

For the Using and Consuming Public:

Robert B. Josey and Layla Cummings, Public Staff - North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699 4300

BY THE COMMISSION: On February 23, 2021, Duke Energy Carolinas, LLC (DEC or the Company) filed its 2020 REPS Compliance Report and application seeking an adjustment to its North Carolina retail rates and charges pursuant to N.C. Gen. Stat. § 62-133.8(h) and Commission Rule R8-67, which require the Commission to conduct an annual proceeding for the purpose of determining whether a rider should be established to permit the recovery of the incremental costs incurred to comply with the requirements of the Renewable Energy and Energy Efficiency Portfolio Standard (REPS), N.C.G.S. § 62-133.8(b), (d), (e) and (f), and to true up any underrecovery or overrecovery of compliance costs. DEC's application was accompanied by the testimony and exhibits of Megan W. Jennings, Renewable Compliance Manager, and Veronica I. Williams, Rates and Regulatory Strategy Manager. In its application and prefiled testimony, DEC sought approval of its proposed REPS Rider, which incorporated the Company's proposed adjustments to its North Carolina retail rates.

On March 18, 2021, the Commission issued an Order Scheduling Hearing, Requiring Filing of Testimony, Establishing Discovery Guidelines, and Requiring Public Notice, in which the Commission set this matter for hearing; established deadlines for the submission of intervention petitions, intervenor testimony, and DEC rebuttal testimony; required the provision of appropriate public notice; and mandated compliance with certain discovery guidelines.

The North Carolina Sustainable Energy Association (NCSEA), the Carolina Industrial Group for Fair Utility Rates III (CIGFUR), and the Carolina Utility Customers Association, Inc. (CUCA), filed separate petitions to intervene in this docket, and the interventions were allowed by the Commission. The intervention and participation by the Public Staff is recognized pursuant to N.C.G.S. § 62-15(d) and Commission Rule R1-19(e).

On May 4, 2021, in this docket, DEC advised the Commission of an error in the amount of renewable energy certificates (RECs) from net metering facilities that had been reported to the North Carolina Renewable Energy Tracking System (NC-RETS) and requested a waiver of Section 5.4 of the NC-RETS Operating Procedures, which allows an account holder to apply for a prior period adjustment to adjust the meter data submitted to create RECs within a year of the generation of the energy that is associated with the REC.

On May 5, 2021, DEC filed the supplemental testimony and revised exhibits of witnesses Jennings and Williams, updating information filed previously, correcting the number of RECs earned from net metering non-time-of-use demand (NMNTD) customers, and proposing to remove RECs that DEC recorded from time-of-use net

metered customers. The Company also updated its estimate of RECs to be acquired from Competitive Procurement of Renewable Energy projects during the prospective billing period, corrected two errors in the billing period incremental REC cost forecast, and incorporated adjustments to the allocation of certain REPS compliance costs among customer classes that are based on energy efficiency savings contributed by each customer class.

Also on May 5, 2021, DEC filed a proposed second public notice to customers which reflected a decrease in proposed monthly REPS charges for the residential customer class, and increases for the general service and industrial classes, compared to amounts requested in the Company's original application in this proceeding.

On May 7, 2021, the Commission issued an order requiring DEC to publish a second public notice prior to the hearing. The Company subsequently filed affidavits of publication on May 25, 2021, and May 27, 2021, in accordance with the Commission's March 18, 2021, and May 7, 2021 Orders.

On May 10, 2021, the Public Staff filed the affidavit of Charles A. Akpom, Staff Accountant in the Accounting Division of the Public Staff, and the testimony of Jay B. Lucas, Utilities Engineer in the Energy Division of the Public Staff.

On May 11, 2021, the Commission issued an order granting waiver of NC-RETS Operating Procedures Section 5.4 and approving the prior period adjustment requested.

On May 24, 2021, DEC and the Public Staff filed a joint motion to excuse certain witnesses from the evidentiary hearing. On May 27, 2021, the Commission granted the motion.

On May 27, 2021, DEC filed a motion to cancel the public hearing and on May 28, 2021, the Commission granted the motion.

On June 1, 2021, DEC and the Public Staff filed a motion to excuse all witnesses as the parties had agreed to waive cross-examination, and on June 1, the Commission granted the motion, cancelled the evidentiary hearing, and required the filing of proposed orders by July 1, 2021.

On July 1, 2021, DEC and the Public Staff filed a joint proposed order.

Based upon the foregoing, including the testimony, exhibits, and affidavits of the parties' witnesses, the records in NC-RETS, and the entire record in this proceeding, the Commission makes the following:

FINDINGS OF FACT

1. DEC is a duly organized limited liability company existing under the laws of the State of North Carolina, is engaged in the business of developing, generating,

transmitting, distributing, and selling electric power to the public in North Carolina and is subject to the jurisdiction of the North Carolina Utilities Commission as a public utility. DEC is lawfully before this Commission based upon its application filed pursuant to N.C.G.S. § 62-133.8 and Commission Rule R8-67.

2. For calendar year 2020, the Company must generally supply an amount of at least 10% of its previous year's North Carolina (NC) retail electric sales (Total Requirement) by a combination of renewable energy and energy reductions due to the implementation of energy efficiency measures. Also in 2020, energy in the amount of at least 0.20% of the previous year's total electric power sold by DEC to its North Carolina retail customers must be supplied by solar energy resources (referred to as the solar set-aside requirement).

3. Beginning in 2012, N.C.G.S. § 62-133.8(e) and (f) require DEC and the other electric suppliers of North Carolina, in the aggregate, to procure a certain portion of their renewable energy requirements from electricity generated from swine and poultry waste, with the poultry waste requirement being based on each electric power supplier's respective pro-rata share derived from the ratio of its North Carolina retail sales as compared to total statewide North Carolina retail sales. In its December 16, 2019 Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief, and its February 13, 2020 Errata Order, (2019 Delay Orders), issued in Docket No. E-100, Sub 113, the Commission modified the 2020 swine waste set-aside requirement for DEC, Duke Energy Progress, LLC (DEP) and Dominion Energy North Carolina to 0.07% of prior year North Carolina retail sales, and modified the 2020 statewide poultry waste set-aside requirement to 700,000 MWh. In its December 30, 2020 Order Modifying the Swine Waste Set-Aside Requirements and Providing Other Relief (2020 Delay Order) issued in Docket No. E-100, Sub 113, the Commission further modified the 2020 swine waste set-aside requirement for electric membership corporations and municipalities, including those for which DEC performs REPS compliance services, to 0.00% and delayed by one year the scheduled increases to the requirement.

