

By order dated May 26, 2022, the Commission authorized Duke to commence a system-wide competitive procurement seeking a minimum of 700 MW of utility-owned and third-party solar energy resources sited in both North Carolina and South Carolina. Consistent with Duke's request, the Commission deferred its decision establishing the final solar resource procurement target for the 2022 Solar Procurement.

CPRE PROGRAM

Pursuant to N.C.G.S. § 62-110.8 the Commission is tasked with oversight of the Competitive Procurement of Renewable Energy (CPRE) Program designed and implemented by Duke for the competitive procurement and development of an aggregate amount of 2,660 MW of renewable energy facilities in North Carolina over a period of 45 months, which commenced on February 21, 2018, and concluded on November 21, 2021 (CPRE Program Procurement Period).

During the CPRE Program Procurement Period, Duke was required to solicit a total of 6,160 MW of renewable energy through a combination of (1) CPRE Program procurement solicitations (CPRE MW) and (2) the execution of power purchase agreements (PPAs) for renewable energy capacity within the DEC and DEP balancing authority areas that are not subject to economic dispatch or curtailment and were not procured pursuant to the Green Source Advantage program authorized under N.C.G.S. § 62-159.2 (Transition MW). Under N.C.G.S. § 62-110.8(a) and (b)(1), 2,660 MW of this 6,160 MW total was targeted to be procured through the CPRE Program, and the remaining 3,500 MW was targeted to be Transition MW.

Section 62-110.8(b)(1) provides that, if during the CPRE Program Procurement Period, Duke contracts for Transition MW in excess of 3,500 MW, the Commission shall reduce the CPRE MW by the amount of such exceedance. Further, N.C.G.S. § 62-110.8(a) states that "[t]he Commission shall require the additional competitive procurement of renewable energy capacity by the electric public utilities in an amount that includes all of the following: (a) any unawarded portion of the initial competitive procurement required by this subsection . . ."

During the CPRE Program Procurement Period, DEC and DEP collectively procured 1,185 MW via the CPRE Program. Further, during the CPRE Program Procurement Period, Duke procured a total of 4,378 Transition MW, an excess of 878 MW. Therefore, pursuant to N.C.G.S. § 62-110.8(b)(1), the Commission determined that it was appropriate to reduce the CPRE Program procurement target to 1,782 MW. As a result, the Commission concluded that Duke was 596 MW short of the adjusted CPRE Program procurement target at the end of the CPRE Program Procurement Period and ordered DEC on December 20, 2021,¹ to initiate a third procurement solicitation (Tranche 3) of the CPRE Program to procure 596 MW.

¹ Order Determining Adjusted CPRE Program Procurement Target, Docket Nos. E-2, Sub 1159 and E-2, Sub 1156 (December 20, 2021).

On January 5, 2022, DEC issued the CPRE Tranche 3 request for proposals (RFP) seeking to procure 596 MW. The bid window for CPRE Tranche 3 closed on February 3, 2022. Only eight projects totaling 520 MW bid into CPRE Tranche 3. Following closure of the bid window, 365 MW withdrew from Tranche 3, citing market uncertainty and the rising costs of solar development as the cause of their withdrawal. Ultimately, only two projects totaling 155 MW completed the Tranche 3 bid evaluation process and have signed CPRE Program PPAs with DEC.

JOINT ISSUES

On September 1, 2022, Duke filed a petition in both the 2022 Solar Procurement Proceeding and the CPRE Program Dockets (E-2, Sub 1159 and E-7, Sub 1156) stating that the CPRE Program is 441 MW short of meeting the target established by N.C.G.S. § 62-110.8 and requesting the Commission's approval to procure the shortage through the 2022 Solar Procurement, to extend the CRPE Program PPA term, and for waiver of certain provisions of Commission Rule R8-71 (Petition).²

Beginning on September 13, 2022, and concluding on September 29, 2022, the Commission heard expert witness testimony regarding the development of the Carbon Plan pursuant to N.C.G.S. § 62-110.9 in Docket No. E-100, Sub 179. Pertinent to the issues to be decided herein, the Commission heard expert witness testimony related to the need for new solar energy resources to support the carbon emissions reduction goals established by N.C.G.S. § 62-110.9. Accordingly, pursuant to N.C.G.S. § 62-65(b) and Commission Rule R1-24, the Commission finds good cause to take judicial notice of the portions of the expert witness hearing transcript pertinent to the 2022 Solar Procurement, as indicated below.

On September 23, 2022, the Commission issued an order soliciting comments on the solar resource procurement target for the 2022 Solar Procurement as well as on Duke's request to procure the CPRE shortage through the 2022 Solar Procurement, to extend the CRPE Program PPA term, and for waiver of certain provisions of Commission Rule R8-71. Specifically, the Commission's order permitted the parties to file comments by October 4, 2022, and Duke to file reply comments by October 12, 2022.

On October 4, 2022, the Public Staff, the North Carolina Sustainable Energy Association (NCSEA) and the Southern Alliance for Clean Energy (SACE), the Sierra Club, and the Natural Resources Defense Council (appearing collectively as SACE et al.), jointly SACE/NCSEA, and the Clean Power Suppliers Association (CPSA) and the Carolinas Clean Energy Business Association (CCEBA), jointly CPSA/CCEBA, filed comments responsive to the Commission's September 23, 2022 Order.

