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August 5, 2019

VIA ELECTRONIC FILING

Ms. M. Lynn Jarvis Chief Clerk North Carolina Utilities Commission 4325 Mail Service Center Raleigh, NC 27699-4300

RE: Duke Energy Carolinas, LLC and Public Staff's Joint Proposed Order

Docket No. E-7, Sub 1191

Dear Ms. Jarvis:

Enclosed for filing with the Commission is Duke Energy Carolinas, LLC's and the Public Staff's Joint Proposed Order in the referenced matter. An electronic copy is being emailed to briefs@ncuc.net.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Robert W. Kaylor, P.A.

Robert W. Koyla

Enclosure

cc: Parties of Record

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-7, SUB 1191

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of:

Application of Duke Energy Carolinas,)	
LLC for Approval of Renewable Energy)	JOINT PROPOSED ORDER OF
and Energy Efficiency Portfolio)	DUKE ENERGY CAROLINAS, LLC
Standard (REPS) Compliance Report)	AND THE PUBLIC STAFF
and Cost Recovery Rider Pursuant to)	
North Carolina General Statute § 62-)	
133.8 and Commission Rule R8-67)	

HEARD: Tuesday, June 11, 2019 at 10:00 a.m. in the Commission Hearing Room

2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

BEFORE: Commissioner Daniel G. Clodfelter, Presiding

Chair Charlotte A. Mitchell

Commissioner ToNola D. Brown-Bland

Commissioner Jerry C. Dockham Commissioner James G. Patterson

Commissioner Lyons Gray

APPEARANCES:

For Duke Energy Carolinas, LLC:

Kendrick C. Fentress Associate General Counsel Duke Energy Corporation 410 South Wilmington Street NCRH 20/P.O. Box 1551 Raleigh, North Carolina 27602

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For Carolina Utility Customers Association, Inc.:

Robert F. Page Crisp & Page, PLLC 4010 Barrett Drive, Suite 205 Raleigh, North Carolina 27609

For North Carolina Sustainable Energy Association:

Benjamin Smith, Regulatory Counsel North Carolina Sustainable Energy Association 4600 Six Forks Road, Suite 300 Raleigh, North Carolina 27609

For the Using and Consuming Public:

Heather Fennell, Staff Attorney Public Staff, North Carolina Utilities Commission 4326 Mail Service Center Raleigh, North Carolina 27699-4300

BY THE COMMISSION: On February 26, 2019, Duke Energy Carolinas, LLC ("DEC" or "the Company") filed its 2018 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. Gen. Stat. § 62-133.8(b), (d), (e) and (f), and to true up any under-recovery or over-recovery 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 pre-filed testimony, DEC sought

approval of its proposed REPS Rider, which incorporated the Company's proposed adjustments to its North Carolina retail rates.

On March 8, 2019, 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. On March 19, 2019, the Commission issued an *Order Rescheduling Hearing, Intervention and Filing Testimony Dates, and Revising Public Notice*, in which the Commission rescheduled the hearing for June 11, 2019, in addition to resetting dates for intervention and filing of testimony, and revising the public notice to be published by DEC.

The North Carolina Sustainable Energy Association ("NCSEA") and the Carolina Utility Customers Association, Inc., filed separate petitions to intervene in this docket, and the interventions were allowed by the Commission. The intervention and participation by the Public Staff are recognized pursuant to N.C. Gen. Stat. § 62-15(d) and Commission Rule R1-19(e).

On May 14, 2019, DEC filed the required affidavits of publication for the public notice in accordance with the Commission's March 19, 2019 Order.

On May 20, 2019, the Public Staff filed the testimony of Michelle M. Boswell, Staff Accountant in the Accounting Division of the Public Staff, and the testimony of Evan D. Lawrence, Staff Engineer in the Electric Division of the Public Staff.

On May 30, 2019, DEC filed the rebuttal testimony of Travis E. Payne.

On June 3, 2019, DEC and the Public Staff filed a joint motion to excuse all witnesses from the evidentiary hearing, and included a request that the testimony of Company witness Jennings be adopted by Company witness Payne. On June 6, 2019, the Commission granted the motion.

The matter came on for hearing on June 11, 2019. DEC presented the testimony and exhibits of Mr. Payne and Ms. Williams, and the Public Staff presented the testimony and exhibits of Ms. Boswell and Mr. Lawrence. All pre-filed testimony and exhibits from the DEC and Public Staff witnesses were received into evidence.

On August 5, 2019, DEC and the Public Staff filed a joint proposed order.

Based upon the foregoing, the testimony and exhibits introduced at the hearing, and the entire record in this proceeding, the Commission now 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. Gen. Stat. § 62-133.8 and Commission Rule R8-67.
- 2. For calendar year 2018, the Company must generally supply an amount of at least 10% of its previous year's North Carolina ("NC") retail electric sales by a combination of renewable energy and energy reductions due to the implementation of energy efficiency measures. Also in 2018, 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.

