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February 14, 2022

VIA ELECTRONIC FILING

Ms. A. Shonta Dunston
Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

**RE: 2022 Solar Procurement Stakeholder Engagement Update and
Plans for Third Stakeholder Meeting
Docket Nos. E-100, Sub 179**

Dear Ms. Dunston:

Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP” and together with DEC, the “Companies”) hereby provide the North Carolina Utilities Commission (“Commission”) a copy of the Companies’ presentation to stakeholders from the second meeting, held on February 7, 2022, to discuss a potential 2022 Solar Procurement, as well as information regarding the Companies’ next planned stakeholder meeting on a potential 2022 Solar Procurement.

The Companies held a second stakeholder meeting to discuss a potential 2022 Solar Procurement with North Carolina and South Carolina stakeholders on Monday, February 7, 2022. Approximately 100 individuals attended the session, and stakeholders were provided the opportunity to provide comments verbally, via chat or by email. During this second stakeholder meeting the Companies addressed their preliminary analysis of the need for new solar resources to meet customers’ future energy needs based upon DEC’s and DEP’s 2020 North Carolina and South Carolina Integrated Resource Plans, provided additional detail on the Companies’ proposal to issue a Request for Proposal (“RFP”) for solar resources using an independent evaluator, and addressed options for designing the RFP to control costs for customers. The Public Staff—North Carolina Utilities Commission (“Public Staff”) also presented on the RFP structure for a potential 2022 Solar Procurement. A copy of the Companies’ presentation including the Public Staff slides presented during this second stakeholder meeting is being filed with this letter.

OFFICIAL COPY

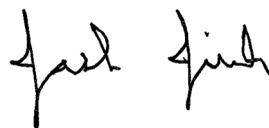
Feb 14 2022

The Companies are planning to host a third 2022 solar procurement stakeholder meeting on February 25, 2022. The Companies look forward to continuing to engage with both North Carolina and South Carolina stakeholders on these and other important resource planning issues and will continue to seek to identify areas of consensus where possible and will leverage any such consensus in developing its planned filing regarding the potential 2022 Solar Procurement, targeted for early March.

Market participants and other stakeholders interested in participating in future 2022 solar procurement stakeholder meetings should contact the Companies at 2022SolarRFP@duke-energy.com to receive communications regarding the stakeholder process. Market participants and other stakeholders may also continue to send comments and feedback to the Companies via this same email address.

If you have any questions, please do not hesitate to contact me. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Jirak", written in a cursive style.

Jack E. Jirak

cc: Parties of Record

2022 Carolinas Solar Procurement Planning Process

Stakeholder Meeting 2

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Feb 14 2022

FEBRUARY 7, 2022



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Safety Moment



General Safety around Downed Power Lines:

- Report all power line hazards to your energy company.
 - Duke Energy at 800.228.8485, or contact your local emergency services department or agency
- Stay away from downed or sagging power lines, and do not touch anything that is on or near a power line.
- Keep children and pets away from areas where lines may have fallen.

Car Safety and Downed Power Lines:

- Call 911
- Never touch a car or someone in the car that is contact with power lines
- Never approach a car that has hit a utility pole
- Never drive over downed power lines
- DO NOT exit your car unless it catches fire
- If you must leave your car:
 - Jump clear and land on both feet
 - Keep both feet together
 - Shuffle away from the car



Agenda

Topic	Presenter	Time
Welcome and Safety Moment	Terri Edwards	2:00 pm
Establishing “preliminary need”	Matt Kalemba	2:05 pm
Cost/Quantity relationship in model	Maura Farver	2:20 pm
Approaches to Limiting Solar Costs	Maura Farver	2:40 pm
RFP Logistics and Process	George Brown	3:00 pm
Public Staff Presentation	Jeff Thomas	3:20 pm
Q&A	All	3:35 pm

Planning for 2022 Carolinas Solar Procurement

HB 951 provides for the Commission to direct a 2022 procurement based upon the NCUC determination of the need for such procurement:

Part 1 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.”