On October 12, 2022, Duke filed reply comments.

² It is worth noting that Duke's proposed Carbon Plan assumes that the full CPRE Program target would be met.

STANDARD OF REVIEW

As is discussed above, Section 2(c) of S.L. 2021-165 provides the Commission the discretion to direct the procurement of solar energy facilities in 2022 if the Commission finds that a solar procurement is consistent with achieving the carbon reduction goals established by N.C.G.S. § 62-110.9.

Pursuant to N.C.G.S. § 62-110.8, the purpose of the CPRE Program is to develop new renewable energy resources in a manner that continues to reliably and cost-effectively serve the State's energy needs.

DISCUSSION AND CONCLUSIONS

The following issues are addressed in this order: (1) closing out the CPRE Program, and (2) the final target volume for the 2022 Solar Procurement. The Commission has carefully considered all of the comments received on these matters but discusses only the commentary underlying its decisions. For the reasons described herein, the Commission directs Duke to procure 1,200 MW of new solar generation, inclusive of the CPRE MW shortfall.

Necessity to Procure the CPRE MW Shortfall

As an initial matter, the Commission must consider whether it is obligated, as Duke contends, pursuant to N.C.G.S. § 62-110.8(a) “to direct one final additional procurement of the 441 CPRE Program Unawarded MW[.]” Duke Petition, ¶ 12. In support of its contention, Duke quotes to the language of N.C.G.S. § 62-110.8(a): “The Commission shall require the additional competitive procurement of renewable energy capacity by the electric public utilities in an amount that includes all of the following: (it) any unawarded portion of the initial competitive procurement required by this subsection”

While the Commission agrees that CPRE Program procurements during the initial 45-month period have fallen short of the target established by N.C.G.S. § 62-110.8, Duke's analysis fails to acknowledge that the Commission has already directed “one final additional procurement” – Tranche 3 – which was commenced on January 5, 2022. Further, nowhere in the plain language of N.C.G.S. § 62-110.8 is the Commission's obligation to require (an) additional procurement(s) so expressly defined to support Duke's narrow interpretation of the statutory requirement.

In addition, certain intervening parties – CPSA/CCEBA and NCSEA/SACE – have likewise failed to provide reasonable legal analysis as to the Commission's ongoing *obligation* to pursue CPRE Program capacity, taking into account that Tranche 3 was already conducted for this purpose following the end of the initial 45-month procurement period. These parties instead rely on conclusory statements regarding additional obligations of either Duke or the Commission. Finally, the Public Staff foregoes any legal analysis regarding an ongoing obligation to procure additional CPRE Program capacity, simply asserting that “the Public Staff supports the Companies' request to procure the

CPRE MW shortfall through the 2022 Solar RFP as being in the best interest of ratepayers . . . ” Public Staff Comments, ¶ 9.

Based on the foregoing and having already completed an additional procurement (Tranche 3) targeted at procuring the unawarded capacity that remained following the CPRE Program Procurement Period, the Commission is not persuaded that it has any additional obligation to direct the procurement of the CPRE MW shortfall. No party, though, has argued that, following the completion of Tranche 3, the Commission is not permitted to direct the procurement of the CPRE MW shortfall, and the Commission determines that it is reasonable and consistent with the plain language of N.C.G.S. § 62-110.8(a) and the whole of the act to proceed on a discretionary basis with regard to further conducting additional procurements aimed at the CPRE MW shortfall.

The Commission notes the following: (1) that procuring the CPRE MW shortfall, which must be capped by the purchasing utility’s current forecast of its avoided cost over the term of the PPA calculated using the method most recently approved by the Commission, is consistent with the cost effectiveness/least cost objectives of N.C.G.S. § 62-110.8 and -110.9; (2) no party has objected to Duke’s proposal to procure the CPRE MW shortfall through the 2022 Solar Procurement; (3) Duke’s opinion that procuring the CPRE MW shortfall through the 2022 Solar Procurement will “expediently and cost-effectively meet the requirements of N.C. Gen. Stat. § 62-110.8 and close out the CPRE Program, while also achieving an efficient transition to the new competitive procurement framework established by HB 951[.]” Duke Initial Comments, ¶ 25; (4) the Public Staff’s opinion that Duke’s request to procure the CPRE MW shortfall through the 2022 Solar Procurement Request for Proposals (RFP) is “in the best interest of ratepayers[.]” Public Staff Comments, ¶ 9; and finally (5) that no party has contended that conducting a hybrid CPRE Program/S.L. 2021-165 procurement will result in the inequitable treatment of prior or future CPRE Program bidders/winners or 2022 Solar Procurement bidders/winners.

Accordingly, the Commission, in its discretion, will require Duke to seek to procure 441 MW, the CPRE MW shortfall, through the 2022 Solar Procurement subject to the additional directives provided herein.

Terms and Conditions Applicable to CPRE MW Shortfall Procurement via the 2022 Solar Procurement

Duke’s Petition makes the following representations and requests regarding how Duke should integrate procurement of the CPRE MW shortfall into the 2022 Solar Procurement.