4. Pursuant to N.C.G.S. § 62-133.8(c)(2)(e), DEC has agreed to provide compliance services, including the procurement of RECs, to the following electric power suppliers: Blue Ridge Electric Membership Corporation (BREMC), the Town of Dallas, the Town of Forest City, the Town of Highlands, and Rutherford EMC (collectively the Wholesale Customers).

5. DEC complied with the 2020 solar set-aside requirement, for itself and the Wholesale Customers for which DEC provided compliance services for the 2020 compliance year, by submitting for retirement 122,532 RECs procured or generated from solar electric facilities and metered solar thermal energy facilities. DEC also complied with the 2020 poultry waste set-aside requirement, for itself and the Wholesale Customers for which DEC provides compliance services, by submitting for retirement 299,536 poultry waste RECs and 6,981 Senate Bill 886 RECs (which count as 13,962 poultry waste RECs), for a total of 313,498 poultry waste RECs. The Company complied with the

2020 swine waste set-aside requirement that applied to electric public utilities only, and did not apply to the Wholesale Customers, by submitting for retirement 41,050 swine waste RECs. Finally, DEC submitted for retirement 5,649,321 general requirement RECs, representing the 2020 Total Requirement for DEC North Carolina retail (DEC retail) and the Wholesale Customers, net of the solar set-aside requirement, swine waste set-aside requirement, and poultry waste set-aside requirement detailed above.

6. DEC and the Wholesale Customers for which DEC provided compliance services met their 2020 REPS obligations, except for those from which they had been relieved under the Commission's orders in Docket No. E-100, Sub 113.

7. The Company's ability to comply with its poultry waste set-aside requirement in 2021 is dependent on the performance of current poultry waste-to-energy contracts and the ability of one new poultry waste-to-energy facility to reach its expected commercial operation date in 2021.

8. The Company's ability to comply with its swine waste set-aside requirement in 2021 is dependent on the performance of swine waste-to-energy developers on current contracts, particularly achievement of projected delivery requirements. DEC's swine waste REC suppliers continue to experience significant and diverse challenges that negatively affect production.

9. DEC's REC inventory available for future use properly includes RECs generated from NMNTD customers.

10. DEC has RECs in its inventory that were generated by its own hydroelectric (hydro) facilities that it cannot use to meet its REPS requirements because those hydro facilities are renewable energy facilities, but not new renewable energy facilities. DEC has exchanged a portion of these hydro RECs for an equal number of RECs in the inventory of the North Carolina Electric Membership Corporation (NCEMC) that are qualified to meet DEC's general compliance requirement. DEC executed contracts with NCEMC for REC exchanges pursuant to the Commission's conclusion that the exchanges are reasonable and serve the public interest in its August 17, 2018 Order Approving REPS and REPS EMF Riders and 2017 REPS Compliance Report in Docket No. E-7, Sub 1162.

11. For purposes of DEC's annual rider pursuant to N.C.G.S. § 62-133.8(h), the test period for this proceeding is the calendar year 2020 (Test Period). The billing period for this proceeding is the 12-month period beginning September 1, 2021 and ending August 31, 2022 (Billing Period).

12. DEC's other incremental REPS compliance costs and its Solar Rebate Program costs are recoverable under N.C.G.S. § 62-133.8(h)(1)(a) and N.C.G.S. § 62-133.8(h)(1)(d), respectively, and will be approved for this proceeding.

13. The research activities funded by DEC during the Test Period are recoverable under N.C.G.S. § 62-133.8(h)(1)(b), and within the statute's \$1 million annual limit.

14. Section § 62-133.8(h) authorizes an electric power supplier to recover the "incremental costs" of compliance with the REPS requirement through an annual REPS rider. The "incremental costs," as defined in N.C.G.S. § 62 133.8(h)(1), include the reasonable and prudent costs of compliance with REPS "that are in excess of the electric supplier's avoided costs other than those costs recovered pursuant to N.C.G.S. § 62-133.9." The term "avoided costs" includes both avoided energy costs and avoided capacity costs.

15. Under Commission Rule R8-67(e)(2), the total costs reasonably and prudently incurred during the Test Period to purchase unbundled RECs constitute incremental costs. The projected costs to purchase such RECs during the Billing Period constitute forecast incremental costs.

16. DEC appropriately calculated its avoided costs and incremental REPS compliance costs for the Test Period and Billing Period, including those avoided and incremental costs specifically related both to the Company's Solar Photovoltaic Distributed Generation (Solar PVDG) Program and to DEC's other owned solar facilities as required by the following Commission orders: (1) Order Granting Certificate of Public Convenience and Necessity with Conditions, issued December 31, 2008, and its Order on Reconsideration, issued May 8, 2009, in Docket No. E-7, Sub 856; (2) Order Transferring Certificate of Public Convenience and Necessity, issued May 16, 2016, in Docket No. E-7, Sub 1079; (3) Order Transferring Certificate of Public Convenience and Necessity, issued May 16, 2016, in Docket No. E-7, Sub 1098; and (4) Order Granting Certificate of Public Convenience and Necessity (Woodleaf Order) issued June 16, 2016, in Docket No. E-7, Sub 1101 (collectively DEC Solar PV Orders).

17. Total incremental REPS costs incurred during the Test Period for DEC North Carolina retail and the Wholesale Customers combined are \$41,866,557, and are reasonable and prudently incurred. Total incremental REPS costs estimated to be incurred for DEC North Carolina retail and the Wholesale Customers combined during the Billing Period are \$35,026,434, and are reasonable and appropriate. The appropriate DEC North Carolina retail portions of Test Period and Billing Period incremental REPS costs are \$39,337,049 and \$32,341,717, respectively.