- 3. Beginning in 2012, N.C. Gen. Stat. § 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 state-wide North Carolina retail sales. In its October 8, 2018, *Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief* ("2018 Delay Order"), issued in Docket No. E-100, Sub 113, the Commission modified the 2018 Swine Waste Set-Aside requirement for public utilities to 0.02% of prior year North Carolina retail sales, and delayed for one year the scheduled increases to the requirement. In addition, the 2018 Delay Order modified the 2018 state-wide Poultry Waste Set-Aside Requirement to 300,000 MWh, and delayed the subsequent scheduled increases by one year.
- 4. Pursuant to N.C. Gen. Stat. § 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 ("EMC"), the City of Concord, the Town of Dallas, the Town of Forest City, the Town of Highlands, the City of Kings Mountain, and Rutherford EMC (collectively the "Wholesale Customers"). The Company's contractual obligation to provide REPS compliance services to the City of Concord and the City of Kings Mountain ended effective December 31, 2018.
- 5. DEC complied with the 2018 solar set-aside requirements, for itself and the Wholesale Customers for which DEC provided compliance services for the 2018 compliance year, by submitting for retirement 119,041 RECs procured or generated from

solar electric facilities and metered solar thermal energy facilities. DEC also complied with the 2018 Poultry Waste Set-Aside requirements, for itself and the Wholesale Customers for which DEC provides compliance services, by submitting for retirement 108,493 poultry waste RECs and 14,084 Senate Bill 886 RECs (which count as 28,168 poultry waste RECs), for a total of 136,661 poultry waste RECs. The Company complied with the 2018 Swine Waste Set-Aside requirement that applied to electric public utilities only, and did not apply to the Wholesale Customers, by submitting for retirement 11,203 swine waste RECs. Finally, DEC submitted for retirement 5,684,933 general requirement RECs, representing the total 2018 compliance requirement of DEC North Carolina retail and the Wholesale Customers, net of the set-aside requirements detailed above.

- 6. DEC and the seven electric power suppliers for which DEC provided compliance services met their 2018 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 2019 poultry waste requirement is dependent on the performance of poultry waste-to-energy developers on current contracts and two new poultry waste-to-energy projects that are scheduled to come on line during 2019.
- 8. DEC's ability to comply with the 2019 swine waste resource requirement is dependent on the performance swine waste-to-energy developers on current contracts, particularly achievement of projected delivery requirements and commercial operation milestones.
- 9. DEC's sales of RECs reviewed in this proceeding are appropriate, and DEC has accounted for them correctly. DEC and the Public Staff will work together over the

next 12 months to determine what, if any, adjustments should be made to the current calculation of sales prices of RECs sold by DEC to other electric power suppliers for the purpose of those suppliers meeting their set-aside REPS compliance requirements. The five considerations enumerated in Public Staff witness Boswell's testimony will be addressed in the analysis and any resolution of issues will be addressed by DEC in direct testimony in its next REPS cost recovery proceeding.

- 10. DEC's REC inventory available for future use properly includes RECs generated from net metering customers receiving electric service under schedules other than a time-of-use schedule with demand rates ("NMNTD customers").
- 11. 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 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 the 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.
- 12. DEC's other incremental REPS compliance costs and its Solar Rebate Program costs are recoverable under N.C. Gen. Stat. § 62-133.8(h)(1)(a) and N.C. Gen. Stat. § 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. Gen. Stat. § 62-133.8(h)(1)(b), as adjusted per the recommendation of Public

Staff witness Lawrence to remove from test period incremental REPS costs a specific expenditure included by DEC as research cost. The adjusted test period research costs are within the statute's \$1 million annual limit.

- 14. No costs associated with the Competitive Procurement of Renewable Energy ("CPRE") program are included for recovery in this REPS proceeding nor in the concurrent DEC CPRE rider proceeding, and the recoverability of such costs in a REPS rider is not decided in this current REPS rider docket.
- 15. For purposes of DEC's annual rider pursuant to N.C. Gen. Stat. § 62-133.8(h), the test period for this proceeding is the calendar year 2018. The billing period for this proceeding is the 12-month period beginning September 1, 2019 and ending August 31, 2020.
- 16. For purposes of establishing the REPS EMF rider in this proceeding, DEC's incremental costs incurred during the 2018 calendar year test period for its own and its Wholesale Customers' REPS compliance were adjusted to remove costs incurred for the January 1, 2018 through April 30, 2018, update period included in last year's EMF rider over-collection calculation in Docket No. E-7, Sub 1162. Costs incurred for the May 1, 2018, through December 31, 2018, current adjusted EMF period totaled \$20,973,648, The Company's projected incremental costs for the combined DEC and Wholesale Customer REPS compliance for the billing period are \$37,631,541.
- 17. N.C. Gen. Stat. § 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. Gen. Stat. § 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. Gen. Stat. § 62-133.9." The term "avoided costs" includes both avoided energy costs and avoided capacity costs.

- 18. Under Commission Rule R8-67(e)(2), the total costs reasonably and prudently incurred during the test period to purchase unbundled renewable energy certificates ("RECs") constitute incremental costs. The projected costs to purchase such RECs during the billing period constitute forecasted incremental costs.
- 19. 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 DG") 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.
- 20. DEC properly complied with the Commission-ordered conditions related to cost recovery and reporting for its Monroe and Mocksville DEC-owned solar facilities in both its general rate case proceeding in Docket No. E-7, Sub 1146 and in previous REPS proceedings, and DEC's compliance requirement associated with these conditions is

complete for the Monroe and Mocksville facilities as of the Company's filing in this docket.

- 21. DEC properly complied with the cost recovery and reporting conditions of the Woodleaf Order in this proceeding, and incremental costs recovered in the REPS rider are appropriately capped as previously ordered by the Commission.
- 22. Including the adjustment to test period research cost recommended by Public Staff witness Lawrence, and incorporated into revised test period incremental REPS cost by Public Staff witness Boswell as shown on Boswell Exhibit 1, DEC's test period REPS expense over-collections, including interest, amount to \$(979,228) for the residential class, \$(167,305) for the general service class, and an under-collection of \$71,609 for the industrial class. 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 \$(510,125) for residential, \$(374,416) for general service, and \$(30,821) for industrial. Total credits to customers' accounts including over-collections and the contract-related credits are \$(1,489,353) for the residential class, \$(541,721) for the general service class, and an under-collection of \$40,788 for the industrial class. All amounts exclude the North Carolina regulatory fee ("regulatory fee").
- 23. DEC's North Carolina retail prospective billing period expenses for use in this proceeding are \$19,584,094, \$14,228,042, and \$1,172,812 for the residential, general service, and industrial classes, respectively, excluding the regulatory fee.
- 24. The appropriate monthly REPS EMF riders per customer account (to be credited to customers during the billing period are \$(0.07) for residential accounts, \$(0.18)

for general service accounts, and a charge of \$0.71 for industrial accounts, excluding the regulatory fee.

