STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 101 DOCKET NO. E-100, SUB 158

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Petition for Approval of Revisions to)	ORDER GRANTING WAIVERS TO
Generator Interconnection Standards)	IMPLEMENT ENERGY STORAGE SYSTEM
)	EXPEDITED STUDY PROCESSES AND
)	APPROVING PROCESS TO ESTABLISH
)	ELIGIBILITY OF AVOIDED COST RATES
)	FOR RETROFIT ENERGY STORAGE
)	SYSTEMS

BY THE COMMISSION: On August 17, 2021, the Commission issued an Order Approving SISC Avoidance Requirements and Addressing Solar-Plus-Storage Qualifying Facility Installations in the above captioned dockets, which, among other things, directed Duke Energy Carolinas, LLC (DEC), and Duke Energy Progress, LLC (DEP, jointly with DEC, Duke), to file: (1) a comprehensive waiver request reflecting all waivers that are needed from the North Carolina Interconnection Procedures (NCIP) to move ahead with an enrollment window for a process to study the addition of an energy storage system (ESS) to a currently interconnected Qualifying Facility (QF); and (2) the procedure for a QF to establish eligibility for the avoided cost rate or methodology applicable to the output of the energy storage addition.

On September 29, 2021, Duke submitted its compliance filing in the above-captioned dockets.

On October 21, 2021, the Public Staff filed comments on Duke's compliance filing in both dockets.

On October 21, 2021, in Docket No. E-100, Sub 158, the Carolinas Clean Energy Business Association (CCEBA) filed comments on Duke's compliance filing.

On November 5, 2021, Duke filed reply comments in response to the comments of the Public Staff and CCEBA.

ESS Retrofit Study Process

In its compliance filing, Duke noted that it had refined the study process for Interconnection Customers seeking to retrofit an operating QF with an ESS (ESS Retrofit) to align with the Definitive Interconnection System Impact Study (DISIS) process. Duke requested waivers from the NCIP to implement the study process for ESS Retrofits as

illustrated in its Compliance Filing Attachment A (ESS Retrofit Study Process), and Compliance Filing Attachment B (Limited Waiver of DISIS Phase 2 and Facility Study Applicability to Certain Existing DC-Coupled Transmission-Interconnected Customers).

Attachment A provides an expedited study process for ESS Retrofits that will only export power during the period of 9:00 a.m. to 5:00 p.m. After submitting an ESS Retrofit Process Application and a fee of \$1,000, the project will be screened and proceed to an amended Interconnection Agreement without needing to participate in the DISIS process. Duke represents in Attachment A that it will provide a report to the Commission with an overview of the implementation of the expedited study process for ESS Retrofits.

Attachment B provides a waiver of DISIS Phase 2 for certain ESS Retrofits that do not cause or contribute to Network Upgrades, allowing those ESS Retrofits to exit the study process after DISIS Phase 1 is complete.

In its comments, the Public Staff stated that it believes Duke met the Commission's directive to provide a comprehensive description of necessary waivers to the NCIP for ESS Retrofits. The Public Staff requested that Duke provide clarification as to whether its proposal would allow for the study of retrofit additions in only the first phase of DISIS or if the proposal would allow for study in subsequent DISIS windows. The Public Staff stated that it believes allowing ESS Retrofit applications to be studied in future DISIS windows is appropriate; however, if the ESS Retrofit Study is an ongoing process, the Public Staff asserts that revisions to the NCIP would be more appropriate than short term waivers. The Public Staff further stated that Duke should submit any required reports on the ESS Retrofit process annually if there are multiple DISIS enrollment windows for the ESS Retrofits.

CCEBA requested in its comments that Duke be transparent and involve stakeholders in developing the standards and parameters for QFs adding ESS that are studied as part of the DISIS process, particularly how Duke will study the output of the proposed ESS dispatched outside of daylight hours.

Duke, in its reply comments, clarified that it believes experience implementing DISIS and experience implementing the expedited ESS Retrofit study process are needed before determining whether to make the expedited ESS study process a permanent part of DISIS. Duke proposed to file a report providing an update on the expedited study processes available for ESS Retrofits within 60 days of issuing the DISIS Cluster 1 Phase 1 study report. This report can inform the decision of whether to (i) extend the requested waivers for DISIS Cluster 2, (ii) terminate the ESS Retrofit process, or (iii) modify the NCIP to reflect the waiver for certain DC-coupled transmission-interconnected Interconnection Customers indicating 24-hour ESS Export when entering DISIS, thereby making this waiver permanent.