Requires stakeholder participation and review of preliminary analysis developed in preparation of the initial Carbon Plan



2022 Procurement Preliminary Analysis of Need

- Modeling from 2020 NC IRPs and SC Modified IRPs provides indicative quantity to inform need

	IRP (Portfolio A2)	IRP (Portfolio B)	IRP (Portfolio C1)	IRP (Portfolio D)	IRP (Portfolio E)
Description	Base w/ No CO2 Policy – SC Modified IRP	Base w/ CO2 Policy	Earliest Practicable Coal Retirement – SC Modified IRP	70% with Wind	70% with SMR
2030 CO ₂ Reduction	57%	59%	66%	70%	71%
2035 CO ₂ Reduction	56%	62%	66%	73%	74%
Total Solar by 2030	9,200	9,690	11,790	11,375	11,375
Total Solar by 2035	10,350	12,325	15,550	16,240	16,240
Incremental Solar by YE2030*	2,400	2,890	4,990	4,575	4,575
Incremental Solar by YE2035*	3,550	5,525	8,750	9,440	9,440

*Assumes 6,800 MW of solar in base plan without HB951

Relationship between Cost and Quantity

- Accuracy of cost estimates in model is important for resource quantity selection
 - Higher costs of a technology type → downward pressure on model quantity selected
 - Lower costs of a technology type → upward pressure on model quantity selected
- Model-selected volume can be used as a target for a procurement, *but the actual procurement amount should reflect the actual procurement costs.*
 - If procurement costs are materially higher than modelled, then actual procurement should trend lower than the model's selected quantity.
 - If procurement costs are materially lower than modelled, then actual procurement should trend higher than the model's selected quantity.
- Other operational constraints and mandate deadlines will also impact price sensitivities and annual resource quantities.

Timing and Solar Interconnection

- Solar costs are forecast to decline over time from 2022 through 2030.
- With future solar to be less expensive, the model will naturally delay procurement dates to achieve lower future prices.

Physical, logistical and operational limits to how many resources can be interconnected in a single year suggests waiting to build all solar in 2029 and 2030 is not feasible.

- Historically, the greatest volume of new solar DEC & DEP have interconnected in a single year is 750 MW.
- Due to existing pipeline of interconnections and other transmission-related work, 2022 DISIS (Definitive Interconnection System Impact Study) projects are projected to come online starting in 2026.
- Duke has a focused effort to expand its ability to connect more megawatts annually to meet the 2030 carbon reduction goal.

Stakeholder Feedback on Cost Caps

- HB 951 does not specify cost caps for the execution of the Carbon Plan.
 - Directs the Commission to use least cost planning
- Stakeholders appear to be split over whether the 2022 solar procurement should include specified Cost Caps.
 - Pre-set administratively determined avoided cost cap (CPRE model) provides cost certainty but does not account for solar resource need
- Duke supports cost controls that enable Commission-approved procurement amounts while ensuring costs remain reasonable for customers.
- Stakeholders also agree that the total cost of procurement needs to be managed and controlled.
 - How to best do this?

Options to Limit Solar Costs

Option 1: Wait – No ‘22 RFP

- Defer any decisions on launching an RFP until there is a complete and approved Carbon Plan 12/31/2022.
- This would mean projects would be studied in the 2023 DISIS cluster.
- Once Carbon Plan is approved, Duke will target the approved volume per Option 3.

Option 2: Preset Cost Cap

- March ‘22 filing would ask NCUC for a “preliminary determination of 2022 solar need” and to approve a set cost cap and a target MW.
- PPA cost cap would be based on already-established methodologies and practices (i.e., generic peaker method proxy avoided cost).
- Designed to mitigate against excessive cost given that a Carbon Plan is not yet approved.
- Cost cap for utility-owned solar would also be established.
- Enables use of 2022 DISIS cluster to bring on solar as quickly as possible.

Option 3: Carbon Plan-informed Volume

- March ‘22 filing would ask NCUC for a “preliminary determination of 2022 solar need” to be based upon the May ‘22 Carbon Plan filing resulting in a modeled economic solar need and resource-specific avoided cost.
- If RFP bid prices are materially higher than modeled assumptions, the MW quantity is **reduced** as much as 20% from target.
- If RFP bid prices are materially lower, the MW quantity would be **increased** as much as 20% from target.
- The filings would request NCUC order by 11/1/22 to determine how many projects are invited to Step 2/Phase 2.*

* Procedural path in SC still under discussion

Independent Evaluator

Consistent with legal requirements, Duke plans to hire an Independent Evaluator (IE)

- Aim to have IE selected by April 1, 2022
- Designed to ensure transparency of 2022 Solar Procurement and RFP selection process