CPRE MW Shortfall Capped at Avoided Cost

First, Duke proposes that in order to meet N.C.G.S. § 62-110.8’s below-avoided-cost requirement, out of the total number of MW procured through the 2022 Solar Procurement, the lowest-cost MW, inclusive of system upgrade costs, in the

Controllable PPA Track will be “assigned” to the CPRE Program. More specifically, Duke states that the all-in cost of each proposal, including upgrade costs, will be compared to Duke’s forecasted avoided cost. Duke then proposes to use its then-current forecast of avoided cost as of November 1, 2022, calculated over a 25-year term and consistent with the Commission’s most recently approved avoided cost methodology, as approved in Docket No. E-100, Sub 167. Further, should the Commission authorize a new avoided cost methodology, in the pending avoided cost proceeding – Docket No. E-100, Sub 175 – before November 1, 2022, Duke will apply the Sub 175 avoided cost methodology for the purpose of assessing whether bids into the 2022 Solar Procurement are eligible to be contracted into the CPRE Program. Finally, Duke commits to filing the applicable avoided cost cap with the Commission and directing the 2022 Solar Procurement Independent Evaluator (IE) to publish the avoided cost cap for all bidders in advance of the Step 2 bid refresh planned for April 2023.

CPSA/CCEBA observe that 2022 Solar Procurement market participants will have the opportunity to refresh their bids in April 2023. Therefore, they assert that Duke should be required to file its proposed 25-year avoided cost rates, as well as its proposed methodology for comparing levelized PPA bids to avoided cost rates with multiple pricing periods, as far in advance of the bid refresh as possible.

In response to CPSA/CCEBA, Duke states that it will provide reasonable transparency to bidders regarding its proposed methodology for comparing levelized PPA bids to avoided cost rates with multiple pricing periods.

NCSEA/SACE support Duke’s commitment to procure all of the CPRE MW shortfall as Controllable PPA projects but also contend that the Commission “should ensure that procuring the CPRE MW shortfall through the 2022 Solar Procurement does not improperly alter the ownership split in the 2022 Solar Procurement[.]” More particularly, NCSEA/SACE contend that any procured CPRE MW shortfall should not be counted toward the 45% third-party ownership share established in N.C.G.S. § 62-110.9(2)(b).

Based upon the foregoing, the Commission concludes that it is reasonable for Duke and the IE to assign CPRE-designated PPAs to the lowest-cost, inclusive of system upgrades, 441 MW bids provided that these bids are priced below the avoided cost cap. Projects awarded CPRE-designated PPAs shall not count toward the utility-owned/third-party owned ratio prescribed by N.C.G.S. § 62-110.9(2)(b).

In order to allow 2022 Solar Procurement bidders adequate time to prepare for the bid refresh in April 2023 and achieve eligibility for the CPRE-designated PPAs, on or before December 15, 2022, Duke shall file with the Commission the updated avoided cost cap to be used to assess 2022 Solar Procurement bids for cost effectiveness to meet the administratively determined avoided cost requirement pursuant to N.C.G.S. § 62-110.8(b)(2) and shall direct the IE to publish to market participants the 25-year avoided cost rates, as well as the proposed methodology for comparing levelized PPA

bids to avoided cost rates with multiple pricing periods, as soon as practicable but no later than December 22, 2022.

Finally, if less than 441 MW of capacity is available to meet the CPRE Program requirements, the Commission accepts the recommendation of the Public Staff and Duke to adjust the HB 951 MW upward such that the CPRE volume (if any) and HB 951 volume together equal 1,200 MW, all of which will be sourced through the 2022 Solar Procurement. Put another way, to the extent that DEC and DEP are unable to procure 441 MW under the CPRE Program framework in this final CPRE Program procurement, the Commission agrees that Duke should nevertheless still procure the full 1,200 MW. The Commission concludes that regardless of whether the CPRE MW shortfall is procured in total through the 2022 Solar Procurement, the CPRE Program will be closed out upon the conclusion of the 2022 Solar Procurement.

Independent Oversight of CPRE Program Procurement Process

Second, Duke states that while the CPRE Program must be administered by an independent administrator, pursuant to Commission Rule R8-71, this requirement is based on N.C.G.S. § 62-110.8(d), which requires only that a third party oversee the competitive bid process to ensure equitable treatment of all bids. In order to integrate a CPRE Program procurement into the 2022 Solar Procurement, Duke states that the 2022 Solar Procurement IE, Charles River Associates (CRA), will provide independent oversight of the process consistent with the requirements of on N.C.G.S. § 62-110.8(d) and requests waiver of Commission Rule R8-71(d)-(f) to the extent these subsections do not align with the 2022 SP and S.L. 2021-165. Based on the foregoing, Duke requests that the Commission approve CRA's oversight of procurement of the CPRE MW shortfall via the 2022 Solar Procurement and waive Commission Rule R8-71(d)-(f).

