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June 9, 2020

VIA ELECTRONIC FILING

Ms. Kimberley A. Campbell, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

**RE: Duke Energy Progress, LLC's Joint Agency Asset Rider Application
Docket No. E-2, Sub 1253**

Dear Ms. Campbell:

Pursuant to N.C. Gen. Stat. § 62-133.14 and Commission Rule R8-70, I enclose the Application of Duke Energy Progress, LLC for Approval of the Joint Agency Asset Rider to Recover Costs Related to Facilities Purchased from the North Carolina Eastern Municipal Power Agency, together with the testimony and exhibits of LaWanda M. Jiggetts, for filing in connection with the referenced matter.

Thank you for your attention to this matter. If you have any questions, please let me know.

Sincerely,

Lawrence B. Somers

Enclosures

cc: David T. Drooz, Esquire
Dianna Downey, Esquire
Dwight Allen, Esquire

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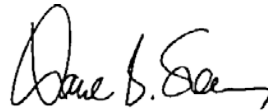
JUN 09 2020

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Progress, LLC's Application for Approval of Joint Agency Asset Rider to Recover Costs Related to Facilities Purchased from the North Carolina Eastern Municipal Power Agency, in Docket No. E-2, Sub 1253, has been served by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid to the following parties:

David T. Drooz
Dianna Downey
Public Staff
North Carolina Utilities Commission
4326 Mail Service Center
Raleigh, NC 27699-4300
david.drooz@psncuc.nc.gov
dianna.downey@psncuc.nc.gov

This the 9th day of June, 2020.



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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1253

In the Matter of)	
Application of Duke Energy Progress, LLC)	DUKE ENERGY PROGRESS,
For Approval of Joint Agency Asset Rider for)	LLC’S APPLICATION FOR
Recovery of Costs Related to Facilities)	APPROVAL OF
Purchased from Joint Power Agency)	JOINT
Pursuant to N.C. Gen. Stat. §62-133.14)	AGENCY ASSET RIDER
and Rule R8-70)	

NOW COMES Duke Energy Progress, LLC (“DEP,” “Company” or “Applicant”), pursuant to North Carolina General Statutes (“N.C. Gen. Stat.”) §62-133.14 and North Carolina Utilities Commission (“NCUC” or the “Commission”) Rule R8-70, and hereby makes this Application for approval of the Joint Agency Asset Rider (“JAAR”) to recover costs to acquire the ownership interests of the North Carolina Eastern Municipal Power Agency (“NCEMPA”), a joint agency established under Chapter 159B of the North Carolina General Statutes, in certain electric generating facilities, as well as the associated estimated financing and non-fuel operating costs expected to be incurred prior to December 1, 2021. In support thereof, the Applicant respectfully shows the Commission the following:

1. The Applicant’s general offices are located at 410 South Wilmington Street, Raleigh, North Carolina, and its mailing address is:

Duke Energy Progress, LLC
P. O. Box 1551
Raleigh, North Carolina 27602

2. The names and addresses of Applicant’s attorneys are:

Lawrence B. Somers, Deputy General Counsel
Duke Energy Progress, LLC
NCRH 20/P.O. Box 1551
Raleigh, North Carolina 27602-1551

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4030 Wake Forest Road, Suite 115
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Copies of all pleadings, testimony, orders, and correspondence in this proceeding should be served upon the attorneys listed above.

3. On July 31, 2015, DEP acquired NCEMPA's undivided ownership interests of 18.33% in the Brunswick Steam Electric Plant (Brunswick Units 1 and 2), 12.94% in the Roxboro Steam Electric Plant (Roxboro Unit 4), 16.17% in the Mayo Electric Generating Plant (Mayo Unit 1), and 16.17% in the Shearon Harris Nuclear Power Plant (Harris Unit 1) (collectively, "Joint Units"). On May 12, 2015, the Commission issued an *Order Approving Transfer of Certificate and Ownership Interests in Generating Facilities* in Docket No. E-2, Sub 1067 and Docket No. E-48, Sub 8, which approved the transfer of NCEMPA's ownership interests in the Joint Units to DEP. On August 13, 2015, the Commission issued its *Order Transferring Certificate Of Public Convenience And Necessity* for NCEMPA's ownership interests in the Joint Units to DEP.