- 25. The appropriate monthly prospective REPS riders per customer account, excluding the regulatory fee, to be collected during the billing period are \$0.94 for residential accounts, \$4.82 for general service accounts, and \$20.53 for industrial accounts.
- 26. The combined monthly REPS and REPS EMF rider charges per customer account, excluding the regulatory fee, to be collected during the billing period are \$0.87 for residential accounts, \$4.64 for general service accounts, and \$21.24 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 \$0.87 for residential accounts, \$4.65 for general service accounts, and \$21.27 for industrial accounts.
- 27. DEC's REPS incremental cost rider, including the regulatory fee, to be charged to each customer account for the billing period is within the annual cost cap established for each class in N.C. Gen. Stat. § 62-133.8(h)(4).

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

These findings of fact are essentially informational, jurisdictional and procedural in nature and are not contested.

N.C. Gen. Stat. § 62-133.8(b)(1) 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; (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 2018, 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.

N.C. Gen. Stat. § 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 2018 is 0.20%.

N.C. Gen. Stat. §§ 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, 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. 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 State 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 2018 Delay Order, the Commission modified the 2018 Swine Waste Set-Aside requirement to be applicable to electric public utilities only, set the requirement at 0.02% of North Carolina retail sales, and delayed for one year the scheduled increases in the requirement. In addition, the 2018 Delay Order the 2018 state-wide Poultry Waste Set-Aside requirement to 300,000 MWh, and delayed by one year the scheduled increases in the requirement.

In its 2018 compliance report, DEC stated that it provided energy resources and compliance reporting services for Blue Ridge EMC, the City of Concord, the Town of Dallas, the Town of Forest City, the Town of Highlands, the City of Kings Mountain, and Rutherford EMC, as allowed by N.C. Gen. Stat. § 62-133.8(c)(2)(e). The Company's contractual obligation to provide REPS compliance services to the City of Concord and the City of Kings Mountain ended effective December 31, 2018. (T. at p. 71)

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

The evidence supporting these findings of fact appears in DEC's 2018 REPS Compliance Report, in the testimony and exhibits of DEC witness Payne, and in the testimony of Public Staff witness Lawrence. In addition, the Commission takes judicial notice of the information contained in the North Carolina Renewable Energy Tracking System ("NC-RETS"). DEC's 2018 REPS Compliance Report was admitted into evidence as Payne Exhibit No. 1.

DEC witness Payne testified that DEC submitted its 2018 REPS compliance report as Payne Exhibit No. 1, and that the 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. (T. at pp. 17-18)

Witness Payne further testified that DEC has submitted for retirement 5,951,838 RECs to meet its total requirement for 2018. He defined the "total requirement" as DEC's overall REPS requirement. Within this total, the Company has submitted for retirement 119,041 RECs to meet the Solar Set-Aside requirement; 108,493 RECs, along with 14,084 SB 886 RECs (which count as 28,168 poultry waste RECs) to meet the Poultry Waste Set-Aside requirement; and 11,203 RECs to meet the Swine Waste Set-Aside requirement. (T. at p. 18) The billing period for this Application covers two separate compliance reporting periods with different requirements for each period. In 2019, the Company estimates that it will be required to submit for retirement 6,217,691 RECs to meet the requirements of N.C. Gen. Stat. § 62-133.8(b), or its total requirement. Within this estimated total, the Company expects to be required to retire the following: 124,357 solar RECs, 43,526 swine waste RECs, and 313,614 poultry waste RECs to meet the requirements set out in N.C. Gen. Stat. §§ 62-133.8(d), (e), and (f) respectively. In 2020, the Company estimates that it will be required to submit for retirement 6,020,898 RECs to meet its total requirement. Within this total, the Company projects that it will be required to retire approximately 120,421 solar RECs, 42,150 swine waste RECs, and 313,614 poultry waste to meet the requirements set out in N.C. Gen. Stat. §§ 62-133.8(d), (e), and (f) respectively. (T. at p. 19)

Witness Payne testified that DEC has met its Solar Set-Aside requirement for the test period by procuring and producing 119,041 solar RECs and that, pursuant to the NC-RETS Operating Procedures, the Company has 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. (T. at p. 24)

Witness Payne testified that DEC has met its 2018 Poultry Waste Set-Aside requirement of 136,661 RECs. Pursuant to NC-RETS Operating Procedures, the Company has submitted for retirement 108,493 poultry RECs and 14,084 SB 886 RECs (which count as 26,168 poultry waste RECs). Accordingly, the equivalent of 136,661 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. (T. at p. 25)

Witness Payne testified that DEC has met its 2018 Swine Waste Set-Aside requirement of 11,203 swine waste RECs. Pursuant to NC-RETS Operating Procedures, the Company has submitted these RECs for retirement by transferring these RECs from the Duke Energy Electric Power Supplier Account to the Duke Energy Compliance Sub-Account. (T. at pp. 27-28)

Witness Payne further testified that the Company had complied with its General Requirement for 2018. Pursuant to NC-RETS Operating Procedures, the Company submitted for retirement 5,684,933 RECs to meet the General Requirement (DEC's total requirement, net of the Solar, Swine Waste, and Poultry Waste Set-Aside requirements). Specifically, the RECs to be used for 2018 compliance have been 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. (T. at p. 19)

