BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-2, SUB 1159
DOCKET NO. E-7, SUB 1156

In the Matter of:	)	**NCSEA AND NCCEBA'S**
Petition for Approval of Competitive	)	**JOINT REPLY COMMENTS**
Procurement of Renewable Energy	)	**ON UTILITY ANCILLARY**
Program to Implement N.C. Gen.	)	**SERVICES COSTS**
Stat. § 62-110.8	)	

NCSEA AND NCCEBA'S JOINT REPLY COMMENTS ON UTILITY ANCILLARY SERVICES COSTS

Pursuant to North Carolina Utilities Commission's ("Commission") October 7, 2019 *Order Requesting Comments* ("Order") filed in the above-captioned dockets, the North Carolina Sustainable Energy Association ("NCSEA") and the North Carolina Clean Energy Business Alliance ("NCCEBA") offer the following reply comments regarding whether and how utility ancillary services costs ("UASC"[1]) should be addressed in Tranche 2 of the Competitive Procurement of Renewable Energy ("CPRE") Program administered by Duke Energy Progress, LLC ("DEP") and Duke Energy Carolinas, LLC ("DEC") ("DEP and DEC, collectively, "Duke").

I. NCSEA AND NCCEBA'S REPLY COMMENTS

As stated in *NCSEA and NCCEBA's Joint Comments on the Solar Integration Services Charge* ("NCSEA and NCCEBA's Joint Initial Comments"), NCSEA and NCCEBA do not believe that UASC should be included in Tranche 2 of the CPRE

[1] UASC as referenced and defined in the *Supplemental Notice of Decision* issued by the Commission on October 17, 2019 in Docket No. E-100, Sub 158 ("Avoided Cost Docket") wherein the Commission stated: "That DEC and DEP's approach to designate the SISC as a separate cost or charge to be established in Schedule PP and through negotiated PPAs should not be approved; instead, DEC and DEP should be required to account for *increased ancillary services costs* when calculating each utility's avoided energy costs." (emphasis added).

program. Until a few weeks ago, the issue of solar integration costs had never been raised in these dockets despite that fact that the CPRE program has been under development for over two years. To raise the issue for the first time now, on the eve of the opening of Tranche 2 of CPRE, would be poor public policy and unfair to market participants, especially given that the underlying mitigation protocol is still at issue.

The complex sub-issue of how market participants can mitigate UASC has just been addressed by Duke for the first time in recent weeks. Duke's complicated mitigation proposal has not been adequately vetted or reviewed by intervenors in the CPRE dockets or by market participants who may be required to comply with the proposed mitigation protocol. Duke's "Solar Site Volatility Metric"[2] ("Metric"), proposed without input from NCSEA or NCCEBA, needs to be evaluated, discussed, and negotiated between Duke and the intervenors prior to approval by the Commission. As proposed, the Metric may, at the very least, limit the use of technologies which could most benefit ratepayers and the grid. Notably, the Metric outlines a process of "smoothing" via paired electric storage with a solar facility as a means to mitigate UASC. While smoothing is often a reasonable and prudent way to utilize a solar+storage facility, limiting UASC mitigation to only that use of storage limits the purpose and utility of a solar+storage facility. Storage can be used in a number of ways to help the grid, such as peak-shaving, which may not reduce UASC under the guidelines of the Metric despite being, at times, a more valuable grid asset than smoothing. Duke's proposed limited application of battery storage will not encourage storage innovation and underscores the need for input on this issue from stakeholders.

[2] *Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's Notice of Opening of CPRE Tranche 2*, Docket Nos. E-2, Sub 1159 & E-7, Sub 1156, October 15, 2019, Exhibit 11, Appendix A.

In addition, Duke has failed to address how its curtailment and dispatch rights with respect to CPRE projects may reduce integration costs. The Commission should call for a stakeholder process involving the Public Staff, Duke, and CPRE market participants to consider how dispatch rights may offset volatility issues and reduce integration costs. NCSEA and NCCEBA believe this stakeholder process can and should also help to inform the process that Duke goes through when Duke files proposed guidelines regarding a "controlled solar generator" in the *Supplemental Notice of Decision* in Commission Docket No. E-100, Sub 158 ("Avoided Cost Docket").[3] While NCSEA and NCCEBA acknowledge that the dispatch, control, and curtailment rights may not reach the level of a complete "controlled solar generator" because they might not offset all ancillary service needs, these rights should offset some of the costs associated with completely uncontrolled solar generators.