4. On April 2, 2015, N.C. Gen. Stat. §62-133.14 became effective and provides for the establishment of an annual rider which allows DEP to recover the North Carolina retail portion of all reasonable and prudent costs incurred to acquire, operate, and maintain the proportional interest in the Joint Units. N.C. Gen. Stat §62-133.14(b) provides that in determining the amount of the rider, the Commission shall:

(1) Allow an electric public utility to recover acquisition costs, as reasonable and prudent costs. For the benefit of the consumer, the acquisition costs shall be levelized over the useful life of the assets at the time of acquisition.

(2) Include financing costs equal to the weighted average cost of capital as authorized by the Commission in the electric public utility's most recent general rate case.

(3) Include an estimate of operating costs based on prior year's experience and the costs projected for the next 12-month period for any proportional capital investments in the acquired electric generating facilities.

(4) Include adjustments to reflect the North Carolina retail portion of financing and operating costs related to the electric public utility's other used and useful generating facilities owned at the time of the acquisition to properly account for updated jurisdictional allocation factors.

(5) Include a Joint Agency Asset rolling recovery factor to reflect the under or over recovery balance. The electric public utility will maintain the under or over recovery balance and add to it the difference between costs incurred during the test period and revenues that were realized. The balance will be subject to a monthly return.

(6) Utilize the customer allocation methodology approved by the Commission in the electric public utility's most recent general rate case.

5. On October 30, 2019, the Commission issued its *Order Approving Joint Agency Asset Rider Adjustment* in Docket No. E-2, Sub 1207, which established the JAAR to recover the costs expected to be incurred by DEP from December 1, 2019 through November 30, 2020, and included a Joint Agency Asset rolling recovery factor

(“RRF”) adjustment related to the over recovery of costs incurred for the test year ended December 31, 2018.

6. NCUC Rule R8-70 provides that the Commission shall schedule annual hearings pursuant to N.C. Gen. Stat. §62-133.14 to establish an annual Joint Agency Asset Rider for the applicable electric public utility. Rule R8-70 schedules an annual adjustment hearing for DEP and requires that the Company use a test period of the calendar year that precedes the end of the test period for each electric public utility for purposes of Rule R8-55. Therefore, the test period used in this Application for these proceedings is January 1, 2019 through December 31, 2019. The rate period to be used in this Application for these proceedings is December 1, 2020 through November 30, 2021.

7. The information and data required to be filed by NCUC Rule R8-70 is contained in the direct testimony and exhibits of LaWanda M. Jiggetts, which are being filed simultaneously with this Application and incorporated herein by reference. In compliance with Rule R8-70(e)(1)(vi), Exhibit L reports the total actual fuel savings experienced during the test period months January through December 31, 2019 of \$37 million.

8. Pursuant to N.C. Gen. Stat. §62-133.14 and Commission Rule R8-70, the Company requests Commission approval of the following JAAR rates to be effective for service on or after December 1, 2020:

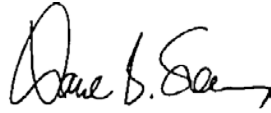
Rate Class	Applicable Schedule(s)	Incremental Rate*
Non-Demand Rate Class (dollars per kilowatt-hour)		
Residential	RES, R-TOUD, R-TOUE, R-TOU	0.00379
Small General Service	SGS, SGS-TOUE	0.00361
Medium General Service	CH-TOUE, CSE, CSG	0.00269
Seasonal and Intermittent Service	SI	0.00066
Traffic Signal Service	TSS, TFS	0.00194
Outdoor Lighting Service	ALS, SLS, SLR, SFLS	0.00000
Demand Rate Classes (dollars per kilowatt)		
Medium General Service	MGS, GS-TES, AP-TES, SGS-TOU	1.06
Large General Service	LGS, LGS-TOU	1.56

* Incremental Rates, shown above, include North Carolina regulatory fee of 0.140% as appropriate.

The estimated costs to be recovered in these rates will be subject to true-up in subsequent annual rider proceedings as provided for in Commission Rule R8-70. The proposed JAAR will be in effect until November 30, 2021.

WHEREFORE, Duke Energy Progress, LLC requests that the Commission issue an order approving the Joint Agency Asset Rider in the amounts as set forth in paragraph 8 above.

Respectfully submitted, this the 9th day of June, 2020.



