STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-100, SUB 175

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Biennial Determination of Avoided Cost Rates for Electric Utility Purchases from Qualifying Facilities – 2021	))))	**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 pursuant to the Commission's August 13, 2021, Order Establishing Biennial Proceeding, Requiring Data, and Scheduling Public Hearing (Scheduling Order) in the above-referenced docket.

I. BACKGROUND

On November 1, 2021, Duke Energy Carolinas, LLC (DEC), Duke Energy Progress, LLC (DEP, and jointly with DEC, Duke), and Virginia Electric and Power Company d/b/a Dominion Energy North Carolina (DENC) filed their proposed avoided cost rates, standard power purchase agreements (PPAs), and terms and conditions, consistent with the Scheduling Order. On December 21, 2021, Western Carolina University (WCU) jointly with New River Light and Power (NRLP) also made their avoided cost filings in this docket.

On February 2, 2022, the Carolinas Clean Energy Business Association (CCEBA), North Carolina Sustainable Energy Association (NCSEA), and Southern

Alliance for Clean Energy (SACE) filed a Joint Motion requesting an extension of time to February 24, 2022, to file initial comments and to March 28, 2022, to file reply comments. The Commission granted the extension.

On February 24, 2022, the Public Staff, SACE, and Appalachian Voices filed comments. CCEBA and NCSEA (Joint Commenters) filed Joint Initial Comments (Joint Comments).

On March 1, 2022, NRLP filed amended proposed rates and contracts. On March 11, 2022, Appalachian Voices filed a response to NRLP's amended filing.

On March 24, 2022, Duke filed a Motion for Extension of Time, asking the deadline for reply comments to be extended to April 1, 2022. The Commission granted the request on March 25, 2022.

In these reply comments, the Public Staff responds to specific issues raised by the intervenors in response to Duke and DENC's Initial Statements, as well as NRLP's amended proposed rates and contracts.

II. <u>DISCUSSION</u>

<u>GAS PRICE FORECASTS</u>

The subject of the appropriate natural gas forecasting methodology used by Duke has been a matter of significant debate over the past several avoided cost proceedings. SACE and the Joint Commenters all raise the issue of natural gas price forecasts in their initial comments.[1] In this docket, as in the 2016 Docket No. E-100, Sub 148 (Sub 148), the 2018 Docket No. E-100, Sub 158 (Sub 158), and the 2020 Docket No. E-100 Sub 167 (Sub 167), Duke has used eight years of forward market prices before fully transitioning to fundamental forecasts in years nine and beyond, pursuant to the Commission's orders in Sub 148, Sub 158, and Sub 167.

In its Integrated Resource Plans (IRPs), however, Duke traditionally used ten years of forward market prices before fully transitioning to fundamental forecasts in year 11 and beyond, with no blending period. The Commission's November 19, 2021 Order Accepting Integrated Resource Plans, Reps and CPRE Program Plans With Conditions And Providing Further Direction For Future Planning, directed Duke to use no more than eight years of forward market prices in its 2022 Carbon Plan and future IRPs.[2] In stakeholder meetings related to the 2022 Carbon Plan, Duke has indicated it intends to comply with this directive by using five years of forward market prices, followed by a three year period blending the forward market prices with a fundamental price forecast derived from the average of several fundamental price forecasts.[3] The Public Staff supports this approach, as it complies with past Commission avoided cost orders and provides for a reasonable blending period, which eliminates the current abrupt price change when the forecast switches from forward markets to fundamentals.

[1] See Joint Comments, at 18; Initial Comments of SACE, at 16.
[2] 2020 IRP Order at 10, filed in Docket No. E-100, Sub 165.
[3] Duke proposes to average private fundamental forecasts from IHS, EVA, and Woods MacKenzie, along with a public fundamental forecast from the Energy Information Administration (EIA)'s Annual Energy Outlook (AEO).

