

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-100, SUB 158

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of  
Biennial Determination of Avoided Cost )  
Rates for Electric Utility Purchases from )  
Qualifying Facilities – 2018 )

**REPLY COMMENTS OF THE  
PUBLIC STAFF**

NOW COMES THE PUBLIC STAFF – North Carolina Utilities Commission, by and through its Executive Director, Christopher J. Ayers, and respectfully submits the following reply comments regarding the Energy Retrofit Stakeholder Meetings Report (Report) filed by Duke Energy Carolinas, LLC (DEC), Duke Energy Progress, LLC (DEP), and Dominion Energy North Carolina (jointly, Utilities) in compliance with Ordering Paragraph No. 31 of the Commission’s April 15, 2020 Order Establishing Standard Rates and Contract Terms for Qualifying Facilities (April 15 Order) in the above-captioned docket.

As required by the April 15 Order, on September 16, 2020,<sup>1</sup> the Utilities filed the Report summarizing the virtual stakeholder process and setting forth areas of consensus among the parties, and in those areas where consensus was not reached, the Report presented recommendations for the Commission’s consideration. Also on September 16, 2020, the Public Staff filed a letter indicating that it participated in the virtual stakeholder process and reviewed the Report filed

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<sup>1</sup> The April 15 Order required the report be filed on or before September 1, 2020. On August 31, 2020, the Commission granted a joint motion for extension for the Utilities to file the report until September 16, 2020.

by the Utilities. The Public Staff stated that it generally agreed with the recommendations in the Report and would not file a separate report.<sup>2</sup>

On November 5, 2020, the Commission issued an Order Allowing Comments on Storage Retrofit Stakeholders Meetings Report (November 5 Order) allowing initial comments by November 20, 2020 and reply comments by December 8, 2020. The North Carolina Clean Energy Business Alliance (NCCEBA), the North Carolina Sustainable Energy Association (NCSEA), and the Southern Alliance for Clean Energy (SACE) filed joint comments on November 20, 2020.

On December 8, 2020, the Utilities requested an extension of time to file reply comments from December 11, 2020 to December 16, 2020. On December 10, 2020, the Commission granted the extension.

#### I. Areas of Agreement

As stated above, the Public Staff filed a letter in this docket indicating that we participated in the virtual stakeholder process and we generally agree with the areas of agreement identified in the Report.

In their joint comments, NCCEBA, NCSEA, and SACE state that the areas of agreement include the following specifically: (1) a new Certificate of Public Convenience and Necessity (CPCN) should not be needed to add storage to an

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<sup>2</sup> The April 15 Order required that to the extent the Public Staff does not agree with any of the recommendations in the utilities' report, the Public Staff shall file a separate report setting forth its recommendations.

existing facility;<sup>3</sup> (2) the existing Power Purchase Agreement (PPA) should be amended to include the addition of storage, rather than requiring a new PPA; (3) DC-coupled storage systems will be allowed once revenue-grade meters are available; (4) the proposed streamlined interconnection study process for energy storage retrofits filed on September 30, 2019, in Docket No. E-100, Sub 101 (ESS Retrofit Process), should be amended to permit existing facilities to add both AC- and DC-coupled energy storage systems, provided certain controls are in place to limit maximum generating capacity;<sup>4</sup> and (5) the parties should continue to explore options for ancillary services that can be provided by storage resources paired with intermittent generation.<sup>5</sup>

The Public Staff generally agrees with the summary as presented in the NCCEBA, NCSEA, and SACE joint comments of the stakeholder areas of consensus, but would further note that the stakeholder group did not discuss in-depth the potential for Qualified Facilities (QF) to provide or be compensated for ancillary services other than the option QFs have to avoid the Solar Integration Services Charge (SISC) by acting as a controlled solar generator.<sup>6</sup> Because the potential for ancillary services to be provided and compensated is specifically listed on the “additional issues” to be addressed in the biennial avoided cost filing that was continued until November 2021 pursuant to the Commission Order Granting

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<sup>3</sup> Consistent with Commission Rules R8-64 and R8-65, the facility would have to file notice of the change to either the Report of New Construction or the CPCN, as appropriate.

<sup>4</sup> On August 14, 2020, Duke filed an update to the ESS Retrofit Process notifying the Commission that they planned to file a revision permitting the addition of AC-coupled storage as a result of stakeholder input.

<sup>5</sup> NCCEBA, NCSEA, and SACE joint comments, at 3-4.

<sup>6</sup> For further discussion, see Report at p. 15.