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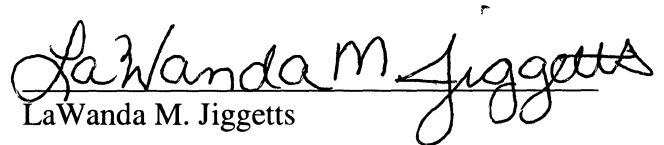
ATTORNEYS FOR DUKE ENERGY PROGRESS, LLC

VERIFICATION

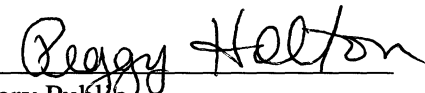
STATE OF NORTH CAROLINA)
) DOCKET NO. E-2, SUB 1253
COUNTY OF WAKE)

LaWanda M. Jiggetts, being first duly sworn, deposes and says:

That she is Rates and Regulatory Strategy Manager for Duke Energy Carolinas;
that she has read the foregoing Application and knows the contents thereof; that the same
is true except as to the matters stated therein on information and belief; and as to those
matters, she believes them to be true.

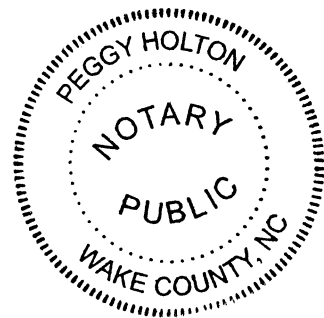

LaWanda M. Jiggetts

Sworn to and subscribed before
me this 4th day of June, 2019.



Notary Public

My Commission expires: 12/22/2021



BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1253

In the Matter of)	
Application of Duke Energy Progress, LLC)	DIRECT TESTIMONY OF
For Approval of Joint Agency Asset Rider)	LAWANDA M. JIGGETTS
to Recover Costs Related to Facilities)	
Purchased from Joint Power Agency Pursuant)	
to N.C. Gen. Stat. §62-133.14 and Rule R8-70)	

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is LaWanda M. Jiggetts. My business address is 410 South
3 Wilmington Street, Raleigh, North Carolina.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am a Rates and Regulatory Strategy Manager for Duke Energy Carolinas,
6 LLC (“DEC”). My responsibilities include providing rates and regulatory
7 support for both DEC and Duke Energy Progress, LLC (“DEP” or the
8 “Company”), primarily for the Joint Agency Asset Rider (“JAAR”) and the
9 development of cost of service studies and quarterly financial reports for
10 DEP.

11 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL**
12 **QUALIFICATIONS.**

13 A. I graduated from the University of Virginia with a Bachelor of Science
14 degree in Commerce with a concentration in Accounting. I received my
15 Masters in Business Administration from Meredith College in Raleigh,
16 North Carolina. From September 1997 – November 2002, I worked as an
17 auditor with PricewaterhouseCoopers in Raleigh. I joined Duke Energy
18 (formerly Progress Energy) in November 2002. I have had various roles in
19 the Accounting Department during my tenure with Duke Energy including
20 roles in SEC Reporting and Analysis, Financial Reporting and
21 Consolidations, Wholesale Contracts and Inventory Accounting, and Fuel
22 Accounting from November 2002 – September 2015. I joined the Rates and
23 Regulatory Strategy group in September 2015.

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS**
2 **COMMISSION?**

3 A. Yes, I provided testimony in DEP's JAAR cost recovery applications under
4 Docket Nos. E-2, Sub 1143, E-2, Sub 1176 and E-2, Sub 1207 in 2017,
5 2018 and 2019, respectively.

6 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

7 A. The purpose of my testimony is to provide support for proposed rate
8 updates to the JAAR approved by the Commission in Docket No. E-2, Sub
9 1207. The proposed rate updates will address the cumulative over recovery
10 of costs that has occurred through the end of the calendar year test year
11 ending December 31, 2019, as well as estimated costs for the rate period
12 December 2020 through November 2021.