18. DEC properly complied with the reporting conditions of the Woodleaf Order in this proceeding.

19. For purposes of establishing the REPS experience modification factor (EMF) rider in this proceeding, the Company's incremental costs for DEC retail during the Test Period are \$39,337,049, and these costs were reasonable and prudently incurred. The Company's projected Billing Period incremental costs for purposes of determining the REPS rider for DEC retail are \$32,341,717. DEC's Test Period REPS expense

undercollections by customer class were \$2,085,364 for residential, \$2,403,479 for general service, and \$617,440 for industrial. In addition, the Company credited to customers amounts received from REC suppliers during the Test Period related to contract amendments, penalties, and other conditions of the supply agreements. Contract-related receipts credited to each customer class are \$(31,643) for residential, \$(24,391) for general service, and \$(2,547) for industrial. Total net Test Period costs by customer class, including offsetting credit amounts for contract-related receipts, are \$2,053,721 for residential, \$2,379,088 for general service, and \$614,893 for industrial. All amounts exclude the North Carolina regulatory fee (regulatory fee).

20. DEC's North Carolina retail prospective Billing Period expenses for use in this proceeding are \$18,143,056, \$13,191,683, and \$1,006,978, for the residential, general service, and industrial classes, respectively, excluding the regulatory fee.

21. The appropriate monthly REPS EMF riders, excluding regulatory fee, to be charged to customer accounts during the upcoming Billing Period are \$0.10 for residential accounts, \$0.78 for general service accounts, and \$10.99 for industrial accounts, excluding the regulatory fee.

22. The appropriate prospective REPS riders per customer account, excluding the regulatory fee, to be collected during the Billing Period are \$0.84 for residential accounts, \$4.35 for general service accounts, and \$18.00 for industrial accounts.

23. The combined REPS and REPS EMF rider charges per customer account, excluding the regulatory fee, to be collected each month during the Billing Period are \$0.94 for residential accounts, \$5.13 for general service accounts, and \$28.99 for industrial accounts. Including the regulatory fee, the combined monthly REPS and REPS EMF rider charges per customer account to be collected during the Billing Period are \$0.94 for residential accounts, \$5.14 for general service accounts, and \$29.03 for industrial accounts.

24. DEC's REPS incremental cost rider, including the regulatory fee, to be charged to each customer account for the twelve-month Billing Period is within the annual cost cap established for each class in N.C.G.S. § 62-133.8(h)(4).

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-4

The evidence supporting these findings of fact appears in DEC's 2020 REPS Compliance Report, in the direct testimony and exhibits of DEC witnesses Jennings and Williams, in the testimony of Public Staff witness Lucas, and in the affidavit of Public Staff witness Akpom. These findings of fact are essentially informational, jurisdictional, and procedural in nature and are not contested.

Section § 62-133.8(b)(1) of the North Carolina General Statutes establishes a REPS requirement for all electric power suppliers in the State. The statute requires each electric public utility to provide a certain percentage of its North Carolina retail sales from

various renewable energy or energy efficiency resources, including the following: (a) generating electric power at a new renewable energy facility; (b) using a renewable energy resource to generate electric power at a generating facility other than the generation of electric power from waste heat derived from the combustion of fossil fuel; (c) reducing energy consumption through the implementation of energy efficiency measures; (d) purchasing electric power from a new renewable energy facility; (e) purchasing RECs from a new renewable energy facility; (f) using electric power that is supplied by a new renewable energy facility or saved due to the implementation of an energy efficiency measure that exceeds the requirements of the REPS in any calendar year as a credit toward the requirements of the REPS in the following calendar year; or (g) electricity demand reduction. Each of these measures is subject to additional limitations and conditions. For 2020, DEC was required to meet a total REPS requirement of 10% of its previous year's North Carolina retail electric sales by a combination of these measures.

Section § 62-133.8(d) requires a certain percentage of the total electric power sold to retail electric customers in the State, or an equivalent amount of energy, to be supplied by a combination of new solar electric facilities and new metered solar thermal energy facilities. The percentage requirement for solar resources in 2020 is 0.20%.

Section § 62-133.8(e) and (f) require DEC and the other North Carolina electric suppliers, in the aggregate, to procure a certain portion of their renewable energy requirements from electricity generated from swine and poultry waste. The swine waste energy requirement is based on a percentage of retail sales, similar to the solar energy requirement. The poultry waste energy requirement is based on each electric power supplier's respective pro-rata share derived from the ratio of its North Carolina retail sales as compared to the total North Carolina retail sales by all electric power suppliers. Pursuant to the Commission's Order on Pro-Rata Allocation of Aggregate Swine and Poultry Waste Set-Aside Requirements and Motion for Clarification, issued on March 31, 2010, in Docket No. E-100, Sub 113, DEC's share of the aggregate statewide set-aside requirements for energy from swine and poultry waste is based on the ratio of its North Carolina retail kilowatt-hour sales for the previous year divided by the previous year's total North Carolina retail kilowatt-hour sales. In its 2019 Delay Orders, the Commission established a modified 2020 swine waste set-aside requirement of 0.07% of North Carolina retail sales and changed the statewide poultry waste set aside requirement to 700,000 MWh. In its 2020 Delay Order, the Commission modified the 2020 swine waste set-aside requirement specifically for electric membership corporations and municipalities, including those for which DEC performs REPS compliance services, to 0.00% and delayed by one year the scheduled increases to the requirement. (Jennings Direct at 6-7)

In its 2020 REPS Compliance Report, DEC stated that it provided energy resources and compliance reporting services for Blue Ridge EMC, the Town of Dallas, the Town of Forest City, the Town of Highlands, and Rutherford EMC, as allowed by N.C.G.S. § 62-133.8(c)(2)(e). (Jennings Exhibit No. 1 at 3)

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 5-8

The evidence supporting these findings of fact appears in DEC's 2020 REPS Compliance Report, which was admitted into evidence as Jennings Exhibit No. 1, in the direct testimony and exhibits of DEC witness Jennings, and in the testimony of Public Staff witness Lucas. In addition, the Commission takes judicial notice of the information contained in NC-RETS. DEC's 2020 REPS Compliance Report provided the information required by Commission Rule R8-67(c) in the aggregate for DEC and the Wholesale Customers for which DEC has agreed to provide REPS compliance services.