In his direct testimony, Company witness Payne testified that future compliance with both the Poultry Waste Set-Aside requirement and the Swine Waste Set-Aside

requirement is dependent on the performance of energy developers on current contracts and new waste-to-energy projects scheduled to come online. Two poultry waste facilities are scheduled to come on line during 2019. Three poultry waste-to-energy facilities that were previously operational experienced operational issues and were shut down in 2018 for plant modifications. One facility is back on line and the remaining two are scheduled to return to service during 2019, but 2019 production will be lower than originally anticipated. (T. at p. 26)

Regarding expected compliance with additional near-term future Swine Waste Set-Aside requirements, witness Payne reported that current swine waste-to-energy facilities have encountered numerous 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 instate and out-of-state supplies; working extensively with potential suppliers to overcome production risks and/or amend contracts to accommodate changing circumstances; and pursuing new biomass and biogas swine resource options; among other efforts. (T. at pp. 28-30)

Public Staff witness Lawrence recommended that the Commission approve DEC's 2018 REPS Compliance Report. (T. at p. 106) Specifically, he testified that for 2018 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 2017 North Carolina retail electricity sales of itself and the Wholesale Customers. Witness Lawrence additionally stated that DEC needed to pursue retirement of sufficient solar RECs to match 0.20% of retail sales in 2017 for itself and the Wholesale Customers, and

of its pro-rata share of the 300,000 poultry waste RECs required by N.C. Gen. Stat. § 62-133.8(f). The poultry waste REC requirement was determined by the Commission in its 2018 Delay Order. The 2018 Delay Order also modified the swine waste requirement under N.C. Gen. Stat. § 62-133.8(e) to lower the 2018 compliance requirement to 0.02% of 2017 retail sales for the investor-owned utilities only. (T. at pp. 105-06)

No party disputed that DEC had fully complied with the applicable REPS requirements, or argued that DEC's REPS Compliance Report for 2018 should not be approved.

Based on the evidence presented and the entire record herein, the Commission finds and concludes that DEC and the seven Wholesale Customers for which it is providing REPS compliance services have fully complied with the REPS requirements for 2018, as modified by the Commission's 2018 Delay Order, and that DEC's 2018 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 FINDING OF FACT NO. 9

The evidence supporting this finding of fact is found in the testimony of DEC witness Payne and in the testimony of Public Staff witness Boswell.

Witness Payne stated the Company sold poultry RECs during the test period to other electric suppliers in North Carolina to enable the state's electric power suppliers to comply with the aggregate Poultry Waste Set-Aside requirement. The proceeds were credited back to the Company's North Carolina retail customers and the Wholesale Customers, and the Company complied with the Commission's reporting and accounting

requirements in its May 2014 order in Docket No. E-100, Sub 113, pertaining to REC sales. (T. at pp. 30-31)

In her testimony, witness Boswell stated that following the Public Staff's review of sales price used by DEC when it sells RECs to other electric power suppliers to help them achieve compliance with poultry waste or swine waste compliance requirements, she recommends that the Company and the Public Staff work together over the next year to review and evaluate the sale price of set-aside RECs sold to other electric power suppliers to aid in their REPS compliance efforts. Witness Boswell further explains that the general method used by the Company in this proceeding to determine the REC sales price has been accepted in previous REPS filings before the Commission, but the Public Staff disagrees with DEC regarding an assumption incorporated in the current calculation applicable to REC sales applicable to this proceeding. Witness Boswell's testimony indicates that implementing her recommendation applicable to the component of the sales price that is the subject of disagreement by the Public Staff does not result in an adjustment to REPS compliance costs in this proceeding. (T. at pp. 93-95) She further recommends that the ratemaking treatment of the amount in question be held in abeyance, and that the abeyance continue until the determination of the appropriate REC price is resolved. (T. at pp. 97-98)

Witness Boswell recommends the Company and the Public Staff work together over the next year to review and evaluate whether the sale price of set-aside RECs sold by DEC should include the following considerations, and if so, how each should be determined:

- (1) overhead costs associated with obtaining the REC and subsequent sale of the REC;
- (2) an amount to mitigate the interest DEC may pay ratepayers on any REPS EMF overcollection that results from the sale of set-aside RECs;
- (3) an amount to ensure that DEC's customers do not bear any risk of REC contracts not materializing or resulting in lower quantities of RECs being generated;
- (4) an amount to provide a price signal to other electric power suppliers to encourage them to continue to participate in the development of swine and poultry waste-to-energy resources without relying solely on DEC to provide the needed set-aside RECs; and
- (5) an amount to encourage DEC to sell RECs, when available, to other North Carolina electric power suppliers for the purpose of assisting with their compliance with the REPS requirements.

Witness Boswell also recommends that DEC address the issue of the sales prices of RECs and any resolution of these issues in its direct testimony in its next REPS cost-recovery proceeding. (T. at pp. 98-99)

In his Rebuttal Testimony filed on May 30, 2019, DEC witness Payne states he agrees with witness Boswell's recommendation that the REC prices and regulatory treatment of REC sales proceeds should be further evaluated, and the Company commits to working with the Public Staff to evaluate the sales prices of RECs, and to address the five considerations set forth in witness Boswell's testimony. He states further that the

Company will address these issues as applicable in future REPS cost recovery proceedings.

(T. at pp. 84-85)

Based on the foregoing, the Commission finds and concludes that the REC sales that occurred during the test period are properly accounted for and reflected for cost recovery purposes in the current REPS rider calculations. The Commission further accepts the recommendations of Public Staff witness Boswell that REC prices and regulatory treatment of REC sales proceeds should be further evaluated, and the Public Staff and DEC shall work together over the next year to evaluate the sales prices of RECs, and to address the five considerations set forth in witness Boswell's testimony. Finally, DEC will address the issue of the sales prices of RECs and any resolution of these issues in its direct testimony in its next REPS cost-recovery proceeding.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 10-11

The evidence supporting these findings of fact is found in the testimony of DEC witness Payne.