13 **Q. PLEASE GENERALLY DESCRIBE THE PROCESS OUTLINED IN**
14 **COMMISSION RULE R8-70 FOR THE JOINT AGENCY ASSET**
15 **RIDER.**

16 A. Commission Rule R8-70 provides for the establishment of a Joint Agency
17 Asset rider that will remain in effect, subject to annual updates, and
18 continue until the end of the useful life of the acquired generating plants.
19 The annual updates, subsequent to the initial rider, are handled much like
20 other riders through an annual proceeding during which the Company
21 makes a filing and the Commission conducts a hearing prior to rendering an
22 order regarding the Company's request. The timing of the Joint Agency
23 Asset annual proceeding is aligned with the timing of DEP's fuel cost

1 recovery proceeding as established in Rule R8-55. Therefore, the annual
2 filing is made in June, a hearing is scheduled in September, and the
3 Company will request that the Commission render its order so rate changes
4 can become effective December 1. Each annual filing addresses actual
5 costs incurred during a historical test period (which will be the calendar
6 year that precedes the June filing for purposes of Rule R8-70) and any
7 resulting over or under recovery of costs that has occurred, as well as costs
8 expected to be incurred in the next rate period of December through
9 November of the following year. The Rule provides for an over or under
10 recovery component as a rolling recovery factor (“RRF”), or a “Joint
11 Agency Asset RRF.” As provided in the Rule, the Company uses deferral
12 accounting and maintains a cumulative balance of costs incurred but not
13 recovered through the Joint Agency Asset rider. This cumulative balance
14 accrues a monthly return as prescribed by the Rule. In determining the
15 annual amount of the rider, the Commission shall allow the Company to
16 recover acquisition costs as reasonable and prudent, and will also decide
17 whether the capital additions and operating costs that the Company seeks to
18 include in its rider are reasonable and prudent and should be recovered in
19 the rider.

20 **Q. I SHOW YOU WHAT HAS BEEN MARKED AS JIGGETTS**
21 **EXHIBITS “SUMMARY RATE” AND A THROUGH L. WOULD**
22 **YOU PLEASE TELL US WHAT THESE ARE?**

1 A. Yes. Accompanying my testimony are a rate summary exhibit and two sets
2 of supporting exhibits that are similar in nature. The set of exhibits labeled
3 A through K “E” addresses “estimated” costs expected to be incurred during
4 the future rate period December 2020 through November 2021. These
5 estimated costs will be adjusted to actual in subsequent annual rider
6 proceedings through the Joint Agency Asset RRF. The set of exhibits
7 labeled A through K “TU” addresses the “true-up” of costs incurred versus
8 revenues realized during the calendar year 2019 test period, and supports
9 the cumulative over collection experienced through the end of the test
10 period. The over collection associated with the test period corresponds to
11 the Joint Agency Asset RRF provided for in Rule R8-70(b)(1)(vi). Finally,
12 Exhibit L shows the total test period fuel savings by customer class as
13 required under Rule R8-70(e)(1)(vi).

14 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR AT YOUR**
15 **DIRECTION AND SUPERVISION?**

16 A. Yes.

17 **Q. PLEASE PROVIDE A SUMMARY DESCRIPTION OF THESE**
18 **EXHIBITS.**

19 A. The following is a high level summary of the purpose of the exhibits;
20 several of the exhibits are discussed in greater detail later in my testimony:
21 SUMMARY RATE – Summarizes the rates for which the Company is
22 requesting approval.

1 Exhibit A series – Computes proposed rates by customer rate schedule for
2 the Joint Agency Asset RRF and for the prospective rate period.

3 Exhibit B series – Summarizes the key components of revenue requirements
4 on which customer rates are based.

5 Exhibit C series – Includes schedules showing the computation of the
6 revenue requirement for the initial acquisition cost of the joint agency
7 assets, by unit, including identification of the portion of the purchase price
8 that is above book value. These schedules compute a revenue requirement
9 amount that is levelized over the remaining life of the assets, in accordance
10 with N.C. Gen. Stat. §62-133.14.

11 Exhibit D series – Includes schedules providing computation of revenue
12 requirements for assets purchased and included as acquisition costs, but
13 which are not included in the acquisition costs to be levelized in Exhibit C.
14 These assets are not depreciated and include minor items such as nuclear
15 fuel, dry cask storage and materials and supplies inventory.

16 Exhibit E series – Includes schedules that compute revenue requirements
17 related to capital additions completed after acquisition of the joint agency
18 assets.

19 Exhibit F series – Shows incremental operating costs that would have been
20 reimbursed by NCEMPA but for the acquisition of the joint agency assets.