In response to CCEBA, Duke described in its reply comments how ESS Retrofits would be studied as part of the DISIS process, and further offered that interconnection customers could obtain additional information on the study process during the DISIS customer engagement window process prior to the DISIS Phase 1 study.

The Commission determines that Duke has satisfied the Commission's request to provide a process for the study of ESS Retrofits via its September 29, 2021 filing, specifically with Attachments A and B, and that the ESS Retrofit Study processes proposed by Duke are reasonable. Therefore, the Commission approves the processes outlined in Attachments A and B to Duke's September 29, 2021 filing, and grants the requested waivers to the NCIP. The Commission also agrees that further information on the implementation of the ESS Retrofit Study process is necessary prior to making a determination that the process should be permanent and accepts Duke's proposed reporting requirement.

Process for ESS Retrofits to Establish Eligibility for Avoided Cost Rates

In Attachment C to its September 29, 2021 filing Duke proposed a procedure for ESS Retrofits to establish eligibility for an avoided cost rate or methodology applicable to the added storage. As stated in the Commission's August 17, 2021 order, an ESS Retrofit "would receive compensation for the output of the energy storage system at the avoided cost rate current at the time the energy storage was added." Duke's proposal provided that to establish eligibility for published ESS Retrofit avoided cost rates an ESS Retrofit must submit a Notice of Commitment form (NOC) prior to November 1, 2023. For NOCs submitted after November 1, 2023, the QF would be eligible for a negotiated rate based on the most recent Commission-approved avoided cost methodology for the ESS Retrofit. Duke's proposed Attachment C also provided that the ESS Retrofit avoided cost rate will correspond to the amount of time remaining on the PPA for the QF as of January 1, 2023. However, if an ESS Retrofit has more than 10 years remaining on its existing PPA as of January 1, 2023, the new rate will apply for the entire term, but the rate applied will be the 10-year published rate.

In its comments, the Public Staff noted that Duke's procedure for ESS Retrofits to establish eligibility for avoided cost rates is sufficient. However, the Public Staff took issue with two criteria Duke imposed for eligibility for ESS Retrofits avoided cost rates. First, Duke limited the availability of these rates to QFs that have established a legally enforceable obligation (LEO) or have entered into a PPA prior to November 1, 2016. Second, Duke's proposal provided that the published avoided cost rates will be available for only the first 100 MW of incremental ESS Retrofit additions that submit a NOC form prior to November 1, 2023. The Public Staff asserted in its comments that the November 1, 2016 cutoff date is inconsistent with prior Commission orders, and requests that Duke explain its rationale for including that date. Regarding the 100 MW cap on incremental ESS Retrofits eligible for the established avoided cost rates, the Public Staff noted that Duke did not include this cap in any prior filing and did not discuss this proposed cap in any prior stakeholder meeting regarding ESS Retrofits. The Public Staff recommended that the 100 MW cap be removed.

In its comments, CCEBA noted that Duke did not include in prior filings nor discuss at stakeholder meetings the criteria it proposed that limit eligibility for avoided cost rates. CCEBA stated that it does not oppose Duke's two limiting criteria; however, it recommends that the Commission direct Duke to submit a report of the status of ESS Retrofit projects with sufficient information for the Commission to determine if the eligibility

for avoided cost rates should be expanded to include QFs with LEOs established after November 1, 2016.

CCEBA further requested that a standard ESS Retrofit avoided cost rate continue to be offered after November 1, 2023, noting that the availability of standard ESS Retrofit rates would be more efficient than requiring each QF with an ESS Retrofit to negotiate a PPA with Duke. CCEBA also took issue with Duke's proposal to limit the standard rates to a 10-year rate for QFs with more than 10 years remaining on their PPA. CCEBA recommends that Duke provide an avoided cost rate for an ESS Retrofit that corresponds with the remaining time on the QF's PPA.

In its November 5, 2021 reply comments, Duke provided an explanation for the two criteria in its proposal that limited eligibility for ESS Retrofits avoided cost rates. Regarding the pre-November 15, 2016 eligibility date, Duke stated that this date corresponds with the H589 changes to the North Carolina implementation of the Public Utilities Regulatory Policies Act (PURPA). Duke asserted that QFs that establish LEOs after that date are on notice that they could have included storage with their initial interconnection request, and that the date limits the "administratively burdensome bifurcated rate and PPA amendment process." Duke also noted that CCEBA does not oppose this limitation. Regarding the 100 MW cap Duke proposed for eligibility, Duke noted that the purpose of the cap was to limit the risk of overpayment for power from the ESS Retrofit. However, after discussion with the Public Staff, Duke agreed to remove the 100 MW cap and filed a revised Attachment C reflecting this revision.