The Public Staff also supports the approach Duke intends to take in its Carbon Plan, and recommends that in future avoided cost filings, Duke use the same forecast methodology for natural gas. The Public Staff does not recommend Duke recalculate its avoided energy rates in this proceeding with the new proposed methodology, as the current methodology technically complies with past Commission orders and is in alignment with the natural gas forecasting methodology in the 2020 IRP Supplemental Portfolio B. The Public Staff believes that the natural gas forecasting methodology should remain consistent between the IRP and avoided cost determinations, and Duke has not yet filed its Carbon Plan utilizing the proposed methodology.

ANCILLARY SERVICES

In its initial comments, the Public Staff discussed the pros and cons of procurement of ancillary services from third parties and suggested the establishment of a pilot program to evaluate whether these services can be procured from inverter based resources (IBRs) at a lower cost than Duke's own resources.[4] SACE[5] and the Joint Commenters[6] also suggested such an approach. The Public Staff appreciates the arguments made by SACE and the Joint Commenters in support of this process. As this issue has evolved, it has become clear to the Public Staff that it has expanded beyond an avoided cost issue, particularly as procurement of IBRs is increasingly occurring outside of PURPA

[4] Public Staff Initial Comments, at 19.
[5] Initial Comments of SACE, at 31.
[6] Joint Comments, at 17.

contracts; therefore, the Public Staff recommends that the Commission open a separate docket to solicit comments specifically related to this pilot or, more broadly, to the utilization of IBRs to provide ancillary services. If approved by the Commission, the details of the pilot program should be established in this new docket and be based upon stakeholder input.

The Public Staff does recognize that the energy landscape in North Carolina is shifting, with fewer third-party projects selling their power through standard offer and negotiated contracts under PURPA. Large-scale competitive procurements for renewable energy, such as the Competitive Procurement of Renewable Energy (CPRE) and the Carbon Plan, through the ongoing 2022 Solar Procurement, are increasingly responsible for much of the solar interconnected to Duke's grid. The PPAs and rates applicable to facilities procured through these programs are often different than the PPAs and rates determined during biennial avoided cost proceedings. In the interest of minimizing the amount of regulatory attention diverted by the establishment of a pilot program for ancillary services, it may be beneficial for Duke and stakeholders to focus on potential revisions to future competitive procurements triggered by need identified within the Carbon Plan. These revisions might include dispatchable contracts and other mechanisms by which IBRs owned by third parties and Duke can be utilized to provide ancillary services to the grid.

For example, both SACE and the Joint Commenters explained how the existing PPA structure can serve as an impediment to realizing the full benefits of third party owned generation facilities,[7] with the Joint Commenters specifically referencing First Solar's proposed dispatchable PPA.[8] The Public Staff is also interested in this concept; however, there is a fundamental difference between PURPA "must take" standard offer contracts, and the contracts procured pursuant to the CPRE program and the Carbon Plan which, by statute, require third party generators to "commit to allow the procuring electric public utility rights to dispatch, operate, and control the solicited solar energy facilities in the same manner as the utility's own generating resources."[9] The current structure of CPRE PPAs, and the proposed structure of the Carbon Plan PPAs for the 2022 Solar Procurement,[10] only include limited economic dispatch rights, which do not constitute full control as envisioned by HB 589 and HB 951. The Public Staff has supported investigating a dispatchable PPA as suggested by First Solar,[11] while also recognizing the challenges inherent in such a structure. The Public Staff urges Duke to work collaboratively with stakeholders to propose an alternative PPA, potentially based upon fixed capacity payments that would allow for full dispatchability and the provision of ancillary services from IBRs, in future RFPs for Carbon Plan

[7] See Joint Comments, at 10; Initial Comments of SACE, at 30.

[8] Comments of First Solar, Inc., filed in Docket Nos. E-2, Sub 1159 & E-7, Sub 1156 on March 22, 2019.