21 Exhibit G series – This reduction is no longer applicable in the JAAR
22 following the implementation of new base rates under DEP’s general rate
23 case proceeding, Docket No. E-2, Sub 1142. Computed the reduction in

1 retail revenue requirements resulting from a change in jurisdictional
2 allocation of costs of existing generation facilities owned at the time of the
3 asset acquisition in accordance with N.C. Gen. Stat. §62-133.14.

4 Exhibit H – This exhibit is no longer applicable to test or prospective
5 periods. Computed the monthly revenue requirement to cover the costs
6 incurred in the four-month period between the date of acquisition and the
7 implementation of the Initial Rider (August through November 2015) that
8 the Company was deferring. DEP was amortizing these deferred costs over
9 a three-year period beginning December 1, 2015. The amortization period
10 ended November 30, 2018.

11 Exhibits I, J and K – Includes schedules showing derivation of various
12 factors used to support the calculations in the other exhibits.

13 Exhibit L – Computes total fuel savings for the test period, by customer
14 class, related to the acquisition of the joint power agency generating
15 facilities as required by Rule R8-70(e)(1)(vi.).

16 **Q. WHAT COST RECOVERY ELEMENTS HAS THE COMPANY**
17 **INCORPORATED INTO ITS PROPOSED NEW RATES?**

18 A. The proposed rider incorporates the cost recovery elements identified in
19 N.C. Gen. Stat. §62-133.14(b), which consist of 1) acquisition costs
20 levelized over the useful life of the assets, 2) financing costs using the
21 weighted average cost of capital approved in DEP's most recent general rate
22 case, 3) estimated operating costs and projected capital investments, 4)

1 adjustments to reflect updated jurisdictional allocation factors, and 5)
2 customer allocation methods approved in DEP's last general rate case.

3 **Q. PLEASE EXPLAIN ITEM 4 -- THE ADJUSTMENTS TO REFLECT**
4 **UPDATED JURISDICTIONAL ALLOCATION FACTORS.**

5 A. The adjustments in item 4 had to be included in the JAAR until retail and
6 wholesale cost allocations were adjusted in a North Carolina retail rate case
7 to reflect the change in jurisdictional allocation factors resulting from the
8 additional NCEMPA load that is served by the Company's portfolio of
9 generating facilities. As a consequence of the joint agency asset purchase, a
10 greater portion of the cost of the Company's other generating facilities
11 reflected in DEP's then existing base rates, should have been allocated to its
12 wholesale jurisdiction, while a lesser portion should have been allocated to
13 its retail jurisdictions. The reallocation between retail and wholesale
14 jurisdictions is reflected in the base rates approved as a part of DEP's base
15 rate filing in Docket No. E-2, Sub 1142. As such, the annual revenue
16 reduction will not be included in the JAAR revenue requirements beyond
17 March 16, 2018 (the effective date for new base rates under DEP's most
18 recent rate case). In this filing, the jurisdictional reallocation credit
19 (revenue reduction) is not applicable for the test period January 2019
20 through December 2019 nor the prospective period December 2020 through
21 November 2021.

22 **Q. HOW CAN THE COSTS ALLOWABLE FOR RECOVERY BY THE**
23 **STATUTE BE FURTHER SUBDIVIDED?**

1 A. There are two broad categories of cost that the Company seeks to recover
2 through its JAAR rates. First, the Company seeks to recover its acquisition
3 costs, which are the amounts DEP paid to NCEMPA to acquire the
4 proportional ownership interest in the joint agency assets. The assets
5 purchased include net generating plant and land, construction work in
6 progress associated with the generating plants, net nuclear fuel, and
7 materials and supplies inventory. Within this first category of acquisition
8 costs there are also two subgroups: costs for which the recovery is levelized
9 and costs for which the recovery is not levelized. The recovery of the net
10 nuclear fuel costs, dry cask storage, and materials and supplies inventory
11 acquired is not levelized, while all other acquisition costs are recovered as
12 levelized revenue requirements. Later in my testimony I provide more detail
13 about the levelized revenue requirements.