Witness Jennings testified that, on behalf of DEC and its Wholesale Customers, the Company submitted for retirement 6,112,439 RECs, which includes 6,981 Senate Bill 886 (SB 886) RECs, each of which counts for two poultry waste and one general REC, to meet its 2020 Total Requirement of 6,126,401 RECs. Within this total, the Company submitted for retirement: 122,532 RECs to meet the solar set-aside requirement; 299,536 RECs, along with 6,981 SB 886 RECs (which count as 13,962 poultry waste set-aside RECs), to meet the poultry waste set-aside requirement of 313,498 RECs; and 41,050 RECs to meet the swine waste set-aside requirement. (Jennings Direct at 8)

Witness Jennings' testimony states that the Billing Period for this Application covers two separate compliance reporting periods with different requirements for each period. In 2021, the Company estimates that it will be required to submit for retirement 7,191,323 RECs to meet its Total Requirement. Within this total, the Company expects to be required to retire the following: 116,073 solar RECs, 40,628 swine waste RECs, and 403,068 poultry waste RECs, to meet the requirements set out in N.C.G.S. § 62-133.8(d), (e), and (f), respectively. In 2022, the Company estimates that it will be required to submit for retirement 7,460,763 RECs to meet its Total Requirement. Within this total, the Company expects to be required to retire the following: 120,381 solar RECs, 84,267 swine waste RECs, and 403,068 poultry waste RECs, to meet the requirements set out in N.C.G.S. § 62-133.8(d), (e), and (f), respectively. (Jennings Direct at 8)

Witness Jennings testified that DEC met its 2020 solar set-aside requirement by procuring and producing 122,532 solar RECs and that, pursuant to NC-RETS Operating Procedures, the Company submitted these RECs for retirement by transferring these RECs from the Duke Energy Electric Power Supplier Account to the Duke Energy Compliance Sub-Account and the Sub-Accounts of its Wholesale Customers. (Jennings Direct at 14-15)

Witness Jennings testified that DEC met the modified 2020 poultry waste set-aside requirement of 313,498 RECs. Pursuant to NC-RETS Operating Procedures, the Company submitted for retirement 299,536 poultry RECs and 6,981 SB 886 RECs (which count as 13,962 poultry waste RECs). Accordingly, the equivalent of 313,498 RECs were submitted for retirement by transferring them from the Duke Energy Electric Power Supplier Account to the Duke Energy Compliance Sub-Account and the Sub-Accounts of its Wholesale Customers. (Jennings Direct at 16-17)

Witness Jennings testified that DEC met the modified 2020 swine waste set-aside requirement of 41,050 swine waste RECs. The modified 2020 requirement was applicable to DEC only, not the Wholesale Customers. Pursuant to NC-RETS Operating Procedures, the Company submitted these RECs for retirement by transferring these RECs from the Duke Energy Electric Power Supplier Account to the Duke Energy Compliance Sub-Account. (Jennings Direct at 19)

Witness Jennings further testified that the Company complied with its general requirement for 2020 by submitting 5,649,321 RECs, pursuant to NC-RETS Operating Procedures. The RECs were transferred from the NC-RETS Duke Energy Electric Power Supplier Account to the Duke Energy Compliance Sub-Account and the Sub-Accounts of the Wholesale Customers. (Jennings Direct at 9)

Witness Jennings testified that future compliance with the poultry waste set-aside requirement is dependent on the performance of energy developers on current contracts, and the production status of a new poultry waste-to-energy project scheduled to achieve commercial operation in 2021. She further testified that production associated with several poultry waste contracts is anticipated to ramp up throughout 2021-2022 and two new poultry waste-to-energy facilities are expected to come online in 2022. This increase to expected poultry waste REC generation is somewhat offset by interruption in service until 2023 for repairs at one poultry waste facility that previously provided RECs. (Jennings Direct at 17) Witness Jennings testified the Company is taking various steps to secure poultry waste-to-energy resources to meet its future requirements, including: continuing direct negotiations for additional supplies and executing contracts; working with developers to overcome technological, permitting, and operating risks, and amending existing contracts to reflect more realistic outcomes; exploring the addition of poultry waste to the fuel mix of current bioenergy contracts, and expansion of the use of poultry waste resources to produce thermal, multi-fuel, or directed biogas RECs; searching the broker market for out-of-state RECs; and funding a North Carolina biogas utilization study aimed at growth in poultry waste project development. (Jennings Direct at 18)

Witness Jennings testified that future compliance with the swine waste set-aside requirement is dependent on the performance of energy developers on current contracts, particularly achievement of projected delivery requirements. Regarding expected compliance with future swine waste set-aside requirements, witness Jennings reported that current swine waste-to-energy facilities are encountering numerous persistent difficulties in achieving full contractual REC output, but the Company has continued to engage in a variety of actions to procure or develop swine waste-to-energy resources to meet its future requirements, including: negotiations for in-state and out-of-state supplies; working extensively with potential suppliers to overcome production risks and amend contracts to accommodate changing circumstances; searching the broker market for out-of-state RECs; and pursuing new biomass and biogas swine resource options; among other efforts. (Jennings Direct at 19-22)

Public Staff witness Lucas recommended that the Commission approve DEC's 2020 REPS Compliance Report. (Lucas Testimony at 5) Specifically, he testified that for

2020 compliance, DEC needed to obtain a sufficient number of RECs and energy efficiency certificates (EECs) derived from any eligible sources so that the total equaled 10% of the 2019 North Carolina retail electricity sales of DEC and the Wholesale Customers. Witness Lucas also stated that DEC needed to pursue retirement of sufficient solar RECs to match 0.20% of retail sales in 2019 for itself and the Wholesale Customers. Additionally, the 2019 Delay Orders modified the requirements for swine and poultry energy established in N.C.G.S. § 62-133.8(e) and (f), requiring retirement of a quantity of swine waste-derived RECs equal to 0.07% of 2019 DEC retail sales, and retirement of an amount of poultry waste-derived RECs matching the pro-rata share of the 700,000 MWh (or the thermal equivalent) statewide requirement allocated to DEC and the Wholesale Customers. Further, the Commission's 2020 Delay Order eliminated the Wholesale Customers' swine waste energy requirement, but retained the requirement for DEC retail. (Lucas Testimony at 3-4)

No party disputed that DEC had fully complied with the applicable REPS requirements, or argued that DEC's 2020 REPS Compliance Report should not be approved.

