program,⁶ a robust solar procurement marketplace results in lower costs for ratepayers. A 700 MW program floor, with much of that capacity reserved for Duke-owned projects,⁷ does not reflect the robust procurement that may enable the most competitive bidding process. Without sufficient market signals to create an early, robust marketplace competition, the ratepayers will suffer. In fact, a higher procurement floor might enable enough competition to cause solar prices to go down enough to offset some or all the network upgrade costs as discussed above.

NCSEA recommends that the Commission direct Duke to seek to have as robust a procurement as feasible and utilizing any “low hanging fruit” that is available. Such

⁶ See, *Updated CPRE Tranche 1 Final Independent Administrator Report*, NCUC Docket Nos. E-2 Sub 1159 & E-7, Sub 1156 (July 23, 2019).

⁷ Petition, pp. 10-11. (“The Companies are designing the 2022 SP Program to achieve the 55%/45% allocation of utility ownership and third-party Controllable PPA resources established in HB 951”).

projects may include those which trigger network upgrades, but such upgrades are an inevitability due to constraint, solar resource in the area, and customer need.⁸

IV. THE CPRE MODEL SHOULD BE USED AS A GUIDE, BUT SHOULD NOT BE BINDING PRECEDENT

In the Petition, Duke repeatedly follows logistical pathways established in the CPRE program. The CPRE Program was, considered on a whole, a successful foray into solar procurement and independent power producer marketplace dynamics, so NCSEA agrees that where applicable, the CPRE logistical model should be emulated in the 2022 SP RFP. This application would include specifically: stakeholder engagement to continue during the 60-day pre-solicitation process;⁹ the pre-solicitation process and solicitation process;¹⁰ procurement of new utility solar resources through the 2022 SP RFP;¹¹ program inquiries made to the independent evaluator;¹² grid locational guidance (especially if improved with grid planning);¹³ and system upgrade cost recovery.¹⁴

However, NCSEA would caution against repeatedly following this formula in future clean energy procurements aligned with the HB 951 carbon mandate. The CPRE, for all its success, saw few solar+storage projects even considered by the independent administrator, let alone brought online. NCSEA believes it is imperative for the procurement marketplace to include storage projects as the carbon plan evolves to avoid the need to otherwise adjust for intermittent power.

⁸See, *Friesian Holdings, LLC's Post Hearing Brief*, NCUC Docket No. EMP-105, Sub 0, pp. 24-42 (February 10, 2020). The *Friesian* argument for the cascading effects of network upgrades triggered by a solar project are persuasive and illustrative and, with the HB 951 mandate, likely show the type of inevitable upgrade necessary to meet the statutory requirement.

⁹ Petition, p. 6.

¹⁰ *Id.* at 11-12.

¹¹ *Id.* at 17-20.

¹² *Id.* at 21.

¹³ *Id.* at 24.

¹⁴ *Id.* at 26.

Further, the independent administrator in the CPRE program capitalized on low-cost network upgrade projects when making its selections, allowing Duke to avoid making more substantial investments in network upgrades. Substantial investments in system upgrades cannot be delayed indefinitely if North Carolina is to transition to a carbon-neutral future, as mandated by HB 951. Therefore, NCSEA would encourage the Commission and all stakeholders to prepare to be nimble in planning and logistical process to reflect what best suits ratepayers while also carrying out the carbon reduction mandate in HB 951.

V. LARGE SCALE SOLAR PROCUREMENT SHOULD BE DONE EARLIER RATHER THAN LATER

In their Petition and in the initial stakeholder meetings on the 2022 solar procurement and the carbon plan, Duke has insinuated that declining solar prices or other economic factors may lead Duke's planning model to "select" solar at a later period maybe even including the latter portion of the 2020s.¹⁵ While Duke has not yet produced a carbon plan model, NCSEA would caution pushing larger solar procurements back into the later 2020s or deferring the larger procurement amounts needed until later. Solar procurements, even with the seemingly improved interconnection process, are unpredictable in timing.

Duke does actually acknowledge the need to front-load procurement in its Petition, in fact, explaining that the solar procured to meet the 2030 carbon reduction mandate must be procured in time for the 2027 DISIS cluster due to interconnection lag times.¹⁶ However,

¹⁵ Duke notes that the target volume of procurement may be decreased dependent upon the carbon plan solar reference price which will defer "some of the modeled procurement volume to the future." *See* Petition, p. 16. *See also*, Petition, pp. 15-16. ("the initial 2022 SP procurement target reasonably takes into consideration both the forecasted changing costs of solar over time and the Companies' forecasted annual interconnection capacity.")

¹⁶ Petition, pp. 8-9.

Duke has proposed a low 2022 SP RFP floor, relative to the total need for solar to meet the 2030 carbon reduction mandate, which signals larger procurements later in the 2020s and such delayed procurements matches what Duke has mentioned about its carbon plan modeling. NCSEA disagrees with this pathway and believes a larger upfront procurement is a key to success in meeting the carbon mandate.

Procuring more solar capacity in 2022 rather than later would allow for lag time associated with interconnecting a larger amount of solar in time for the 2030 deadline. The uncertainty involved in backloading solar procurement is a risk to meeting the HB 951 carbon reduction mandate. Moreover, as explained above, ratepayers will be positively impacted by the robust procurement marketplace, which will reduce the overall costs associated with the energy transition. As detailed below, NCSEA believes a more robust transmission planning process is necessary, but until it is in place, the marketplace dynamics of a frontloaded solar procurement is the most known and quantifiable pathway to the carbon reduction mandate.

VI. TRANSMISSION PLANNING MUST BE FIXED

The transmission planning process must be updated as soon as possible to adopt a top-down view, rather than the current ala carte transmission planning process which is only done based upon specific project requests and review. Upon updating the transmission planning aspect, the new process should be synthesized with future generation needs including clean energy procurements. For HB 951's carbon reduction mandate to be fulfilled pursuant to the "least cost" requirement, generation planning in the Duke territories in North Carolina must be informed by transmission planning, and vice versa.

We have seen the Commission utilize this concept to some degree before,¹⁷ but North Carolina needs to take an even further step back in transmission cost/benefit analysis as it moves forward with generation planning beyond just considering the levelized cost of transmission associated with decentralized utility generation portfolios.

For now, though, and until the transmission planning aspect of the carbon plan is clarified, NCSEA would encourage the Commission to require Duke move forward with the robust 2022 SP RFP as outlined herein.

VII. CONCLUSION

As noted above, NCSEA submits these limited initial comments for Commission consideration when implementing the 2022 SP RFP. NCSEA has had the opportunity to discuss some of the positions that other intervenors were taking in their early drafts of comments in this docket and looks forward to the opportunity to review the filed initial comments of other intervenors and respond in reply comments.

Respectfully submitted this the 28th day of March 2022.

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¹⁷ See, *Order Denying Certificate of Public Convenience and Necessity for Merchant Generating Facility*, NCUC Docket No. EMP-105, Sub 0 (June 11, 2020) which provides context for the Commission considering the levelized cost of transmission when considering whether to grant a merchant Certificate of Public Convenience and Necessity.

CERTIFICATE OF SERVICE

I hereby certify that all persons on the docket service list have been served true and accurate copies of the foregoing document 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 28th day of March 2022.

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