In response, the Public Staff states that it generally supports the requested waivers of Commission Rule R8-71(d)-(f) as in the public interest in furtherance of procuring the CPRE MW shortfall through the 2022 Solar Procurement. Nonetheless, the Public Staff recommends that the Commission require CRA to conform to the requirements of Commission Rule R8-71(d)(2), which requires the independent third-party administrator to disclose any financial interest involving the electric public utilities or any market participants, and also Commission Rule R8-71(d)(9), which requires the independent third-party administrator to immediately report any violation of procurement program rules together with any recommended remedy, to the Commission.

CPSA/CCEBA do not object to Duke's proposed waiver requests, and NCSEA/SACE state that Duke's requested waivers are reasonable.

On reply, Duke agrees to the Public Staff's waiver modification.

Based on the foregoing, the Commission approves CRA's oversight of procurement of the CPRE MW shortfall through the 2022 Solar Procurement and waives

Commission Rules R8-71(d)(1), R8-71(d)(3)-(8), R8-71(d)(3)-(10), R8-71(e), and R8-71(f) for this limited purpose.

Cost Recovery

Duke states that the 2022 Solar Procurement RFP provides that administrative and related implementation expenses will be recovered from market participants through a combination of bid fees and winner's fees. However, Duke states that as the 2022 Solar Procurement is already underway and in the interest of regulatory efficiency, Duke will not seek recovery of any 2022 Solar Procurement administrative and related expenses (including the IE's costs associated with procuring the CPRE MW shortfall through the 2022 Solar Procurement) through the CPRE Rider.

Further, Duke states that consistent with N.C.G.S. § 62-110.8(g), as well as Commission Rule R8-71(j), it will seek cost recovery for all purchases of energy, capacity, and environmental and renewable attributes from third-party renewable energy facilities assigned as CPRE MW shortfall through the annual CPRE Rider approved by the Commission. All other 2022 Solar Procurement MW energy and capacity costs will be recovered through the fuel clause, pursuant to N.C.G.S. § 62-133.2.

No party objects to these proposals, and the Commission determines these proposals to be reasonable at this time. As such, the Commission approves Duke's proposal with regard to cost recovery.

PPA Term for CPRE MW Procured via the 2022 Solar Procurement

Dukes next requests that the Commission exercise its authority pursuant to N.C.G.S. § 62-110.8(b)(3), which authorizes the Commission to approve a CPRE Program PPA term of a duration other than 20 years "if the Commission determines that it is in the public interest to do so." Particularly, Duke requests that, for the purposes of CPRE MW shortfall procured through the 2022 Solar Procurement, the Commission authorize a PPA term of 25 years. Duke states that an extension of the existing 20-year CPRE PPA term is in the public interest as it will "ensure that these [CPRE MW shortfall] are contracted to provide renewable energy to the Carolinas through 2050, and assist North Carolina in meeting HB 951's goals of procuring low or carbon-free resources by 2050 pursuant to the Carbon Plan." Duke Petition, ¶ 41. Further, Duke states that extending the PPA term for this limited purpose will ensure fairness and equal treatment amongst the 2022 Solar Procurement market participants.

All other parties, CPSA/CCEBA, NCSEA/SACE, and the Public Staff do not oppose or support the limited extension of the PPA term. The Commission notes this consensus, as well as the fact that no party has asserted that extending the PPA term for PPAs awarded within the 2022 Solar Procurement is inequitable to prior CPRE Program PPA winners. Based upon the foregoing, the Commission concludes that, for the limited purpose of the 2022 Solar Procurement Proceeding, extending the CPRE Program third-party Controllable PPA term to 25 years is reasonable and in the public interest.

Volume Adjustment Mechanism

The 2022 Solar Procurement is subject to a Volume Adjustment Mechanism (VAM), which provides for limited adjustment to the Target Procurement Volume, either up or down, depending on how actual bid prices compare to the assumed prices of solar resources in the Carolinas Carbon Plan (Carbon Plan Solar Reference Cost). More particularly, prior to selecting the portfolio of winning proposals, Duke will calculate the weighted average cost of the total portfolio of Utility Ownership Track and PPA Track resources, including System Upgrade costs. If the weighted average cost is greater than or equal to 110% of the Carbon Plan Solar Reference Cost, the Target Procurement Volume may be decreased by as much as 20% (subject to a 700 MW Minimum Procurement Volume).³ If the weighted average cost is less than or equal to 90% of the Carbon Plan Solar Reference Cost, the target volume may be increased by up to 20% above the Target Procurement Volume.

The addition of a CPRE Program procurement to the 2022 Solar Procurement necessitates that the Commission determine how CPRE Program winning bids will impact the VAM.

Duke and the Public Staff recommend that CPRE-designated projects should be included in the calculation of the weighted average cost for the purpose of applying the VAM. However, Duke and the Public Staff also recommend that the VAM be limited to 150 MW, which is 20% of 750 MW – Duke’s recommended Target Procurement Volume for the 2022 Solar Procurement (excluding the recommended CPRE Program procurement volume). Additionally, CPSA/CCEBA recommend that the Commission should direct Duke to include any CPRE Program projects procured in the 2022 Solar Procurement in its calculation of the weighted average cost but that the CPRE MW shortfall to be procured not be included in the total, which is subject to the VAM. Finally, NCSEA/SACE likewise contend that while CPRE Program capacity is not subject to the VAM, the CPRE Program bids should be used to calculate the weighted average cost of the bids.