Witness Payne 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. He further stated the Company had complied with the 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. (T. at pp. 21-22) No party to this proceeding contested this finding of fact.

Witness Payne explained 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 generating 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. Gen. Stat. § 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. (T. at pp. 31-32) In last year's REPS cost recovery proceeding, Docket No. E-7, Sub 1162, the Company proposed to exchange a portion of these hydroelectric RECs for RECs within the inventory of the North Carolina Electric Membership Corporation ("NCEMC"). In its August 17, 2018 Order Approving REPS and REPS EMF Riders and 2017 REPS Compliance Report, the Commission concluded the proposed transfer was reasonable and served the public interest. Witness Payne stated the Company has executed contracts with NCEMC exchanging a portion of these hydroelectric RECs for an equal number of General Requirement RECs in NCEMC's inventory that DEC can use for REPS compliance. (T. at pp. 32-33)

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 hydroelectric RECs, are properly included in DEC's inventory of RECs available for future REPS compliance use.

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

The evidence for these findings of fact can be found in the testimony and exhibits of DEC witnesses Payne and Williams and Public Staff witnesses Boswell and Lawrence.

Witness Payne sponsored Confidential Payne Exhibit No. 3 as an exhibit to his testimony, wherein he identified the "Research," "Solar Rebate Program," and "Other Incremental" costs that the Company has incurred or projects to incur in association with REPS compliance. With respect to research costs, Williams Exhibit No. 1 shows that the research costs are under the \$1 million per year cap established in N.C. Gen. Stat. § 62-133.8(h)(1)(b).

Consistent with the Commission's orders in prior REPS proceedings, witness Payne provided testimony and exhibits on the results and status of various studies, the costs of which DEC is including for recovery in its incremental REPS cost for the calendar year 2018 test period. (T. at pp. 40-50) In his testimony, witness Lawrence contested as a qualifying research or REPS other incremental cost, an expenditure identified as "CAPER, Short Course Development". (T. at p. 107) He explained the Public Staff thought that although the course could help attendees improve their understanding of the physics and engineering principles of the electric grid, the development of a concepts review course does not constitute "research" that advances the development of renewable energy. (T. at p. 109) Witness Lawrence therefore recommended removing the associated cost from the

REPS EMF rider calculation. (T. at p. 110) Witness Boswell stated in her testimony that, consistent with witness Lawrence's testimony, she recommends adjusting the REPS EMF rider proposed by the Company to remove the research cost in question, and that she reflected the effect of doing so in Boswell Exhibit No. 1. (T. at p. 92)

In his rebuttal testimony, witness Payne states that the Company believes the costs associated with "CAPER, Short Course Development" are properly recoverable as research cost in this REPS rider proceeding, as courses such as this are intended to train in the improved understanding of power system operations and planning for those working in the field. However, the Company did not contest witness Lawrence's recommendation that the cost be removed and not recovered in this proceeding. (T. at p. 85)

Witness Payne describes in his 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, and accounting and tracking tools related to RECs, reduced by proceeds from REC sales and agreed-upon liquidated damages paid by sellers for failure to meet contractual milestones, and amounts paid for administrative contractual amendments requested by sellers. (T. at pp. 34-35)

Witness Payne also states that, pursuant to N.C. Gen. Stat. § 62-155(f), each public utility required to offer a solar rebate program:

[S]hall be authorized to recover all reasonable and prudent costs of incentives provided to customers and program administrative costs by amortizing the total program incentives distributed during a calendar year and administrative costs over a 20-year period, including a return component adjusted for income taxes at the utility's overall weighted

average cost of capital established in its most recent general rate case, which shall be included in the costs recoverable by the public utility pursuant to G.S. 62-133.8(h).

N.C. Gen. Stat. § 62-133.8(h) provides for an electric power supplier's cost recovery and customer charges under the REPS statute; North Carolina HB 589 amended it by adding a provision to allow for the recovery of incremental costs incurred to "provide incentives to customers, including program costs, incurred pursuant to N.C. Gen. Stat. § 62-155(f)." 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. As detailed on Confidential Payne Exhibit No. 3, these costs include the annual amortization of incentives paid to customers and program administration costs, which includes labor, information technology and marketing costs. (T. a pp. 35-36) 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 that the research activities funded by DEC during the test period, adjusted for the removal of the "CAPER, Short Course Development" cost as recommended by witness Lawrence, are renewable research and development costs recoverable under N.C. Gen. Stat. § 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.

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 FINDING OF FACT NO. 14

The evidence for this finding of fact is found in the testimony of DEC witness Payne and in the testimony of Public Staff witness Lawrence.

In his direct testimony, witness Payne describes how the CPRE program will affect DEC's future compliance with its general requirement, and how the program is reflected in compliance planning. He states that because the Company will use the RECs acquired through the CPRE program for REPS compliance, CPRE program implementation costs could be recovered through the REPS rider. He also notes, however, that the Company has elected to recover reasonable and prudently incurred costs incurred to implement the CPRE program through the CPRE rider, as contemplated under Commission Rule R8-71(j). (T. at p. 23)

In his testimony, witness Lawrence confirms DEC is not requesting recovery of CPRE program costs in this current REPS proceeding, and that he generally does not agree with the recovery of any CPRE costs in a REPS rider. He cites reasons for inclusion of