14 Second, the Company seeks to recover the cost incurred to own and
15 operate the purchased assets after the acquisition date. These costs would
16 previously have been paid by NCEMPA, but now will be recovered by DEP
17 through this rider. The items in this category include the cost of capital
18 additions and non-fuel operating costs from the closing date forward. These
19 represent incremental costs related to ownership of the acquired assets and
20 include the categories of return (i.e., financing cost) and
21 depreciation/amortization expense related to capital additions, operating and
22 maintenance cost, nuclear decommissioning expense, current and deferred
23 income taxes, property taxes, and Commission regulatory fees. This group

1 of costs does not include any costs recoverable under N.C. Gen. Stat. §62-
2 133.2 (i.e., fuel and fuel-related cost).

3 The total of all acquisition costs and non-fuel operating costs post-
4 acquisition for a given period is the revenue requirement that DEP must
5 collect from its North Carolina retail customers through this rider.

6 **Q. WHAT DO YOU MEAN BY “LEVELIZED REVENUE**
7 **REQUIREMENT”?**

8 A. In general terms, levelized requirement represents recovery of certain
9 acquisition costs for the NCEMPA assets, spread evenly over the life of the
10 assets. The revenue requirement associated with the acquisition costs
11 includes financing costs on the investment in generating facilities. The
12 financing costs, comprised of debt and equity return, decline over the life of
13 the facilities as the book value or investment, on which the financing costs
14 are computed, declines through recognition of depreciation. A levelized
15 amount represents an even amount of revenue requirement, rather than an
16 unlevel amount, computed such that the present value of the even revenue
17 requirement stream and the present value of the unlevel revenue
18 requirement stream are equal. N.C. Gen. Stat. §62-133.14 requires that the
19 acquisition costs be levelized over the useful life of the assets at the time of
20 acquisition, for the benefit of consumers. The Company’s calculation of
21 financing costs also reflects the benefit of accumulated deferred income
22 taxes related to accelerated tax depreciation, which represent cost-free funds

1 associated with the purchased assets that reduce the Company's financing
2 costs.

3 The C series exhibits illustrate the calculation of the leveled
4 revenue requirements related to acquisition costs.

5 **Q. YOUR FILED EXHIBITS INCLUDE SEVERAL VERSIONS OF THE**
6 **"C EXHIBITS." PLEASE EXPLAIN THE NEED FOR THESE**
7 **EXHIBITS.**

8 A. For the true-up calculations, the Company intends to file two versions of the
9 C Exhibits each year. One set of Exhibits will support the estimated
10 leveled revenue requirement for the test period. This version of the
11 Exhibits may be revised/restated at the beginning of the year to reflect
12 changes in certain key inputs (e.g., changes that impact the after-tax cost of
13 capital). For test year 2019, there were no revisions to the estimated
14 leveled calculations (as filed on Exhibits C-1-E through C-6-E under
15 Docket No. E-2, Sub 1207). A second set of C Exhibits is included in the
16 C-TU set of work papers to compute the true-up for the difference between
17 the estimated unleveled revenue requirements for the test period compared
18 to the actual requirements for the test period.

19 **Q. WHAT IS THE COMPANY'S APPROACH TO COMPUTING**
20 **TRUE-UPS TO THE LEVELIZED ACQUISITION COSTS?**

21 A. Each year, in order to determine whether a true-up is needed related to the
22 test period being presented, the Company will compare the actual unlevel
23 revenue requirement for the test period year to the original unlevel revenue

1 requirement for the test period year. If there is a difference in the unlevel
2 amounts for the test period, then the Company will include the difference in
3 its determination of the test period true-up (or Joint Agency Asset RRF).
4 For example, in this proceeding the Company has compared the actual
5 unlevel revenue requirement for test period year 2019 to the estimated
6 unlevel revenue requirement for test period 2019 to determine the test
7 period true-up amount that is part of the proposed Joint Agency Asset RRF.
8 In its next annual proceeding in 2021, the Company will compare the actual
9 unlevel revenue requirements for test period 2020 to the original unlevel
10 revenue requirement for 2020 to compute a true-up for the 2020 test period.
11 In this manner, the Company will continue to use the original level revenue
12 requirements for initial billing purposes, accompanied by a subsequent true-
13 up based on the unlevel revenue requirement for each annual test period.