Based upon the foregoing, the Commission will require Duke to include CPRE Program winning bids in calculating the weighted average cost of the portfolio for purposes of applying the VAM. However, in the interest of achieving cost effectiveness and least cost mandates of the CPRE Program and N.C.G.S. § 62-110.9, the Commission determines that the total volume of capacity targeted in the 2022 Solar Procurement, including the CPRE MW shortfall, should be subject to adjustment through the VAM.

³ Order Authorizing a Competitive Procurement of Solar Resources Pursuant to House Bill 951 and Establishing Further Procedures, E-2, Sub 1297 and E-7, Sub 1268 (May 26, 2022).

2022 Solar Procurement Target Procurement Volume

As is stated above, the Commission previously authorized Duke to commence a system-wide competitive procurement seeking a minimum of 700 MW but deferred its decision establishing the final 2022 Solar Procurement Target Procurement Volume.

Duke requests that the Commission set the Target Procurement Volume at 1,200 MW, inclusive of an up to 441 MW of CPRE MW shortfall. Similarly, the Public Staff recommends that the Commission establish a total Target Procurement Volume for the 2022 Solar Procurement of 1,200 MW (inclusive of any available CPRE MW shortfall). CPSA/CCEBA recommend that the Commission set the Target Procurement Volume at 1,500 MW plus one-third of the CPRE MW shortfall,⁴ 147 MW, for a total of 1,647 MW. Finally, NCSEA/SACE recommend a Target Procurement Volume of 2,241 MW, inclusive of 441 MW of CPRE MW shortfall and 1,800 MW of Carbon Plan MW.

The recommendation to procure 1,200 MW of capacity is supported by the prefiled Direct Testimony of Snider, McMurray, Quinto, and Kalemba filed in Docket No. E-100, Sub 179 on August 19, 2022, and the Testimony of Jeff Thomas, also filed in Docket No. E-100, Sub 179 on September 2, 2022.

CPSA/CCEBA's recommendation of 1,647 MW is supported by the Testimony of CPSA Witness Tyler Norris, filed in Docket No. E-100, Sub 179 on September 2, 2022. CPSA/CCEBA contend that "a 2022 SP target of at least 1500 MW is necessary and appropriate if Duke is to have any hope of complying with the 70% carbon reduction mandate of H.B. 951 by 2030." CPSA/CCEBA Comments, 2. CPSA/CCEBA further state that "a more ambitious" 2022 Solar Procurement has advantages, including:

- (1) decreasing solar execution risk;
- (2) mitigating the risk of network upgrade delays and rising costs;
- (3) better enabling the assessment of interconnection limits;
- (4) reducing the need to rely on higher cost alternative resources with greater execution risk;
- (5) mitigating the risk of higher electricity load; and
- (6) accounting for the project attrition that is to be expected in any significant procurement.

Norris Testimony, 37-43. In contrast, CPSA/CCEBA argue that a less robust procurement will "not test Duke's interconnection limit," will increase the risk that the 70% interim carbon emissions reduction target will not be reached by 2030 and will increase the likelihood that "more expensive and more uncertain resources will be needed to for (sic) Carbon Plan compliance." CPSA/CCEBA Comments, 4.

NCSEA/SACE arrive at their recommended Target Procurement Volume, exclusive of the CPRE MW shortfall, by taking Duke's Portfolio P1A, which selected approximately 7,200 MW of new solar by 2030 and dividing it by four (procurements in 2022, 2023, 2024, and 2025 which could reasonably become operational by 2030), to

⁴ CPSA/CCEBA state that the remaining 293 MW of the CPRE MW shortfall could be added to subsequent procurement volumes set based on Carbon Plan modeling.

arrive at an annual Target Procurement Volume of 1,800 MW per year. NCSEA/SACE assert that a targeted solar procurement of 7,200 MW by 2030 is further supported by the Testimony of Tyler Fitch, filed in Docket No. E-100, Sub 179 on September 2, 2022. Further, NCSEA/SACE contend that their recommended method of dividing the capacity of new solar needed to meet the 2030 interim requirement evenly by the number of available procurement years is less risky than annual adjustments based on uncertain factors. NCSEA/SACE Comments, 6.

On reply, Duke reiterates that its direct and rebuttal witness testimony filed in E-100, Sub 179 does not support the “significantly higher” Target Procurement Volume for the 2022 Solar Procurement for which other parties advocate. First, Duke states that higher procurement recommendations ignore “real-world constraints on the number of solar interconnections that Duke Energy’s transmission planning and forecasting experts have determined Duke can reasonably achieve by 2026.” Duke Reply Comments, 7. More particularly, Duke argues that its Carbon Plan witnesses Matthew Kalemba and Sammy Roberts testified extensively about why limitations on solar interconnections reflect Duke’s “best estimate of the volume of new solar interconnections that can be achieved under real-world conditions.” *Id.* Duke also notes that the Public Staff’s Carbon Plan witness Jeff Thomas agreed that Duke’s near-term modeling constraint on solar interconnections is reasonable, that more aggressive interconnection assumptions for new solar prior to 2030 come with significant execution risk, and that procurement volumes should account for the likelihood of a higher interconnection rates closer to 2030. *Id.*, 7-9.