[9] Session Law 2017-197, House Bill 589, Part II, Section 2(a), 62-110.8(b); Session Law 2021-165, House Bill 951, Part I, Section 1(2)b.

[10] See DEC-DEP Petition for Authorization of 2022 Solar Procurement Program, filed in Docket Nos. E-2, Sub 1297 and E-7, Sub 1268, at 19.

[11] Transcript of Technical Conference held on May 23, 2019, Volume 2, at 144-150.

resources.[12] This dispatchable PPA structure could be based upon the proposed First Solar dispatchable PPA.[13]

NOTICE OF COMMITMENT FORMS AND ESTABLISHMENT OF A LEGALLY ENFORCEABLE OBLIGATION

In its initial comments, the Joint Commenters raise issues related to Section 4 of the Notice of Commitment (NOC) form, which requires a Qualifying Facility (QF) to commit to delivering power from its facility within 365 days of submitting the NOC form. The Joint Commenters point out that the interconnection process can take four years, meaning that a QF could have to wait until three years into the interconnection and construction process to obtain a Legally Enforceable Obligation (LEO), which could substantially impact the ability of QFs to obtain financing. The Joint Commenters propose a modified Section 4, which would require QFs to commit to delivering power no more than 90 days after the completion of all interconnection studies and interconnection facilities, which the Joint Commenters assert is generally consistent with the deadline for achieving

[12] The Public Staff does not recommend that Duke implement dispatchable PPAs in the 2022 Solar Procurement due to the lack of time and the complexity of such contracts. Multiple stakeholder meetings have already been held, and the interested parties largely agreed to similar PPA structures as CPRE. In addition, the 2022 Solar Procurement does not intend to procure solar plus storage, which would most benefit from a dispatchable PPA. It is also noteworthy that with the 2022 Solar Procurement, and future procurements resulting from the implementation of HB 951, the utility will own a majority stake in the total procurement amounts of IBR resources. Utility-owned resources may be able to supply system ancillary demands while lowering costs and program complexity relative to the procurement of these ancillary services from third party sellers. However, the overarching concept still remains, and a demonstration of these capabilities would facilitate the proper valuation of ancillary services from IBR resources.

[13] See Joint Comments, Exhibit 2, First Solar Appendix 1.

commercial operation included in Duke PPAs approved by the Commission for use in the CPRE Program.

The Public Staff generally agrees with the Joint Commenters that Duke's proposed language may impact a QF's ability to obtain financing. Duke shared a draft of a revised NOC, which included the modifications addressing the Joint Commenters' concerns, with the Public Staff. It is the Public Staff's understanding that Duke will file this newly revised NOC with its reply comments and that the Joint Commenters support the revisions. The Public Staff also supports the revisions to the NOC and commends the parties in coming to an agreement.

<u>NRLP'S ELIMINATION OF THE ADMINISTRATION FEE</u>

The Public Staff notes that NRLP's elimination of the administrative fees on small power producers appear to be a reasonable continuation of prior practices, given the relatively small number of customers involved and the issues raised by Appalachian Voices. The Public Staff recommends that the Commission accept NRLP's revised filing.

<u>DUKE'S RESPONSE TO THE PUBLIC STAFF'S NET EXCESS ENERGY CREDIT (NEEC) PROPOSAL</u>

Duke has shared its response to the Public Staff's NEEC proposal, and the two parties are continuing discussions in an effort to reach a consensus on this issue. The Public Staff asks the Commission to allow the Public Staff to file supplemental reply comments, if necessary, to update the Commission on further developments of this issue.

III. CONCLUSIONS

WHEREFORE, the Public Staff requests that the Commission take these reply comments into consideration in reaching its decision in this proceeding.

Respectfully submitted this the 1st day of April 2022.

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CERTIFICATE OF SERVICE

I certify that a copy of these reply comments has 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 1st day of April 2022.

Electronically submitted
/s/ Robert B. Josey