14 **Q. ARE THERE ACQUISITION COSTS NOT INCLUDED IN THE**
15 **LEVELIZED REVENUE REQUIREMENT?**

16 A. Yes. As mentioned previously in my testimony, there are a few cost items
17 included in the original purchase price that are not included in the levelized
18 revenue requirement computations noted above. These items include
19 inventory amounts that are part of the asset acquisition costs, including
20 nuclear fuel inventory, dry cask storage, and materials and supplies
21 inventory. Because these assets are not depreciated, the financing costs for
22 these amounts are calculated on the basis of the investment balances for the
23 test period or rate period.

1 **Q. HOW ARE ACQUISITION COSTS AND INCREMENTAL COSTS**
2 **ALLOCATED TO NORTH CAROLINA RETAIL JURISDICTION?**

3 A. Costs are allocated to the North Carolina retail jurisdiction using the
4 production demand allocation factor from the Company's cost of service
5 studies filed annually with the Commission. This allocation method is
6 consistent with that used in DEP's last general rate case. In most cases the
7 peak demand allocation factor from the 2019 cost of service study has been
8 used to allocate costs to North Carolina retail in this rider filing. In the case
9 of the levelized acquisition costs, the C1 – C6 Estimate TU schedules use
10 the factor from the 2018 cost of service study. As of the beginning of the
11 2019 test period, the 2018 cost of service study was the latest one available.

12 **Q. HOW IS THE NORTH CAROLINA RETAIL REVENUE**
13 **REQUIREMENT ALLOCATED AMONG CUSTOMER CLASSES?**

14 A. The North Carolina retail revenue requirement is allocated among customer
15 classes, as shown on Exhibits A-E and A-TU, using the production demand
16 allocation factors from the Company's 2019 cost of service study. The
17 allocated revenue requirement for each North Carolina retail customer class
18 is then divided by estimated billing units, either kWh or kW, to produce a
19 billing factor per unit.

20 **Q. WHAT IS THE SOURCE OF THE INFORMATION USED TO**
21 **COMPUTE THE COMPANY'S PROPOSED RATES?**

22 A. The information to compute the rider comes from three sources. The
23 acquisition costs for the generating assets purchased are based on the actual

1 amounts paid to NCEMPA to complete the purchase. For actuals associated
2 with nuclear fuel, dry cask storage, materials and supplies inventory, capital
3 additions, and operations and maintenance expenses, the primary source of
4 data is DEP's internal accounting records, including records from the
5 general ledger as well as records from its asset accounting sub ledger. The
6 Company's books, records and reports are subject to review and audit by
7 regulatory agencies, as well as periodic audits by independent auditors to
8 provide assurances that, in all material respects, internal accounting controls
9 are operating effectively and the Company's financial statements are
10 accurate. The estimated costs for the December 2020 through November
11 2021 rate period are based on information from the Company's financial
12 budget. In most cases the data gathered is recorded and captured at a
13 generating unit level, and then multiplied by the unit ownership percentage
14 purchased by DEP to determine the incremental amounts that should be
15 recovered through this rider.

16 **Q. WHAT IS THE RESULT OF THE COMPANY'S CALCULATION**
17 **OF ACTUAL TEST PERIOD COSTS COMPARED TO REVENUES**
18 **REALIZED IN THE TEST PERIOD?**

19 A. During the test period, calendar year 2019, the Company collected revenue
20 that essentially equaled its revenue requirement. The revenue requirement
21 for the test period ended December 31, 2019 was \$147.7M. Revenues
22 collected during the test year were \$139.6M and included the give back of
23 the Joint Agency Asset RRF overcollection pertaining to test year 2017 in

1 the amount of \$9.2M. If the reduction for this overcollection is excluded,
2 revenues collected for 2019 are \$148.8M.

3 **Q. PLEASE PROVIDE ADDITIONAL INFORMATION REGARDING**
4 **THE JOINT AGENCY ASSET RRF BALANCE INCLUDED IN THE**
5 **PROPOSED RATES.**

6 A. As of the test year ended December 31, 2019, the Company has a Joint
7 Agency Asset RRF balance of \$27.6M. This amount is largely comprised
8 of the overcollection for the test year ended December 31, 2018 and the
9 related interest due to customers through the end of 2019. My testimony in
10 Docket No. E-2, Sub 1207 discussed details of the 2018 overcollection, and
11 rates to return the over collected amount were approved by the Commission
12 and went into effect on December 1, 2019. This timing for the return of
13 overcollections is consistent with the timing stipulated by Commission Rule
14 R8-70. Under this rule, results for the calendar year test period are filed
15 with the Commission in June of the subsequent year, and new rates to
16 address the cumulative Joint Agency Asset RRF become effective in
17 December.