CPRE costs only in a CPRE rider, including the authority given to the Commission by the CPRE statute to establish a specific CPRE annual cost recovery mechanism, the increased possibility of reaching the REPS per-account caps sooner by including CPRE program implementation costs in the REPS rider, and the fact that other compliance methods such as EECs are used for REPS compliance without any associated costs being recovered in the REPS rider. Witness Lawrence recommended the Commission address CPRE program cost recovery if the Company requests such recovery in a REPS rider proceeding, and stated the Public Staff's opinion that recovery of CPRE program costs through the REPS rider should not occur prior to the Commission considering the issue in a CPRE cost recovery proceeding. (T. at pp. 110-113) In his rebuttal testimony, DEC witness Payne disagreed with witness Lawrence's testimony that CPRE costs cannot be recovered in a REPS proceeding, but stated that the issue need not be decided in this current REPS proceeding, as there are no CPRE costs included in the Company's filing. (T. at pp. 85-86)

The Commission concludes that the matter of the inclusion of any CPRE program implementation costs in the REPS rider will be decided in a future CPRE rider or REPS rider proceeding, as no CPRE costs have yet been submitted for recovery in a CPRE rider or REPS rider.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 15

The evidence supporting this finding is procedural in nature, found in the testimony DEC witness Williams and the testimony and exhibits of Public Staff witnesses Boswell and Lawrence, 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 months 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, 2018 and ending December 31, 2018. (T. at p. 55) 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. In last year's annual REPS cost recovery proceeding, Docket No. E-7, Sub 1162, DEC filed supplemental testimony and exhibits updating the calendar year 2017 EMF period to include the months of January through April of 2018, as allowed by Commission Rule R8-67(e)(5). The REPS rider approved by the Commission included the over-collection applicable to the additional four months of January through April of 2018. Accordingly, calendar year 2018 EMF period costs in this current REPS docket are adjusted to remove the compliance costs for January through April 2018 that were included in the over-collection reflected in the REPS rider approved in Docket No. E-7, Sub 1162. The costs incurred during the totality of the January 1, 2018 through December 31, 2018 test period were, however, presented in this filing to demonstrate their reasonableness and prudency as provided in Rule R8-67(e). (T. at p. 57) 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, 2019 and

ending on August 31, 2020. (T. at p. 55) 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. (T. at p. 57) 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, 2018 through December 31, 2018. The REPS EMF rider calculation in this proceeding will reflect the removal of amounts for the period January 1, 2018 through April 30, 2018 that were included in the EMF rider approved in Docket No. E-7, Sub 1162. The Commission further concludes that, as requested by the Public Staff, and consistent with Commission Rule R8-67(e)(5), the test period will remain as January 1, 2018 through December 31, 2018 for the purpose of allowing for a complete review of the reasonableness and prudency of the totality of revenues collected and costs incurred.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 16-18

The evidence for these findings of fact is found in DEC's Application and in the testimony and exhibits of DEC witnesses Payne and Williams, as well as in the testimony and exhibits of Public Staff witnesses Boswell and Lawrence.

N.C. Gen. Stat. § 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. Gen. Stat. § 62-133.8 though an annual rider. N.C. Gen. Stat. § 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. Gen. Stat. § 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 Payne. (T. at pp. 58-61) Witness Williams also described the method used by the Company to determine the appropriate avoided cost to apply to REPS compliance purchased power agreements, 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. (T. at pp. 68-70) Williams Exhibit No. 1, page 1, identified total incremental costs incurred during the test period for DEC North Carolina retail and the Wholesale Customers as \$28,264,136 and Williams Exhibit No. 1, page 2 showed estimated incremental costs for the billing period as \$37,631,541. For purposes of establishing the REPS EMF rider in this proceeding, DEC's incremental costs incurred during the 2018 calendar year test period for its own and its Wholesale Customers' REPS compliance were adjusted to remove costs incurred for the January 1, 2018 through April 30, 2018 update period included in last year's EMF rider over-collection calculation in Docket No. E-7, Sub 1162. Williams Exhibit No. 1 also shows costs incurred for the May 1, 2018 through December 31, 2018 adjusted EMF period totaled \$21,012,618.

As discussed previously, Public Staff witness Lawrence recommended the removal of a research cost from the EMF period research costs. Company witness Payne stated the Company did not contest witness Lawrence's recommendation that the cost be removed

and not recovered in this proceeding. (T. at p. 85) The effect of the removal of the research cost reduced the incremental costs for the adjusted EMF period of May 1, 2018 through December 31, 2018 to \$20,973,648.

Based on the foregoing, the Commission concludes that the correct incremental costs for the adjusted EMF period of May 1, 2018 through December 31, 2018 is \$20,973,648. The Commission further concludes the estimated incremental costs for the billing period are \$37,631,541.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 19-21

The evidence supporting these findings of fact is found in the testimony of DEC witness Williams.

With respect to DEC's Solar DG program, witness Williams testified that DEC determined the avoided cost using a process similar to that described for a purchased power agreement with a non-standard duration. The inputs and methodology used for the Schedule PP rates approved in Docket No. E-100, Sub 117 were used to determine the annualized combined capacity and energy rates for the twenty-year term, corresponding to the expected life of the solar facilities. DEC similarly estimated its avoided cost and incremental cost for its new Solar PV facilities. (T. at pp. 69-70)

Regarding the Company's other owned solar facilities, the Commission issued orders approving the transfers of the certificates of public convenience and necessity ("CPCN") to DEC for both the Company's Mocksville solar facility ("Mocksville," Docket No. E-7, Sub 1098) and the Company's Monroe solar facility ("Monroe," Docket No. E-7, Sub 1079) on May 16, 2016. On June 16, 2016, the Commission issued its Woodleaf Order in Docket No. E-7, Sub 1101, approving the CPCN for construction of Woodleaf