Based on the evidence presented and the entire record herein, the Commission finds and concludes that DEC and the five Wholesale Customers for which it is providing REPS compliance services have fully complied with the REPS requirements for 2020, as modified by the Commission's 2019 Delay Orders and 2020 Delay Order and that DEC's 2020 REPS Compliance Report should be approved. The Commission further concludes that the RECs and EECs in the related NC-RETS compliance sub-accounts should be permanently retired.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 9-10

The evidence supporting these findings of fact is found in the direct and supplemental testimony of DEC witness Jennings, and in the testimony of Public Staff witness Lucas.

Witness Jennings explained that under the current Net Metering for Renewable Energy Facilities Rider offered by DEC (Rider NM), a customer receiving electric service under a schedule other than a time-of-use schedule with demand rates shall provide any RECs to DEC at no cost. (Jennings Direct at 10) She further stated that the Company performed site visits and complied with the other measurement, verification, and reporting requirements set out by the Commission in its June 5, 2018 Order Approving Rider and Granting Waiver Request in Docket Nos. E-2, Sub 1106 and E-7, Sub 1113, and the RECs associated with these net metering facilities are currently in DEC's REC inventory and available for use in meeting future compliance requirements. Witness Jennings described the site visit and verification process performed by the third-party contractor, and the determination that actual production from installed systems in the test sample met expectations and that the PVWatts™ production estimate methodology remains accurate for predicting future megawatt hours per year (MWh/yr.). She recommended no changes to the production estimates as well as the elimination of the site visits

requirement. (Jennings Direct at 10-13) In supplemental testimony filed in this docket, witness Jennings testified that the realization rate calculated for the sample of customers verified in the site visits process was calculated by dividing the verified annual production by the expected annual production for each customer, then taking the average of the individual sample percentages. She stated that the realization rate should instead be calculated by dividing the average verified production for the sample group as a whole by the average generation estimate produced by PVWatts™, and she testified that the updated realization rate calculation produced results confirming the accuracy of the PVWatts™ production estimate methodology in predicting future production. (Jennings Supplemental at 2-3)

Witness Lucas recommended that the Commission accept the changes in calculating the number of NMNTD RECs as shown in the supplemental testimony of witness Jennings and that these systems produce 1.2 MWh/yr. on average for every kilowatt of installed direct current capacity. He also recommended that the Commission not require DEC to complete further site visits to verify the accuracy of the number of RECs determined by PVWatts™, but that DEC may need to recheck the accuracy of PVWatts™ at some time in the future. (Lucas Testimony at 10-11)

Witness Jennings testified that, after the filing of her direct testimony, the Company determined there was an error in the calculation of the number of net metering RECs reported in her exhibits for both the EMF and Billing Periods, and corrections were reflected in revised exhibits filed with her supplemental testimony. (Jennings Supplemental at 3-4) The error in calculating these NMNTD RECs also affected RECs claimed and reported in NC-RETS for vintages from June 2016 forward, and a certain number of the ineligible RECs were previously retired for compliance. In order to remove any ineligible NMNTD RECs from its active NC-RETS sub-account as well as retire additional RECs for prior period compliance to replace any ineligible NMNTD RECs used, the Company filed a letter, along with supporting documentation, in this docket requesting a waiver of Section 5.4 of the NC-RETS Operating Procedures. The section cited requires an account holder to apply for a prior period adjustment to adjust the meter data submitted to create RECs within a year of the generation of the energy that is associated with the RECs, and the corrections required by DEC were outside of this time limit. (Jennings Supplemental at 3-5) Witness Lucas testified that the Public Staff presented a proposed order to the Commission regarding these RECs at the May 10, 2021 Regular Staff Conference. The Public Staff recommended, and the Commission approved that DEC work with the NC-RETS administrator to remove any improperly claimed NMNTD RECs as well as select for retirement additional RECs to replace any prior improperly claimed NMNTD RECs. (Lucas Testimony at 11-12)

Witness Jennings testified that DEC has hydro RECs in its inventory that it cannot use for its own REPS compliance efforts because they were generated by specific hydro facilities owned by the Company. In its Order Accepting Registration of Renewable Energy Facilities, Docket No. E-7, Subs 886, 887, 888, 900, 903, and 904, issued July 31, 2009 (July 31, 2009 Order), and its Order Accepting Registration of Renewable Energy Facilities, Docket No. E-7, Subs 942, 943, 945 and 946, issued

December 9, 2010, the Commission accepted the registration of these specific hydro facilities as renewable energy facilities, but not as new renewable energy facilities. The Commission so concluded because these utility-owned facilities did not meet the delivery requirement of N.C.G.S. § 62-133.8(a)(5)(c), which requires the delivery of electric power to an electric power supplier, such as DEC, by an entity other than the electric power supplier itself to qualify as a new renewable energy facility. (Jennings Direct at 23-24) Witness Jennings further testified that in DEC's REPS cost recovery proceeding in Docket No. E-7, Sub 1162, the Company proposed exchanging a portion of these hydro RECs for RECs within the inventory of NCEMC. The exchanges were at no cost to either party, and resulted in DEC acquiring RECs it could use to help meet its general requirement, and in NCEMC obtaining an equal number of RECs it could use to meet its REPS compliance requirements. In its August 17, 2018 Order Approving REPS and REPS EMF Riders and 2017 REPS Compliance Report, the Commission concluded that a proposed transfer like this was reasonable and served the public interest. Witness Jennings stated the Company executed contracts with NCEMC exchanging a portion of these hydro RECs for an equal number of general requirement RECs in NCEMC's inventory that DEC can use for REPS compliance. (Jennings Direct at 24-25)

Based on the foregoing, the Commission finds and concludes that the RECs generated by the net metering facilities as described above and the RECs acquired in exchange for its own hydro RECs are properly included in DEC's inventory of RECs available for future REPS compliance use.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 11

The evidence supporting this finding is procedural in nature, found in the testimony and exhibits of DEC witness Williams, testimony of Public Staff witness Lucas, and affidavit of Public Staff witness Akpom and is not contested.