Stakeholder Feedback:



- Positive feedback for Charles River Associates
- Current proposal is that cost of IE is born by bidders – there has been feedback both for and against.
- IE would host website/platform for Q&A, RFP documents, and bid submission

Independent Evaluator Scope of Work

Substantially similar to CPRE for purchases to serve NC & SC

- Manage 60-day Pre-Solicitation process (April 1, 2022 – May 30, 2022)
 - Provide input to draft RFP
 - Coordinate market participant (MP) review of RFP documents
 - Host Two Meetings: (1) draft RFP Overview and (2) MP Feedback on RFP
 - Coordination with Public Staff and Office of Regulatory Staff
- Pre-Issuance Report to Commission(s) IE's Assessment of RFP
 - Comment on Evaluation Methodology
 - Consistency with accepted industry standards and practices
- Audit Bid Evaluation including:
 - RFP Step 1 bid evaluation and ranking of PPA projects, asset acquisition bids, and utility self-build projects
 - RFP Step 2 evaluation and grid upgrade cost assignments for both PPA and utility ownership projects
- Post RFP Report to Commission(s)
 - Solicitation process was conducted fairly, transparently and consistently for all bidders and utility self-build projects
 - Final short-list of bids represent the most cost-effective proposals to meet the procurement objectives

PPAs and Asset Acquisition

- Some developers expressed a preference to be able to bid in both PPA and Asset Acquisition tracks.
- PPAs and Asset Acquisition will both exclude unregulated Duke affiliate companies for this 2022 solar RFP.
- IE will review Duke sponsored projects to compare them against third party projects submitted in the RFP



If a project is competitive under both tracks,
which track is selected?

PPA Contract Term

Stakeholder Feedback:

- Multiple contract terms may be unnecessarily complicated for this first RFP.
- Some stakeholders do not want contracts beyond 20 years; some prefer 25 or 30.

- A 25-year contract would ensure the energy stays on the Duke system for the 2050 goal at a known cost.

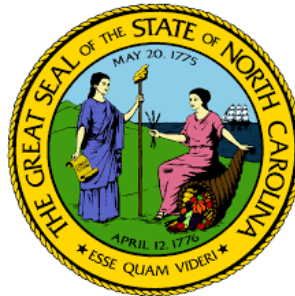


Network Upgrades

- Stakeholders seem to prefer separating network upgrades for “cost of service” recovery (similar to CPRE and other transmission investments)
 - Enables more aggressive offers in the RFP by removing upgrade cost uncertainty from the bidding process.
- FERC jurisdictional approach requires interconnecting customer to fund network upgrades at IA but provides for reimbursement by Duke after COD is achieved.
- Network upgrades will be used to rank the projects.

North Carolina Utilities Commission Public Staff

2022 Procurement
Second Stakeholder Meeting
February 7, 2022



PS Discussion Topics

- Avoided Cost Cap without Network Upgrades
- Total quantity of the procurement – range based on 2020 IRP and Carbon Plan
- To allow utility or affiliate bids, need assurances on process
 - IE has to present its own report in the docket similar to the IA report, certified to IE's independent judgment that the process was fair

PS Discussion Topics

- Open to various PPA lengths
- No preset allocation per utility; final amount from Carbon Plan
- Cost Containment Guardrails
 - Evaluation and selection includes network upgrade costs
 - Rebuttable presumption that costs above 25% of cost estimate used in selecting winning projects are unreasonable
 - IE costs have to be covered by the bidders, not ratepayers – if the costs go over, not recoverable

Draft Timeline to Align with Interconnection Process

Task	Target Completion Date
22P Pre-filing Stakeholder Meeting 2	2/7/2022
22P Pre-filing Stakeholder Meeting 3	Mid/late Feb
File “Procurement Plan” with Commission(s) (overall structure)	3/1/2022 - 3/14/2022
Post draft RFP documents and pro formas for MP feedback	4/1/2022
Comment period on RFP documents	4/1 - 4/15/2022
Incorporate comments, post final RFP documents/pro formas	4/16 - 4/30/2022
Commission(s) (requested) approval date for Procurement Plan	5/13/2022
2022 PV RFP bid window	5/31/2022 - 6/29/2022

You may continue to submit
written questions to:

2022SolarRFP@duke-energy.com

Q&A



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