(collectively, the "DEC Solar PV Orders"). An annual revenue requirement, including capital and operations and maintenance costs, was calculated for each project for all years of the expected service life of the project. The present value of the total project revenue requirement was levelized over the project life to produce a level annual revenue requirement, which was compared to avoided cost to determine any annual incremental cost subject to recovery through the REPS rider. (T. at pp. 58-59) Witness Williams testified that the Company is including for cost recovery in this REPS rider only the percentage of annual levelized total cost for each facility equivalent to the standard REC offer price as approved by the Commission in its DEC Solar PV Orders. She further explains that the Solar DG program costs, and the Monroe and Mocksville facility costs, are reflected in base rates approved in its most recent general rate case in Docket No. E-7, Sub 1146. Adjustments to rate base in the general rate case were made, as necessary, to remove incremental REPS costs associated with the facilities that were being recovered in the REPS rider instead. In the REPS rider currently proposed, the Company is holding the percentage of incremental cost recovered in the REPS rider for each facility constant with the incremental cost percentage for each facility that was excluded from rates approved in Docket No. E-7, Sub 1146. (T. at pp. 60-61)

Witness Williams further explains that, in its DEC Solar PV Orders, the Commission included two conditions related to cost recovery for the DEC Solar PV facilities that are relevant to this proceeding. First, the Company agreed to the condition noted above, limiting the cost recovery amount in REPS to the standard offer REC price. The second condition relates to DEC's ability to realize certain tax benefits included in the Company's revenue requirements analysis for each facility as presented during the CPCN

proceedings. The condition provides that, in the appropriate REPS rider and general rate case proceedings, DEC will separately itemize the actual monetization of the tax benefits listed in the Commission's orders 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 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. (T. at p. 62)

Witness Williams' testimony describes the Company's compliance with the two conditions outlined above with respect to its Monroe and Mocksville facilities. She states that, in the Company's 2017 annual REPS rider filing in Docket No. E-7, Sub 1131 and its 2018 annual REPS rider filing in Docket No. E-7, Sub 1162, the Company updated its original models of estimated annual revenue requirements to reflect its actual experience to date for each of the specified tax-related benefits, and the Company updated its estimates of the timing of realization of the relevant tax benefits in future tax years. In addition, in each docket, the incremental costs from the updated revenue requirement models that were included for recovery in the REPS rider were limited to the percentage of annual levelized total cost equivalent to the standard REC offer price as approved by the Commission in its DEC Solar PV Orders. She further explains that, on August 25, 2017, DEC filed its Application to Adjust Retail Rates, Request for an Accounting Order and to Consolidate

Dockets in Docket No. E-7, Sub 1146, the Company's only general rate case proceeding since the date of the DEC Solar PV Orders. Mocksville and Monroe costs were included (reduced by the percentage of cost recovered in the REPS rider as capped by the Commission in its DEC Solar PV Orders) in the revenue requirement calculated and subject to recovery in base rates in the general rate case docket. The Commission issued its June 22, 2018 Order Accepting Stipulation, Deciding Contested Issues, and Requiring Revenue Reduction ("2018 Rate Order") in Docket No. E-7, Sub 1146, in which the Commission accepted DEC's conclusion that the facility costs included in its proposed base rates were prudently incurred and approved applicable recovery through base rates. The Company is limiting recovery of costs related to Mocksville and Monroe in its current REPS rider filing to the percentage equivalent to the REC price cap established in the DEC Solar PV Orders, and holding that percentage constant with the percentage used to adjust cost of the facilities included in the E-7, Sub 1146 general rate case, as discussed above. Finally, witness Williams states that the Company respectfully submits that it has now met in full the cost recovery conditions of the DEC Solar PV Orders specific to Mocksville and Monroe, and its compliance requirement has been completed with respect to those facilities. (T. at pp. 63-64)

Witness Williams stated in her testimony that the Company's Woodleaf project was placed in service in December 2018, and costs for the facility have not yet been included in a DEC general rate case. She explained that, in this current REPS docket, the Company updated its revenue requirement calculation for Woodleaf to reflect its current assumptions regarding the availability of the following tax benefits listed in the Woodleaf Order, and its estimates of the timing of realizing the tax benefits:

- (a) The federal Section 199 deduction;
- (b) The federal Investment Tax Credit ("ITC") of 30% of the cost of eligible property;
- (c) The five-year Modified Accelerated Cost Recovery System ("MACRS") tax depreciation; and
- (d) A property tax abatement of 80% on solar property. (T. at pp. 64-65)

Witness Williams' testimony explains that the Company's current assumptions regarding tax benefits continue to reflect Woodleaf qualifying for MACRS tax depreciation, and that it will realize the benefit of 80% property tax abatement on the facility. The assumptions related to realizing the tax benefits of MACRS tax depreciation and 80% property tax abatement are the same as those presented as part of the original Woodleaf CPCN proceeding. In addition, the Federal Tax Cuts and Jobs Act (the "Tax Act") was enacted on December 22, 2017. Among other provisions, it eliminated the federal Section 199 manufacturing deduction. Accordingly, the associated reduction is removed from the composite tax rate utilized in the updated revenue requirement calculations. Federal ITC benefits were originally assumed to be realized in 2021 for Woodleaf. However, DEC expects to experience a delay in realizing the federal ITC benefits because it anticipates lacking sufficient taxable income against which it can take the tax credit. The Company currently estimates realizing the federal ITC benefits beyond the current forecast window of year 2023. The Company's ability to take federal bonus depreciation related to many of its assets placed in service prior to the bonus depreciation expiration deadline established by the Tax Act, combined with the updated forecast timing of utilization of other tax credits, contribute to the estimated lack of taxable income for utilization of ITC. (T. at pp. 65-66)

Witness Williams stated, in addition to the tax benefits discussed above, the Tax Act reduced the corporate federal income tax rate to 21% from 35%, which affects the revenue requirement calculation for Woodleaf as well. The return on equity, debt rate, and capital ratios were also updated in the revenue requirement model to reflect amounts approved according to the 2018 Rate Order. (T. at p. 66)