Commission Rule R8-67(e)(3) provides that the test period for REPS rider proceedings shall be the same as that used by the utility in its fuel charge adjustment proceedings, which is specified in Commission Rule R8-55(c) for DEC to be the 12-month period ending December 31 of each year. Company witness Williams testified that the Test Period or EMF period used for this proceeding was the twelve months beginning on January 1, 2020 and ending December 31, 2020. (Williams Direct at 3) Commission Rule R8-67(e)(5) provides that "the REPS EMF rider will reflect the difference between reasonable and prudently incurred incremental costs and the revenues that were actually realized during the test period under the REPS rider then in effect." Witness Williams further stated that the rider includes the REPS EMF component to recover the difference between the compliance costs incurred and revenues realized during the Test Period. (Williams Direct at 5) Witness Williams also testified that the Billing Period for the REPS rider requested in the Company's application is the twelve months beginning on September 1, 2021 and ending on August 31, 2022. (Williams Direct at 3) Witness Williams stated that, in addition to an EMF component, the current proposed rider includes a component to recover the costs expected to be incurred for the Billing Period.

(Williams Direct at 5) The Test Period and the Billing Period proposed by DEC were not challenged by any party.

Based on the foregoing, the Commission concludes that, consistent with Commission Rule R8-67(e)(3), the Test Period for this proceeding is the twelve months from January 1, 2020 through December 31, 2020.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 12-13

The evidence for these findings of fact can be found in the direct and supplemental testimonies and exhibits of DEC witnesses Jennings and Williams, the testimony of Public Staff witness Lucas, and the affidavit of Public Staff witness Akpom.

Witness Jennings Revised Exhibit Nos. 2 and 3 identified the renewable energy and REC, Other Incremental, Solar Rebate Program, and Research costs that the Company has incurred or projects to incur in association with REPS compliance. With respect to research costs, Revised Williams Exhibit No. 1 shows the total incremental REPS compliance costs and that the research costs are under the \$1 million per year cap established in N.C.G.S. § 62-133.8(h)(1)(b).

Consistent with the Commission's orders in prior REPS proceedings, witness Jennings provided testimony and exhibits on the results and status of various studies, the costs of which DEC is including for recovery as research in its incremental REPS cost for the 2020 Test Period. (Jennings Direct at 32-41) In his testimony, witness Lucas discussed the research costs submitted by the Company and stated the costs were within the \$1,000,000 maximum annual limit allowed and met the definition of costs qualified to be incurred for research as defined by N.C.G.S. § 62-133.8(h)(1)(b). (Lucas Testimony at 5-6)

Witness Jennings describes in her testimony Other Incremental costs of REPS compliance as including labor costs associated with REPS compliance activities and non-labor costs associated with administration of REPS compliance. Among the non-labor costs associated with REPS compliance are the Company's subscription to NC-RETS, accounting and tracking tools related to RECs reduced by agreed-upon liquidated damages paid by sellers for failure to meet contractual milestones, and amounts paid for administrative contractual amendments requested by sellers. (Jennings Direct at 26)

Witness Jennings also testified that, pursuant to N.C.G.S. § 62-155(f), DEC developed a Solar Rebate Program, and she discussed the processes in place to pay rebates and the resulting effect on the payments made each year. (Jennings Direct at 26-29) She further testified that the incremental costs incurred to "provide incentives to customers, including program costs, incurred pursuant to N.C.G.S. § 62-155(f)" are allowed to be recovered under N.C.G.S. § 62-133.8(h). Therefore, DEC has included for recovery in this filing costs incurred during the EMF period, and projected to be incurred in the Billing Period, related to the implementation of the Solar Rebate Program. These

costs include the annual amortization of incentives paid to customers and program administration costs, which include labor, information technology, and marketing costs. (Jennings Direct at 29-30) Other Incremental and Solar Rebate Program costs included for recovery in the REPS EMF and REPS riders in this proceeding were not contested by any party.

The Commission concludes based on the foregoing and the entire record herein that the research activities funded by DEC during the Test Period are renewable research costs recoverable under N.C.G.S. § 62-133.8(h)(1)(b) and that such research costs included in the Test Period are within the \$1 million annual limit provided in that statute. The Commission further concludes that the Company has complied with the prior Commission orders requiring filing results of such research studies. In addition, the Commission finds that the research information DEC provided is helpful. Therefore, the Commission finds that DEC should continue to file this information with future REPS compliance reports and to provide procedures for third parties to access the results of studies that are subject to confidentiality agreements. For research projects sponsored by Electric Power Research Institute, DEC should provide the overall program number and specific project number for each project, as well as an internet address or mailing address that will enable third parties to inquire about the terms and conditions for access to any portions of the study results that are proprietary. Finally, the Commission also concludes the costs identified as Other Incremental and Solar Rebate Program are properly recoverable in the REPS EMF and REPS riders calculated in this proceeding.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 14-17

The evidence for these findings of fact is found in DEC's Application and in the direct and supplemental testimonies and exhibits of DEC witnesses Jennings and Williams, the testimony of Public Staff witness Lucas, and the affidavit of Public Staff witness Akpom.

Section 62-133.8(h)(4) requires the Commission to allow an electric power supplier to recover all of its incremental costs incurred to comply with N.C.G.S. § 62-133.8 through an annual rider. Section § 62-133.8(h)(1) provides that "incremental costs" means all reasonable and prudent costs incurred by an electric power supplier to comply with the REPS requirements that are in excess of the electric power supplier's avoided costs other than those costs recovered pursuant to N.C.G.S. § 62-133.9. The term "avoided costs" includes both avoided energy and avoided capacity costs. Commission Rule R8-67(e)(2) provides that the "cost of an unbundled renewable energy certificate to the extent that it is reasonable and prudently incurred is an incremental cost and has no avoided cost component."