In reply comments, Duke disagreed with CCEBA's proposal to provide an avoided cost rate to an ESS Retrofit that corresponds with the remaining time on the QF's PPA for those QFs that have more than 10 years remaining on their PPAs after November 1, 2023. Duke asserted that it is unlikely that there are many PPAs in this position due to the passage of time and subsequent changes in PURPA implementation. Duke further asserted that allowing its proposal consisting of 2, 3, 4, 5, 6, 7, 8, 9, and 10-year ESS Retrofit rates is reasonable as it provides standard rates and balances the interests of the QFs with the interests of ratepayers.

With respect to the pre-November 15, 2016 LEO eligibility criterion that Duke seeks to impose, the Commission, like the Public Staff, finds this limitation on eligibility to be inconsistent with the eligibility requirements for generating facilities seeking to add retrofit storage established by prior order of the Commission. Thus, the Commission questions Duke's explanations for the pre-November 15, 2016 eligibility limitation.

Nonetheless, the Commission notes that the CCEBA did not oppose the limitation and other than requesting clarification of the rationale for the limitation, the Public Staff did not oppose the limitation outright. Therefore, the Commission determines that Duke's proposal for establishing eligibility for avoided cost rates for ESS Retrofits as reflected in its revised Attachment C is reasonable, at this time. The Commission will adopt CCEBA's

¹ To be clear, Duke's proposal would provide that the ESS Retrofit rate would apply to the entire remaining term of the PPA, even past 10 years. However, Duke's proposal is not to include the calculation of standard rates for terms past the 10-year avoided cost rate.

request that Duke be required to submit a report on the status of ESS Retrofit projects with sufficient information for the Commission to determine if the eligibility for avoided cost rates should be expanded to include QFs with LEOs established after November 1, 2016, and that the Commission consider expanding the eligibility for avoided cost rates to QFs with LEOs established after November 15, 2016. The Commission will revisit the eligibility for QFs with a LEO established after November 15, 2016, and the availability of standard rates for ESS Retrofits that submit a NOC after November 1, 2023, once Duke provides information regarding the implementation of the ESS Retrofit process through the reports required in this order.

The Commission further determines that Duke's proposal to provide 2, 3, 4, 5, 6, 7, 8, 9, and 10-year ESS Retrofit rates is reasonable, and agrees that the practice will balance the interests of the small number of QFs that may be impacted by this provision with the interests of ratepayers and will maximize administrative efficiency.²

IT IS, THEREFORE, ORDERED as follows:

- 1. That Duke's request for waivers from the NCIP, as provided in Attachment A and B of its September 29, 2021 filing is granted for use in Duke's ESS Retrofit Study Processes;
- 2. That for any DISIS that includes an ESS Retrofit, Duke shall file a report within 60 days of issuing the DISIS Cluster 1, Phase 1 study report providing an update on the expedited study processes available for solar Interconnection Customers requesting interconnection service for ESS Export between 9:00 a.m. and 5:00 p.m. and certain DC-Coupled transmission-interconnected Interconnection Customers indicating 24-hour ESS Export when entering in DISIS. This initial report shall inform the Commission of Duke's considerations as to whether to (i) extend the requested waivers for DISIS Cluster 2, (ii) terminate the ESS Retrofit process, or (iii) modify the NCIP to make the waiver for certain DC-Coupled transmission-interconnected Interconnection Customers indicating 24-hour ESS Export when entering in DISIS permanent;
- 3. That Duke's proposal for a process to establish eligibility for avoided cost rates for ESS Retrofits as reflected in its revised Attachment C filed on November 5, 2021, is reasonable; and
- 4. That by March 1, 2023, Duke shall file a report on the total number of ESS Retrofit NOC forms that have been submitted and the status of those projects. Within 60 days of that report, any party may file a request to the Commission to consider whether the ESS Retrofit process should be expanded to include QFs with a LEO established after

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² The approval of the ESS Retrofit rates will be considered in Docket No. E-100, Sub 175.

November 15, 2016, and whether standard rates for ESS Retrofits should be available for ESS Retrofits that submit NOC forms after November 1, 2023.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 12th day of May, 2022.

NORTH CAROLINA UTILITIES COMMISSION

Erica N. Green, Deputy Clerk

Commissioner Karen M. Kemerait did not participate in this decision.