Based upon the record as a whole on this matter, the Commission finds the testimonies of witnesses Kalemba, Roberts, and Thomas persuasive and gives them substantial weight. Therefore, the Commission concludes that a Target Procurement Volume of 1,200 MW (including up to 441 MW of CPRE MW shortfall) is reasonable for the 2022 Solar Procurement. The Commission notes that, as provided by Section 2(c) of S.L. 2021-165, the Commission is authorized to direct this procurement based on its “preliminary analysis” of the Carbon Plan. This decision is not an indication of any final decision by the Commission in the Carbon Plan in Docket No. E-100, Sub 179.

Other Issues

Jurisdictional Allocations

First, the Public Staff proposes, and Duke supports, allocating procurements, regardless of CPRE Program or S.L. 2021-165 capacity, between the Balancing Authority Area (BAA) by directing one-third of the Target Procurement Volume to be located in DEC, one-third in DEP, and the remaining one-third to be procured from the least cost remaining projects, whether located in DEP or DEC. Public Staff engineer Jeff Thomas supported the proposed jurisdictional allocations during testimony given to the Commission on September 22, 2022, in Commission Docket No. E-100, Sub 179. Tr. vol. 21, 23-25.

The Commission notes that the Public Staff had previously reserved its right to provide a recommendation on this issue, and the RFP contemplates that “[I]n approving the RFP Target Volume, the NCUC may also order allocation targets or minimums between DEC and DEP.” Initial Comments of the Public Staff, ¶ 14; RFP, 2.

The Commission finds the proposed jurisdictional allocations reasonable for the purposes of the 2022 Solar Procurement.

Reserve List

Second, CPSA/CCEBA state that, due in part to tax changes enacted in the Inflation Reduction Act (IRA), they are “concerned that that many bids that would be competitive with IRA-adjusted pricing will be eliminated prior to Step 2, because those bidders will not have had the opportunity to refresh their bids by then.” CPSA/CCEBA Comments, 6-7. To compensate, CPSA/CCEBA recommend that Duke create a “very large” reserve list of projects advanced to Step 2.

On reply, Duke states:

CPSA/CCEBA’s request ignores the risks of overly inflating the DISIS Phase 2 studies, which could result in inaccurate network upgrades being identified in Phase 2 and inaccurate cost allocations of those upgrades. This, in turn, could lead not only to less accuracy in the Step 2 rankings but could create the need for a Phase 3 DISIS study. Adding a Phase 3 study would impact both DISIS timelines and 2022 SP RFP timelines. There is good reason why the RFP was designed to eliminate some Proposals from Step 1 to Step 2. Moreover, projects that are not selected to proceed forward to Step 2 will have the opportunity to participate in a 2023 procurement where the project’s IRA-informed tax equity strategy can be more fully considered.

Duke Reply Comments, 15.

The Commission finds the risk associated with CPSA/CCEBA’s proposal outweigh any potential benefit that could be achieved. For the foregoing reasons, the Commission finds good cause not to grant CPSA/CCEBA’s request.

Red Zone Transmission Expansion Projects

Lastly, CPSA/CCEBA seek to revisit the Commission’s June 10, 2022, determination that Duke should not include Red Zone Transmission Expansion projects (RZEP) projects in the 2022 DISIS baseline and that the procurement process must evaluate bids based on the allocation of the all-in costs, including Network Upgrades. The Commission intends to consider and address the issue of whether the RZEP projects are necessary to achieve the Carbon Plan mandates in Docket No. E-100, Sub 179. Further, as with above, CPSA/CCEBA’s request is outside of the scope of the topics on which the

Commission requested comments. For the foregoing reasons, the Commission determines not to grant CPSA/CCEBA's request.

Finally, the Commission's determination on this procurement will not be precedential, and the Commission will reexamine all aspects de novo prior to approving any subsequent procurements.

IT IS, THEREFORE, ORDERED as follows:

1. That Duke is authorized to procure up to 441 MW of CPRE MW shortfall, pursuant to the following terms and conditions:
 - a. That bids awarded CPRE Program contracts shall be capped at the utility's avoided cost calculated using the Commission-approved method in effect as of November 1, 2022, and inclusive of costs associated with System Upgrades;
 - b. That bids awarded CPRE Program contracts shall be Controllable PPA Track only (no Utility Ownership Track proposals shall be designated as CPRE MW shortfall), and these projects shall not be counted toward the utility-owned/third-party owned ratio prescribed by N.C.G.S. § 62-110.9(2)(b);
 - c. That the term of the CPRE Controllable PPAs shall be 25 years;
 - d. That on or before December 15, 2022, Duke shall file with the Commission the updated avoided cost cap to be used to assess 2022 Solar Procurement bids for cost-effectiveness to meet the administratively determined avoided cost requirement and shall direct the IE to publish to market participants the 25-year avoided cost rates, as well as the proposed methodology for comparing levelized PPA bids to avoided cost rates with multiple pricing periods, as soon as practicable but no later than December 22, 2022;
 - e. That Charles River Associates is authorized to perform independent, third-party oversight of the procurement of the CPRE MW shortfall via the 2022 Solar Procurement;
 - f. That, for this limited purpose, the Commission hereby waives Commission Rules R8 71(d)(1), R8 71(d)(3)-(8), R8 71(d)(3)-(10), R8-71(e), and R8-71(f);
 - g. That Duke shall not seek recovery of any 2022 Solar Procurement administrative and related expenses (including the Charles River Associates' costs associated with procuring CPRE MW shortfall through the 2022 Solar Procurement) through the CPRE Rider;