Witness Williams concluded that although DEC expects to experience some delay in realizing the 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. The tax benefit updates, taken together with current general rate case assumption inputs, result in a calculated revenue requirement that is not materially different from that presented during the original Woodleaf CPCN proceeding. She stated that no costs for Woodleaf were included in the EMF Period, and billing period cost estimates included for recovery were limited to the equivalent of the standard offer REC price established pursuant to the Woodleaf CPCN proceeding. (T. at pp. 66-67)

The Commission finds and concludes that DEC appropriately complied with the applicable requirements of the Commission's DEC Solar PV Orders relevant to this proceeding, and DEC's compliance obligation related to the conditions detailed above is complete as of the filing made in this docket, with respect to the Company's Monroe and Mocksville solar facilities.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 22-27

The evidence supporting these findings of fact appears in DEC's Application, in the testimony and exhibits of DEC witnesses Payne and Williams, and in the testimony and exhibits of Public Staff witnesses Boswell and Lawrence.

Public Staff witness Boswell testified that as a result of its investigation of the incremental cost presented by DEC in the calculation of the REPS EMF rider, the Public Staff identified one adjustment to test period costs. The research cost identified in witness Lawrence's testimony, and discussed in the Conclusions and Evidence for Findings of Fact Nos. 12-13 above, was removed from EMF Period incremental costs on Williams Exhibit No. 2, and the resulting revised EMF rider calculation was presented on Boswell Exhibit No. 1. (T. at pp. 91-92) In his rebuttal testimony, Company witness Payne stated the Company will not contest witness Lawrence's recommendation that the cost be removed and not recovered in this proceeding. (T. at p. 85) Boswell Exhibit No. 1, Schedule 2, shows total North Carolina retail test period over-collections (including interest) of \$(979,228) for the residential class, \$(167,305) for the general service class, and an undercollection of \$71,609 for the industrial class. Boswell Exhibit No. 1, Schedule 3, shows additional credits for contract receipts by customer class of \$(510,125) for residential, \$(374,416) for general service, and \$(30,821) for industrial. Total over-collections and contract-related credits by class for the EMF period are \$(1,489,353) for residential, \$(541,721) for general service, and the under-collection for the EMF period for the industrial class is \$40,788. Witness Boswell calculated proposed North Carolina retail monthly per-account REPS EMF credits (excluding regulatory fee) of \$(0.07) for residential accounts, \$(0.18) for general service accounts, and a proposed monthly peraccount REPS EMF charge of \$0.71 for industrial accounts. Witness Boswell calculated no change to billing period costs from those originally proposed by the Company and shown on Williams Exhibit No. 4. On Boswell Exhibit No. 1, Schedule 3, she calculated

the projected North Carolina retail REPS costs for the billing period of \$19,584,094 for the residential class, \$14,228,042 for the general service class, and \$1,172,812 for the industrial class. Boswell Exhibit No. 1, Schedule 3, shows that the proposed monthly prospective REPS riders per customer account, excluding the regulatory fee, to be collected during the billing period are \$0.94 for residential accounts, \$4.82 for general service accounts, and \$20.53 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 thus \$0.87 for residential accounts, \$4.64 for general service accounts, and \$21.24 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 \$0.87 for residential accounts, \$4.65 for general service accounts, and \$21.27 for industrial accounts. As further illustrated on Boswell Exhibit No. 1, Schedule 3, the Company's REPS incremental cost rider to be charged to each customer account for the billing period is within the annual cost cap established for each customer class in N.C. Gen. Stat. § 62-133.8(h)(4).

Public Staff witness Boswell stated in her testimony that as a result of its investigation, the Public Staff is recommending annual REPS EMF increment/(decrement) riders of \$(0.85), \$(2.20), and \$8.57, per customer account for DEC's residential, general service, and industrial customers, respectively, excluding the North Carolina regulatory fee. The corresponding monthly rider amounts are \$(0.07), \$(0.18), and \$0.71, per customer account (T. at p. 83)

Public Staff witness Lawrence recommended the Company's proposed prospective monthly REPS rider amounts per customer account, excluding regulatory fee, of \$0.94 for

residential accounts, \$4.82 for general service accounts, and \$20.53 for industrial accounts be approved. Combined with the monthly EMF rider amounts recommended by witness Boswell, witness Lawrence recommends approval of the following total monthly REPS charge per customer account, excluding regulatory fee: \$0.87 for residential accounts, \$4.64 for general service accounts, and \$21.24 for industrial accounts. (T. at pp. 114-115)

The Commission concludes that DEC's calculation of its REPS and REPS EMF riders, as adjusted for the removal of the research charge contested by the Public Staff, is reasonable and appropriate. Accordingly, the Commission finds that the DEC test period REPS costs and appropriate monthly REPS EMF riders, as well as the projected billing period REPS costs and the appropriate monthly REPS riders, as set out on Boswell Exhibit No. 1, are appropriate. Finally, the Commission finds that these amounts are below the respective annual per-account cost caps of \$27.00, \$150.00, and \$1,000.00, as established in N.C. Gen. Stat. § 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, 2019 and expiring on August 31, 2020;
- 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, 2019 and expiring on August 31, 2020;
- 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 both this docket and in Docket No. E-7, Sub 1190;

- 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 No. E-7, Sub 1190, 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 both dockets:
- 5. That DEC's 2018 REPS compliance report is hereby approved and the RECs in DEC's 2018 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 and 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 ___ day of______, 2019.

NORTH CAROLINA UTILITIES COMMISSION

Janice Fulmore, Deputy Chief Clerk

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's and the Public Staff's Proposed Order, in Docket No. E-7, Sub 1191, has been served by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid to the parties of record.

This is the 5th day of August, 2019.

Robert W. Koyla.

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