In addition, there is no compelling reason to act precipitously to address UASC in the context of CPRE Tranche 2. Since ratepayers will absorb any UASC costs whether directly or indirectly through higher CPRE bid prices, the only potential impact to ratepayers arising from UASC would be if the consideration of UASC caused an otherwise cost-effective CPRE bid to no longer be cost-effective. The risk of this outcome is low given the delta between past CPRE bid prices and the likely CPRE Tranche 2 cost-effectiveness caps. Also, the majority of CPRE Tranche 2 procurement will be in DEC territory, for whom current UASC have been stipulated to and accepted by the Commission

[3] In Concluding Paragraphs 8 and 9, the Commission found that the UASC should not be imposed on a "controlled solar generator" and that Duke is required to "to file with the Commission proposed guidelines for QFs to become 'controlled solar generators' and thereby avoid" the UASC.

as $1.10 per megawatt hour ("MWh") until the next avoided cost proceeding in 2020.[4] NCSEA and NCCEBA will defer to the independent administrator ("IA") of the CPRE Program on the exact issues, but in the IA's October 18, 2019 comments on this matter it was clear the inclusion of the UASC into the CPRE Tranche 2 would create new complications and make the program more difficult to administer.[5]

Furthermore, as noted above, the Commission's *Supplemental Notice of Decision* directed Duke to file proposed "controlled solar generator" guidelines by November 18, 2019 which would allow a qualified facility ("QF") to avoid the UASC . Without having the opportunity to review those proposed guidelines, much less the opportunity for the Commission to determine what constitutes an appropriate UASC mitigation protocol, NCSEA and NCCEBA cannot yet evaluate whether it is feasible for a market participant to mitigate UASC. For this reason as well, NCSEA and NCCEBA reiterate their position that the Commission should not address UASC in Tranche 2 of the CPRE. In the alternative, NCSEA and NCCEBA believe that bidding for Tranche 2 of the CPRE should be held open until the Commission has approved a UASC mitigation protocol.

Should the Commission nevertheless determine that UASC should be included in Tranche 2 of the CPRE program, NCSEA and NCCEBA provide below a proposal that is consistent with the positions taken by the Commission in the *Supplemental Notice of Decision* without adding significant responsibility to the role of the IA or undermining the ability for CPRE solar facilities to mitigate UASC.

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[4] See, *Stipulation of Partial Settlement Regarding Solar Integration Services Charge*, Docket No. E-100, Sub 158, pp. 3, 7; see also, *Supplemental Joint Notice of Decision*, Docket No. E-100, Sub 158, October 17, 2019, p. 2.
[5] See, *Comments of the CPRE Independent Administrator*, Docket Nos. E-2, Sub 1159 & E-7, Sub 1156, October 18, 2019.

II. NCSEA AND NCCEBA'S JOINT PROPOSAL

NCSEA and NCCEBA agree with the Public Staff that the ratepayers "will ultimately be responsible for paying the additional ancillary service costs for all uncontrolled solar projects selected under CPRE, whether through the increase in bid prices to account for UASC or through additional fuel and energy costs recovered by the utilities[.]"[6] The question is not who will bear the UASC, but rather how any such costs should be accounted for in Tranche 2. In the *Supplemental Notice of Decision*, the Commission ruled that the underlying ancillary services costs that Duke incurs when utilizing solar generation are to be accounted for in the calculation of Duke's avoided cost – not recovered through a separate charge.[7] According to N.C. Gen. Stat. § 62-110.8, Duke's calculated avoided cost rate shall function as the participant's market cap:

> To ensure the cost-effectiveness of procured new renewable energy resources, each public utility's procurement obligation shall be capped by the public utility's current forecast of its avoided cost calculated over the term of the power purchase agreement. The public utility's current forecast of its avoided cost shall be consistent with the Commission-approved avoided cost methodology.