DEC witness Williams testified regarding the calculation of DEC's various incremental costs of compliance with REPS requirements based on detailed incurred and projected costs provided by witness Jennings. (Williams Direct at 6-7) Witness Williams also described in detail the methods used by the Company to determine the appropriate avoided costs to apply to REPS compliance purchased power agreements and biogas

costs, the Company's Solar PVDG Program, and its newer utility-owned solar facilities, in order to calculate the incremental costs for recovery through the REPS rider. (Williams Direct at 5-6) She testified that the Company limited cost recovery in this proceeding for its four newer solar facilities as required by the Commission in its DEC Solar PV Orders. (Williams Direct at 8-9)

Revised Williams Exhibit No. 1, page 1, identified total Test Period incremental costs incurred for DEC North Carolina retail and the Wholesale Customers combined as \$41,866,557, and Revised Williams Exhibit No. 1, page 2, showed estimated Billing Period incremental costs for DEC North Carolina retail and the Wholesale Customers combined as \$35,026,434. Williams Exhibit No. 2, page 1, showed the DEC retail portion of Test Period incremental costs as \$39,337,049, and Revised Williams Exhibit No. 3, page 1, showed the DEC retail portion of Billing Period incremental costs as \$32,341,717.

In his affidavit, witness Akpom described the Public Staff's investigation and review of the Company's filing, including its evaluation of DEC's per books incremental costs and revenues, as well as the annual revenue cap for REPS requirements, for the Test Period. (Akpom Affidavit at 2-3) Based on his review of costs submitted for recovery, witness Akpom recommended approval of DEC's proposed monthly and annual REPS EMF decrement riders for the residential, general service, and industrial customer classes. (Akpom Affidavit at 3) As described by witness Akpom, the items included in the Company's supplemental testimony and exhibits that affected the EMF riders proposed were: (1) correction of a cost overstatement in the billing period; and (2) modification of the calculations allocating general requirement compliance costs, taking into account energy efficiency savings contributed by each customer class. (Akpom Affidavit at 2)

In her supplemental testimony filed on May 5, 2021, witness Williams described DEC's established method of allocating costs associated with its general compliance requirement in a manner that gives credit for Energy Efficiency (EE) RECs according to the relative energy reduction contributed by each class, as recommended by the Public Staff and accepted by the Commission in its November 17, 2017 Order Approving REPS and REPS EMF Rider and Approving REPS Compliance Report in Duke Energy Progress, LLC's 2017 REPS rider proceeding in Docket No. E-2, Sub 1144. She further testified that the Company made an adjustment to this allocation calculation after the Company's initial filing of direct testimony and original exhibits in this DEC REPS docket. The calculation modifications requested by the Public Staff were incorporated in the general requirement cost allocation, and the results reflected in the revised exhibits filed with her supplemental testimony. She stated that if the modification causes one or more customer classes to exceed the statutory per-account cost cap, the Company would reallocate costs among classes to the extent necessary to compute per-account charges that do not exceed the caps. (Williams Supplemental at 4-6)

In his testimony, witness Lucas elaborated on the method and justification for allocating costs associated with the Company's general REPS compliance requirement in a manner that recognizes that customer classes participate in EE-DSM programs to different degrees, and pay DSM-EE rider rates that vary by class. He noted the

calculations resulted in a large negative billing period REPS charge for industrial customers in this year's original proposed billing period REPS charges. He stated the Public Staff believes industrial customers should not be subsidized by residential and general service customers simply because a REPS program exists, regardless of how many EECs industrial customers create. (Lucas Testimony at 6-7) Witness Lucas testified that the Public Staff and DEC informally discussed the issue of the negative industrial billing period REPS rider charge and agreed upon a solution to adjust the general requirement cost allocation to incorporate general RECs and EECs needed for annual compliance to calculate a credit to each customer class for its contribution of EECs, rather than using the total of all general RECs and EECs accumulated for the annual period, whether or not they were all needed for current near-term compliance. Witness Lucas noted that the supplemental testimony and revised exhibits filed by witness Williams incorporated the modifications to the calculations as described above, reducing the effect of the number of RECs and EECs accumulated but not needed until well after the upcoming billing period, and he recommended that the Commission accept the rate calculations filed with the supplemental testimony. (Lucas Testimony at 8-9) Witness Lucas further testified that the Public Staff agreed with the rates in the supplemental testimony filed by DEC witness Williams on May 5, 2021, and recommended approval of the Billing and EMF components of the total REPS rate as filed therein. (Lucas Testimony at 12-13)

Based on the foregoing, the Commission concludes that the correct DEC retail and Wholesale Customer combined incremental costs for the January 1, 2020 through December 31, 2020 Test Period are \$41,866,557, and are reasonable and prudently incurred. The Commission further concludes the appropriate DEC retail and Wholesale Customer combined estimated incremental costs for the Billing Period are \$35,026,434. The appropriate DEC North Carolina retail portions of Test Period and Billing Period incremental REPS costs are \$39,337,049 and \$32,341,717, respectively. In addition, the Commission accepts the modification to the calculation that allocates DEC's general requirement REPS compliance cost among customer classes as described above.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 18

The evidence supporting this finding of fact is found in the testimony of DEC witness Williams.

Witness Williams testified that in the Woodleaf Order, the Commission included two conditions related to cost recovery that are relevant to this proceeding: (1) limiting the cost recovery amount in its annual REPS rider filing to the standard offer REC price that DEC was offering to new renewable energy facilities at the time of execution of the Woodleaf construction contract; and (2) separately itemizing the actual monetization of the tax benefits listed in the Woodleaf Order within its calculation of the levelized revenue requirement per MWh for each facility, so that it may be compared with the monetization of such tax benefits included in the Company's revenue requirement analysis of each facility presented during the Woodleaf CPCN proceedings. To the extent the Company fails to fully realize the tax benefits it originally assumed in its estimated revenue

requirements, costs associated with the increased revenue requirements (with a limited exception) will be presumed to be imprudent and unreasonably incurred. The condition further provides that DEC may rebut this presumption with evidence supporting the reasonableness and prudence of its actual monetization of the tax credits. (Williams Direct at 9-10)