Continuance and Establishing Reporting Requirements in Docket No. E-100, Sub 167 (Sub 167 Avoided Cost Proceeding), the Public Staff anticipates further discussions on this issue with the Utilities and other stakeholders.<sup>7</sup>

## II. Areas of Disagreement

### a. Calculating the Fixed-Price Term Rate for the Energy Storage Output

In its Report, the Utilities recommended, consistent with the terms prescribed for QFs by House Bill 589, the output from the addition of energy storage would be eligible for a fixed price that is the lesser of the term available to the solar facility under N.C. Gen. Stat. § 62-156(c) or the remaining term of the underlying solar contract.<sup>8</sup> For existing solar facilities that qualify for the standard contract, one MW or less, the energy storage added to the facility would be compensated for its output at the then-current 10-year avoided cost rate. For existing solar facilities over one MW, which qualify for a negotiated contract, the energy storage added to the facility would be compensated for its output at the then-current five-year avoided cost rate. As energy storage added under this expedited process is not permitted to increase the maximum export capacity of the

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<sup>7</sup> On December 7, 2020, DEC and DEP committed to continuing that discussion with the Public Staff and stakeholders in 2021. See Docket No. E-100, Sub 167, DEC and DEP Joint Progress Report on Sub 158 Additional Issues, stating at pp. 5-6:

The Companies had preliminary discussions of this issue with the Public Staff in the context of the recent Storage Retrofit Stakeholder Meetings, and they intend to discuss this issue with the Public Staff in the January-March 2021 timeframe and to engage with other stakeholders on this issue in the June-August 2021 timeframe.

<sup>8</sup> Report, at p. 20.

facility,<sup>9</sup> the size of the storage added is irrelevant to determining the contract term of the PPA amendment.

To be clear, if the retrofit storage is added as an amendment to the existing contract, the amendment to the contract detailing the terms of the energy storage addition would be in place for the remainder of the existing contract. However, the amendment should be subject to a separate fixed-price term based on the current avoided cost methodology, either five or ten years based upon the size of the solar facility. As noted in the Report, such an arrangement – with a longer-term contract containing periodically refreshed price terms – is similar to the Green Source Advantage (GSA) fixed bill credit option approved by the Commission.<sup>10</sup> A GSA customer and renewable energy developer can enter into a contract term of up to 20 years; however, if the GSA customer chooses the fixed-price bill credit, the price is refreshed every 5 years. In approving this methodology, the Commission recognized that: “This five-year reset will mitigate the impact of the staleness of long-term fixed rates, consistent with the intent supporting House Bill 589.”<sup>11</sup>

This is also consistent with the Public Staff’s position in the Sub 158 Avoided Cost Proceeding, which recommended allowing for the addition of energy storage facilities in a manner consistent with the intent of the General Assembly in

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<sup>9</sup> Increasing the maximum export capacity of the facility through the co-location of energy storage on the AC side of the inverter would require a new interconnection agreement and would be studied through the standard North Carolina Interconnection Procedures.

<sup>10</sup> See Report at footnote 6, referring to Docket Nos. E-2, Sub 1170 and E-7, Sub 1169, Order Modifying and Approving the Green Source Advantage Program (February 1, 2019), at 46. The Green Source Advantage Program also allows for the option to calculate the bill credit based on the utility’s marginal production hourly cost data.

<sup>11</sup> Docket Nos. E-2, Sub 1170 and E-7, Sub 1169, Order Modifying and Approving the Green Source Advantage Program (February 1, 2019), at 47.

enacting House Bill 589 and the Commission’s decision in the Sub 148 Avoided Cost Proceeding to prevent overcompensation to QFs by revisions to the standard offer and negotiated contract terms. The Public Staff recognizes that energy storage can provide benefits to ratepayers by enabling more dispatchable solar facilities, shifting energy from off-peak to on-peak hours, avoiding new peaking capacity, and reducing solar intermittency.<sup>12</sup> However, with the exception of compensation for dispatchability, a solar plus storage facility would presumably be compensated for those benefits through existing rate structures and tariffs, including higher on-peak pricing, capacity payments, and the avoidance of the SISC charge, respectively.

In the Sub 158 Avoided Cost proceeding, the Public Staff recognized that energy storage when paired with intermittent generation can provide benefits to ratepayers. Public Staff witness Metz further testified in that proceeding that paying for additional energy and capacity at old, higher avoided cost rates that no longer reflect the actual avoided costs of the utility would be unfair to ratepayers, as they would no longer be indifferent between energy supplied by a QF and energy generated by the utility.<sup>13</sup> However, the Public Staff did not agree with the Utilities in that proceeding that a QF that adds storage or increases output should lose its eligibility for the rates it established for its original facility output. Rather, any “additional energy” put to the electrical grid from an already existing QF, whether commercially operational or studied as part of the facility’s original interconnection

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<sup>12</sup> NCCEBA, NCSEA, and SACE Joint Comments, at 10.