Therefore, as pointed out in NCSEA and NCCEBA's Joint Comments, if the UASC are to be addressed in the CPRE Program, that must occur by utilizing the UASC-adjusted avoided cost rate as the price cap, not be imposing a stand-alone charge of the sort the Commission rejected in the Avoided Cost Docket. The suggestion by Public Staff and Duke in their initial comments[8] that the Commission should address UASC in CPRE by

[6] *Comments of the Public Staff Regarding the Application of the Solar Integration Service Charge*, Docket Nos. E-2, Sub 1159 & E-7, Sub 1156, October 18, 2019 ("Public Staff Comments"), p. 8.
[7] *Supplemental Notice of Decision*, Docket No. E-100, Sub 158, October 17, 2019, p. 2.
[8] See Public Staff Comments and *Comments of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC*, Docket Nos. E-2, Sub 1159 & E-7, Sub 1156, October 18, 2019.

imposing a charge on market participants of the sort rejected in the Avoided Cost Docket is misplaced and inconsistent with the CPRE statute.[9] The Commission should not deal with UASC one way under one program and another way under other programs. That said, NCSEA and NCCEBA agree with the Public Staff and Duke that, if UASC are to be addressed in CPRE Tranche 2, the UASC amount should be set at the values approved by the Commission for new LEOs formed under PURPA (i.e., $1.10/MWh for DEC territory projects and $2.39/MWh for DEP territory projects), subject to an adjustment to account for CPRE curtailment rights discussed below.

In place of the stand-alone charge proposed by the Public Staff and Duke, NCSEA and NCCEBA propose the CPRE Program include two contractual pathways to allow for consideration of UASC:

> (1) The "Uncontrolled Projects" pathway: The CPRE Tranche 2 bid cap would be set at the 20-year avoided cost rate, less a decrement to the avoided cost rate equal to $1.10/MWh in DEC and $2.39/MWh in DEP (pursuant to the Commission's *Supplemental Notice of Decision*) (again, subject to an adjustment discussed below); and
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> (2) The "Controlled Projects" pathway: The CPRE Tranche 2 bid cap would be set at the 20-year avoided cost rate, *exclusive of* a decrement to the avoided cost rate (i.e. the 20-year avoided cost rate without a decrement for UASC).

[9] This would not be the case had the Commission opted to impose a stand-alone charge on PURPA QFs to collect UASC rather than incorporating UASC into the avoided cost rate. The Public Staff acknowledged in its initial comments, which were filed the day after the Commission's Supplemental Decision, that it had not had an opportunity to fully consider the impact of that decision on its recommendations. *See*, Public Staff Comments, fn. 2.

The Uncontrolled Projects would not plan to mitigate UASC during the term of the CPRE PPA. The Uncontrolled Projects would maintain cost-effectiveness pursuant to N.C. Gen. Stat. § 62-110.8 mandate through the incorporation of the fixed UASC amount incorporated into the avoided cost rate approved by the Commission in the Avoided Cost Docket, in the manner dictated in Paragraph 7 of the *Supplemental Notice of Decision*.

The Controlled Projects would contractually agree to mitigate UASC in accordance with a Commission-approved mitigation protocol. These Controlled Projects would maintain cost-effectiveness pursuant to N.C. Gen. Stat. § 62-110.8 mandate through an avoided cost rate cap that does not include the fixed integration cost amount approved by the Commission in Docket No. E-100, Sub 158. The Controlled Projects' contractual pathway would mirror the parameters set forth Paragraph 10 of the *Supplemental Notice of Decision*, which requires Duke in Docket No. E-100, Sub 158 to "calculate avoided energy rates that do not include a UASC and to include these non-UASC inclusive rates that would be available to 'controlled solar generators' [.]"[10] Therefore, the Controlled Projects pathway would not create any new work for Duke. Further, per the earlier mentioned requirements of the Supplemental Notice of Decision, Duke is still required to develop an avoided cost rate inclusive of its ancillary services costs, so the Uncontrolled Project pathway would not create further work for Duke, either. Most importantly, the IA's job would not be further complicated through the addition of grid assessment during the procurement phase.

[10] *Supplemental Notice of Decision*, p. 2.