- h. That Duke shall include CPRE Program winning bids in calculating the weighted average cost of the portfolio for purposes of applying the Volume Adjustment Mechanism, and the total capacity procured — whether CPRE MW shortfall or Carbon Plan MW capacity — is subject to adjustment pursuant to the terms of the Volume Adjustment Mechanism;
 - i. That Duke shall seek cost recovery for all purchases of energy, capacity, and environmental and renewable attributes from third-party renewable energy facilities pursuant to CPRE Program PPAs through the annual CPRE Rider approved by the Commission. All other 2022 Solar Procurement MW energy and capacity costs shall be recovered through the fuel clause, pursuant to N.C.G.S. § 62-133.2;
2. That Duke is authorized to target a total 2022 Solar Procurement volume of 1,200 MW, which is inclusive of the 441 MW CPRE MW shortfall;
3. That the Target Procurement Volume should be allocated as follows, regardless of CPRE Program or S.L. 2021-165 status: one-third of the Target Procurement Volume to be located in DEC, one-third in DEP, and the remaining one-third to be procured from the least cost remaining projects, whether located in DEP or DEC; and
4. That Duke shall file a compliance filing within seven days of the issuance of this order, which shall propose: (a) a 25-year term CPRE Program Procurement Power Purchase Agreement consistent with the terms of the 2022 Solar Procurement Power Purchase Agreement and (b) any necessary proposed notices to 2022 Solar Procurement market participants.

ISSUED BY ORDER OF THE COMMISSION.

This the 1st day of November, 2022.

NORTH CAROLINA UTILITIES COMMISSION



Tamika D. Conyers, Deputy Clerk

Commissioner Daniel G. Clodfelter dissenting in part. Commissioner Jeffrey A. Hughes joins in Commissioner Clodfelter's partial dissent.

DOCKET NO. E-2, SUB 1159
DOCKET NO. E-2, SUB 1297
DOCKET NO. E-7, SUB 1156
DOCKET NO. E-7, SUB 1268

Commissioner Daniel G. Clodfelter, dissenting in part:

In the June 10, 2022 Order approving the 2022 solar procurement program, the Commission advised that “[i]t intends to establish further procedures in this docket, including opportunities for parties to comment on the RFP Target Volume and allocation targets or minimums between DEC and DEP, by future order.” When this advice was provided, no proposals were then on the table for any geographic or territorial allocation of the total procurement target between DEC and DEP. The Public Staff, which has been rightly sensitive to concerns about differential cost impacts on DEP and DEC ratepayers attributable to Carbon Plan implementation, had voiced its concerns at the time but had made no specific proposals. In its original filing relating to the proposed 2022 procurement made on March 28, 2022, the Public Staff signaled that it “may recommend” that the Commission allocate the target capacity between the two companies at the time a final procurement target is set, but, again, there was no specific proposal for such an allocation offered.⁵

On September 1, 2022, the Duke utilities filed their petition seeking to establish the final target for the 2022 procurement and to permit use of the 2022 procurement process as a mechanism for securing the remaining shortfall in solar procurement under the CPRE program. The companies’ petition did not propose any jurisdictional or territorial allocation of the procurement volumes between the two Duke utilities. In addition, the RFP for the 2022 procurement issued on June 20, 2022, did not advise bidders of any specific territorial allocations, although it did generically advise bidders that the Commission had reserved its authority to require or make such an allocation.

In response to the September 1, 2022 petition, the Commission entered an order directing that comments on the Duke utilities’ petition be filed by October 4, 2022, and that the utilities file any reply comments by October 12, 2022. Unfortunately, the Public Staff’s proposal for a specific jurisdictional allocation of the final 2022 procurement target did not appear until the Public Staff filed its comments on October 4, 2022, by which time intervenors and other interested parties had already filed their own comments to the utilities’ September 1 proposal, which as noted did not include any such territorial allocation. On October 12, 2022, the Duke utilities’ filed their reply comments, accepting the Public Staff’s proposal for an allocation of the target between DEC and DEP but also noting that based on prior history of the CPRE procurement tranches and based on the bids received by that point in the 2022 procurement process, there was risk that such an

⁵ The Public Staff also noted that if the total procurement volume was 1,000 megawatts or less, then the disparity issue might not be considered significant in this docket. (March 28, 2022, Comments ¶14.) The Commission today has established a final procurement target of 1200 megawatts, including potential selection of up to 441 megawatts to be selected under modified CPRE program criteria

allocation might lead to a higher aggregate total cost for the 2022 procurement than would otherwise be the case in the absence of any territorial sub-allocation.