Witness Williams testified that DEC had updated its revenue requirement calculation in this current REPS rider proceeding, including its current estimates regarding the realization of the tax benefits enumerated in the Woodleaf Order. She described the results of the Company's analysis of the updated tax monetization estimates and other relevant inputs and indicated the resulting calculated annual revenue requirement was slightly above the original Woodleaf CPCN estimate. Witness Williams testified that, although DEC expects to experience some delay in realizing the Income Tax Credit (ITC) benefit, the accelerated benefits of bonus depreciation to Duke Energy Corporation, and the overall benefit of a lower federal tax rate mitigate the effect of the delay. With respect to the condition restricting Woodleaf cost recovery in the annual REPS rider, witness Williams testified that the Company limited the amount included for recovery in the rider proposed in this REPS proceeding to the percentage of annual levelized cost equivalent to the standard offer REC price established in the Woodleaf CPCN proceeding. (Williams Direct at 10-13)

Based on the foregoing, the Commission concludes DEC properly complied in this proceeding with the reporting and cost recovery conditions of the Woodleaf Order.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 19-24

The evidence supporting these findings of fact appears in DEC's Application, in the direct and supplemental testimonies and exhibits of DEC witness Williams, the testimony of Public Staff witness Lucas, and the affidavit of Public Staff witness Akpom.

Revised Williams Exhibit No. 2, Page 3 shows EMF Period undercollections by customer class of \$2,085,364 for residential, \$2,403,479 for general service, and \$617,440 for industrial. Revised Williams Exhibit No. 4 shows additional credits for contract receipts by customer class of \$(31,643) for residential, \$(24,391) for general service, and \$(2,547) for industrial. The total EMF period net undercollections by customer class are \$2,053,721 for residential, \$2,379,088 for general service, and \$614,893 for industrial. As reflected on Revised Williams Exhibit No. 4, witness Williams calculated monthly per-account REPS EMF charges (excluding regulatory fee) by customer class of \$0.10 for residential, \$0.78 for general service, and \$10.99 for industrial. Also on Revised Williams Exhibit No. 4, she calculated projected Billing Period REPS costs by customer class of \$18,143,056 for residential, \$13,191,683 for general service, and \$1,006,978 for industrial. Revised Williams Exhibit No. 4 shows that the proposed monthly prospective REPS riders per customer account, excluding the regulatory fee, to be collected during the Billing Period are \$0.84 for residential accounts, \$4.35 for general service accounts, and \$18.00 for industrial accounts. The combined monthly REPS and REPS EMF rider charges per customer account, excluding regulatory

fee, to be collected during the Billing Period are \$0.94 for residential accounts, \$5.13 for general service accounts, and \$28.99 for industrial accounts. Including the regulatory fee, the combined monthly REPS and REPS EMF rider charges per customer account to be collected during the Billing Period are \$0.94 for residential accounts, \$5.14 for general service accounts, and \$29.03 for industrial accounts. Revised Williams Exhibit No. 4 shows that the Company's REPS incremental cost rider to be charged to each customer account for the twelve-month Billing Period is within the annual cost cap established for each customer class in N.C.G.S. § 62-133.8(h)(4).

Public Staff witness Akpom stated in his affidavit that as a result of its investigation, the Public Staff is recommending annual REPS EMF increment riders of \$1.15, \$9.41, and \$131.87 per customer account, respectively, for DEC's residential, general service, and industrial customers, excluding the regulatory fee. Excluding regulatory fee, the corresponding monthly REPS EMF increment rider amounts are \$0.10, \$0.78, and \$10.99 for residential, general service, and industrial customers, respectively. (Akpom Affidavit at 3)

Public Staff witness Lucas recommended the Company's proposed prospective monthly REPS rider amounts per customer account, excluding regulatory fee, of \$0.84 for residential accounts, \$4.35 for general service accounts, and \$18.00 for industrial accounts be approved. Combined with the monthly EMF rider amounts recommended by witness Akpom, witness Lucas recommended approval of the following total monthly REPS charge per customer account, excluding regulatory fee: \$0.94 for residential accounts, \$5.13 for general service accounts, and \$28.99 for industrial accounts. (Lucas Testimony at 12-13)

The Commission concludes that DEC's calculations of its REPS and REPS EMF riders are reasonable and appropriate. Accordingly, the Commission finds that the Company's test period REPS costs and associated monthly REPS EMF riders, as well as the projected Billing Period REPS costs and the corresponding monthly REPS riders, as set out on Revised Williams Exhibit No. 4, are appropriate. Finally, the Commission finds that these amounts are below the respective annual per-account cost caps as established in N.C.G.S. § 62-133.8(h)(4).

IT IS, THEREFORE, ORDERED as follows:

1. That DEC shall establish a REPS rider as described herein, in the amounts approved herein, and that this rider shall remain in effect for a 12-month period beginning on September 1, 2021 and expiring on August 31, 2022;
2. That DEC shall establish an EMF rider as described herein, in the amounts approved herein, and that this rider shall remain in effect for a 12-month period beginning on September 1, 2021 and expiring on August 31, 2022;
3. That DEC shall file the appropriate rate schedules and riders with the Commission in order to implement the provisions of this Order as soon as practicable, but

not later than ten (10) days after the date that the Commission issues orders in this docket as well as in Docket Nos. E-7, Sub 1247 and E-7, Sub 1250;

4. That DEC shall work with the Public Staff to prepare a joint notice to customers of the rate changes ordered by the Commission in this docket, as well as in Docket Nos. E-7, Sub 1247 and E-7, Sub 1250, and the Company shall file such notice for Commission approval as soon as practicable, but not later than ten (10) days after the Commission issues orders in all three dockets;

5. That DEC's 2020 REPS Compliance Report is hereby approved, and the RECs in DEC's 2020 compliance sub-accounts in NC-RETS shall be retired;

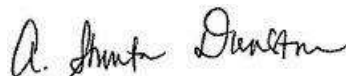
6. That DEC shall file in all future REPS rider applications the results of studies the costs of which were or are proposed to be recovered via its REPS EMF rider and, for those studies that are subject to confidentiality agreements, information regarding whether and how parties can access the results of those studies; and

7. That DEC shall continue to file a worksheet explaining the discrete costs that DEC includes as Other Incremental costs in all future REPS rider proceedings.

ISSUED BY ORDER OF THE COMMISSION.

This the 17th day of August, 2021.

NORTH CAROLINA UTILITIES COMMISSION



A. Shonta Dunston, Chief Clerk