A. Accounting for CPRE Dispatchability in the UASC

As discussed above and in NCSEA and NCCEBA's Joint Initial Comments, because Duke is entitled to curtail CPRE projects, a CPRE project managed by Duke would require fewer ancillary services – and therefore lower integration costs – than an uncontrolled traditional PURPA project. Also as discussed above, NCSEA and NCCEBA contend that the failure by Duke to account for this factor is grounds for not addressing UASC in CPRE Tranche 2. But if UASC are to be addressed in Tranche 2, NCSEA and NCCEBA believe Duke's dispatch and curtailment rights over CPRE projects should be considered in calculating the UASC.

NCSEA and NCCEBA are aware that time is of the essence with regard to Tranche 2, and, in an effort to move Tranche 2 forward, propose that for Tranche 2, the UASC are reduced by 10% for DEC territory CPRE projects and 20% for DEP territory CPRE projects to account for Duke's curtailment rights.[11] Since UASC must be included as a decrement to the avoided cost rate, the amount of the decrement would be reduced by 10% and 20% for DEC and DEP, respectively. This approximation aligns with the curtailment limits in the CPRE program and should roughly reflect the actual costs incurred by Duke for its added ancillary services in the CPRE program as compared to ancillary services needed for a typical PURPA style project as was relied upon and modeled in the Astrape Study that was provided in the Avoided Cost Docket.

[11] For example, a 10% reduction to the DEC UASC of $1.10/MWh would result in a charge of $0.99/MWh, and a 20% reduction to the DEP UASC of $2.39/MWh would result in a charge of $1.91/MWh.

B. Contractual Damages Applicable to Controlled Projects for Failing to Mitigate the UASC

NCSEA and NCCEBA further propose that the Controlled Projects' PPAs would include a contractual damages provision that would apply to any market participant whose Controlled Project fails to mitigate UASC pursuant to a Commission-approved mitigation protocol during the course of the PPA. Specifically, a market participant whose Controlled Project fails to mitigate UASC in accordance with the protocol would pay damages equal to the applicable fixed UASC amount for any unmitigated megawatt hours delivered. A Controlled Project in DEC that failed to mitigate UASC would pay damages, assessed on an hourly basis, for all unmitigated MWhs equal to $1.10/MWh (or $0.99/MWh if adjusted by 10% as proposed above). Similarly, a project in DEP under the same scenario would pay damages equal to $2.39/MWh (or $1.91/MWh). These damages would then be included as an asset in the utility's fuel rider to account for the costs of the utility mitigating the UASC, thus holding ratepayers neutral.

C. Evaluating Bids from Controlled and Uncontrolled Projects

Under NCSEA's and NCCEBA's proposal, the winning bids would be based upon the *decrement* to that project's applicable avoided cost rate. This would mean that a Controlled Project and an Uncontrolled Project, while having different contractual pathways, would end up in the same procurement analysis. The Controlled Projects would have a higher bid cap and, presumably, higher bids (due to the improvements necessary for them to avoid UASC), while the Uncontrolled Projects would have a lower bid cap and lower bids (due to their lack of ability to avoid UASC). Using this methodology, in the scenario for DEC below (using the adjusted UASC of $0.99/MWh), Projects 2 and 4 would be selected as the winning bids.

	Project Type	Price Cap	Bid Price	Decrement
Project 1	Uncontrolled	$42.01/MWh	$39.00/MWh	$3.01/MWh
Project 2	Uncontrolled	$42.01/MWh	$38.00/MWh	$4.01/MWh
Project 3	Controlled	$43.00/MWh	$41.00/MWh	$2.00/MWh
Project 4	Controlled	$43.00/MWh	$39.50/MWh	$3.50/MWh

This should keep the CPRE program straightforward for the IA and allow Duke and the market participants to police their own contractual rights and shortcomings. In the event that a Duke-owned "Controlled Project" failed to mitigate the UASC, the applicable damages should be applied as a decrement to the CPRE rider.

III. CONCLUSION

For all the reasons set forth herein, NCSEA and NCCEBA contend that UASC should not be considered in Tranche 2 of CPRE, but, if the Commission concludes otherwise, NCSEA and NCCEBA recommend that the Commission apply NCSEA and NCCEBA's proposed two-contract pathway methodology proposed herein.

Respectfully submitted this the 29th day of October, 2019,

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This the 29th day of October, 2019.

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