<sup>13</sup> April 15 Order, at 125-26.

request, should be compensated at the most current avoided cost rates and schedules. The “compromise” proposed by the Public Staff would allow the Facility to continue to receive payments at its established rates for the energy output associated with the existing facility, but also receive compensation at current avoided cost rates for the additional energy associated with the energy storage retrofit.

In their joint comments, NCCEBA, NCSEA, and SACE state their disagreement with the recommendation in the Report regarding the proposed calculation of the length of the term for the bifurcated avoided cost rate stating that House Bill 589 does not limit the storage addition to a five-year avoided cost rate.<sup>14</sup> While we agree that House Bill 589 does not require a five-year avoided cost rate for modifications to an existing contract, the amendments in House Bill 589 were intended to limit the overpayment risk to ratepayers of long-term fixed prices, and is relevant in the consideration of a modification to existing contracts. Limiting the compensation of new energy output from a QF over one MW to the five-year term is consistent with the Public Staff compromise position that additional energy from the energy retrofit should be compensated at rates that reflect the current avoided cost methodology. It is also consistent with the amendments to N.C. Gen. Stat. § 62-156(c) made by House Bill 589 and the subsequent Commission decision in the Sub 148 Avoided Cost Proceeding to modify the terms of standard and

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<sup>14</sup> NCCEBA, NCSEA, and SACE Joint Comments, at 7.

negotiated QF contracts, which are meant to mitigate the risk of inaccuracy of long-term avoided cost rates.

NCCEBA, NCSEA, and SACE further comment that “there is no reason to believe that any QF can finance an addition of storage device to its facility with only five years of price certainty.”<sup>15</sup> Similarly, in the Sub 158 Avoided Cost Proceeding, NCSEA testified that five-year avoided cost rates are not economically viable and 10-year avoided cost rates would be needed to finance a facility with energy storage.<sup>16</sup> While the Public Staff does not have evidence regarding whether a five-year term fixed-price is financeable for an energy storage retrofit, at this time, we believe that this compromise proposal seeking to modify an existing facility provides the necessary and proper balance between ratepayer risk and developer price certainty, while also considering the legislative intent expressed by House Bill 589.

The Public Staff continues to recommend that compensation for additional energy from energy storage retrofit to existing facilities be limited to a five-year or 10-year avoided cost rate, as appropriate depending on whether the solar facility qualifies for a negotiated or standard offer contract. We believe this approach reduces the risk to ratepayers and is consistent with past Commission decisions in the prior avoided cost dockets and other House Bill 589-related dockets.

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<sup>15</sup> Id. at 9.

<sup>16</sup> April 15 Order, at 127. Witness Norris testified for NCSEA that a five-year avoided cost rate would “undercut or fully eliminate the capacity value of the storage equipment and make it wholly unfinanceable.”

b. Timeline for availability of DC meters

In the Report, the Utilities state that revenue grade DC meters are necessary to proceed with DC-connected storage retrofits. Since the Report was filed, the Public Staff has had further discussions with DEC/DEP and stakeholders on this issue. Stakeholders seem to be in agreement that the ANSI standard will be approved soon. The Public Staff agrees with the NCCEBA, NCSEA, and SACE joint comments that the Utilities “should ensure that there will not be unnecessary delays in their efforts to request DC meters from the manufacturers and test the meters” once the ANSI standard is approved and the meters are available.<sup>17</sup> With regard to NCCEBA, NCSEA, and SACE’s request for reporting on the Utilities’ progress in approving the use of those meters for DC-connected storage retrofits, it is our understanding that the Utilities are willing to make such reports. In the interim, the Public Staff agrees with that it is appropriate for DEC and DEP to revise their ESS Retrofit Study Process to permit AC-connected storage before any DC meter is approved, giving developers additional time to consider both options.

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<sup>17</sup> NCCEBA, NCSEA, and SACE Joint Comments, at 12.

Respectfully submitted this the 16th day of December, 2020.

PUBLIC STAFF  
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### **CERTIFICATE OF SERVICE**

I certify that a copy of these Reply Comments have been served on all parties of record or their attorneys, or both, by United States mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 16th day of December, 2020.

Electronically submitted  
/s/ Layla Cummings