Understandably, due to the timetable and deadlines that the Commission and all parties are operating under, there has been no opportunity to evaluate the Public Staff's proposal or assess the significance of the risk identified in Duke's reply comments. However, for this same reason I am not comfortable imposing a jurisdictional allocation for the 2022 procurement on an undeveloped factual record and without full vetting of the specific proposal being offered. The issue of potential disparate cost impacts on DEP and DEC related to and arising from implementation of any Carbon Plan is, as the Public Staff correctly maintains, an important one, but it is also one that is far more complex than can be adequately addressed or resolved in the 2022 interim solar procurement. It embraces many questions of much greater potential financial impact, including, by way of illustration only, transmission cost investments necessary to retire existing fossil fuel plants, costs of developing onshore and offshore wind, costs of expansion of pumped hydro storage at DEC's Bad Creek II generating plant, and, potentially, the costs of siting and developing new nuclear generating facilities. These matters must be addressed in the Carbon Plan and associated implementation proceedings, but I would prefer to address them in a more comprehensive manner on a more fully developed record than in the procedural and evidentiary context I have recited above relating to the interim 2022 solar procurement. I therefore dissent from that portion of the Commission's order directing a territorial allocation of the procurement target volumes between DEC and DEP.⁶

With respect to the remaining issues determined in the Commission's Order, I am in agreement with the manner of their disposition, although in a couple of instances with some reservations. In particular and for the reasons well-articulated in the comments filed by CPSA/CCEBA and by SACE et al., I believe the record compiled in the Carbon Plan hearings would support a higher total procurement target than the 1200 megawatts, inclusive of the 441-MW shortfall from the CPRE program, authorized by the Commission. I am fully mindful of the Duke utilities' evidence concerning the challenges that would attend interconnecting any larger volume of projects at this time. As they point out, virtually every scenario offered for consideration by the various parties in the Carbon Plan docket, including the Duke utilities themselves, contemplates a significant ramp up in the rate of interconnection of new solar, wind, and storage facilities and that this poses planning, logistical, supply chain, construction, scheduling, and operational challenges beyond those encountered to date. These are very real, and I do not minimize them. Offsetting these factors is the consideration that, on one view of the matter, it may be

⁶ The Duke utilities' reply comments note that the 2022 bidding produced projects sited in the DEC territory totaling only 850 megawatts. The record at this point does not contain further information about the number or size of these projects, their siting relative to existing transmission system capacity, or other important considerations. We do not know, therefore, whether the results of the final bid evaluation will or will not yield a total quantity of solar capacity sufficient to meet a 400-megawatt DEC allocation at any reasonable pricing level or whether there may be a shortfall in meeting that sub-allocation. I note that the CPRE Tranche 3 solicitation limited to projects sited in DEC territory produced a very disappointing response and final result. It is not possible on this record to determine exactly why that result occurred, but for me, that experience counsels caution before repeating the same exercise in connection with the 2022 procurement.

better to test the limits of existing systems and processes, identify and target specific bottlenecks and chokepoints, and then develop solutions and identify resources for process and system improvements sooner in the process, while there is still sufficient time to make corrections and adjust course, than confront the same tasks later in the process when we are approaching the legislatively mandated target deadlines for carbon reduction and accordingly have less time to change course or bring new options into play. I am in wholehearted agreement with the Duke utilities' statement in their Carbon Plan filing that "[t]o meet the CO2 emissions reductions targets set in Session Law 2021-165 ('HB 951'), the Companies will need to 'bend the curve' and accelerate the interconnection of solar." (Duke Proposed Carbon Plan, Appendix I, p.1) One way to advance this objective is to set ambitious goals earlier rather than later. The concept of "execution risk" and its meaning, application, and implications were extensively discussed and debated during the Carbon Plan hearings. There is "execution risk" that an ambitious 2022 procurement target may not be met. If that should happen, we will be able to draw from the exercise learnings and guidance that can be used to develop future procurements. For me, more important than the risk that a more ambitious 2022 procurement target might not be met is the overriding "execution risk" that the mandated 2020 emissions reduction target may not be met.

While I would be prepared to set a higher target for the 2022 procurement, in the end I am reconciled to the target established in the Commission's Order and therefore do not dissent on this point. If bid prices prove favorable, then the Volume Adjustment Mechanism may yield a final actual procurement amount closer to a total I would prefer. Another consideration, however, is of primary importance for me in settling on a final position. The 2022 procurement is limited to standalone solar facilities and will not include either solar-plus-storage facilities or standalone storage facilities. Strong evidence was adduced at the Carbon Plan hearings supporting the superiority of generating solutions that incorporate energy storage components, in terms of both their energy value to the overall system and their ability to provide grid support services that can mitigate or offset the loss of those services as traditional generating facilities are retired. The relative balance of the future resource portfolio as between standalone solar and solar coupled with storage is thus for me an important consideration. We are in the beginning stages of trying to identify and shape the proper balance of different resource types needed to meet the objectives of HB 951, including the balance between standalone solar and solar coupled with storage, and for this reason I am in agreement that a bit of conservatism in the procurement of standalone solar is not unwarranted for the 2022 procurement.

In all other respects I am in accord with the Order approved by the Commission.