18 **Q. HOW DO THE ESTIMATED COSTS FOR THE RATE PERIOD**
19 **DECEMBER 2020 THROUGH NOVEMBER 2021 COMPARE TO**
20 **THE LEVEL OF ESTIMATED COSTS IN CURRENT RATES?**

21 A. The estimated costs in this filing for the rate period December 2020 through
22 November 2021 are higher than the costs that were estimated for the prior
23 rate period December 2019 through November 2020 which are reflected in

1 current rates. The increase in the estimated revenue requirement is due
2 primarily to increases for capital additions which was offset partially by
3 lower operating and maintenance costs. The estimated operating expenses
4 (depreciation) and return on capital additions increased due to more assets
5 going into service. Operation and maintenance expenses decreased due to
6 reduced spending at operating plants as a result of ongoing cost control
7 efforts.

8 **Q. HOW ARE FUEL-RELATED BENEFITS ASSOCIATED WITH THE**
9 **ACQUISITION OF THE JOINT AGENCY ASSETS REFLECTED IN**
10 **CUSTOMER RATES?**

11 A The fuel-related benefits arise from the reduction in system average fuel
12 costs per kilowatt-hour which results from the addition of lower cost
13 generation to DEP's generation portfolio. The actual fuel savings continue
14 to be reflected in DEP's fuel costs and in its subsequently proposed fuel
15 rates. In compliance with Rule R8-70(e)(1)(vi), the Company has included
16 as Exhibit L a report of the actual fuel savings experienced during the test
17 period from January 2019 – December 2019. The exhibit shows a total of
18 \$37 million in savings for the test period.

19 **Q. WHAT IS THE NET IMPACT TO CUSTOMERS OF THE**
20 **PROPOSED CHANGE IN RATES?**

21 A. The requested rate decrease represents a 0.1% decrease in rates for the
22 average residential customer. There is 0.6% and 0.5% increase in rates for
23 the average commercial and industrial customer. The impact of the rate

1 change for a residential customer consuming 1,000 kWh per month is a
2 decrease of \$0.11.

3 **Q. WHAT SPECIFIC REQUEST IS BEING MADE OF THE**
4 **COMMISSION?**

5 A. The Company requests that the Commission approve the following Joint
6 Agency Asset Rider rates, to become effective December 1, 2020. The
7 estimated costs recovered in these rates will be subject to true-up in
8 subsequent annual rider proceedings.

Rate Class	Applicable Schedule(s)	Incremental Rate*
Non-Demand Rate Class (dollars per kilowatt-hour)		
Residential	RES, R-TOUD, R-TOUE, R-TOU	0.00379
Small General Service	SGS, SGS-TOUE	0.00361
Medium General Service	CH-TOUE, CSE, CSG	0.00269
Seasonal and Intermittent Service	SI	0.00066
Traffic Signal Service	TSS, TFS	0.00194
Outdoor Lighting Service	ALS, SLS, SLR, SFLS	
Demand Rate Classes (dollars per kilowatt)		
Medium General Service	MGS, GS-TES, AP-TES, SGS-TOU	1.06
Large General Service	LGS, LGS-TOU	1.56

9 * Incremental Rates, shown above, include North Carolina regulatory fee of 0.140%.

10 **Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

11 A. Yes, it does.

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF JOINT AGENCY ASSET RIDER
LISTING OF EXHIBITS

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EXHIBIT B-E	COST COMPONENTS OF JOINT AGENCY ASSET RIDER
EXHIBIT C-E	SUMMARY OF ANNUAL LEVELIZATION REVENUE TO BE INCLUDED IN THE JOINT AGENCY PURCHASE RIDER
EXHIBIT C-1-E	LEVELIZED COST FOR THE HARRIS NUCLEAR PLANT
EXHIBIT C-2-E	LEVELIZED COST FOR THE BRUNSWICK UNIT 1 NUCLEAR PLANT
EXHIBIT C-3-E	LEVELIZED COST FOR THE BRUNSWICK UNIT 2 NUCLEAR PLANT
EXHIBIT C-4-E	LEVELIZED COST FOR THE MAYO COAL STATION
EXHIBIT C-5-E	LEVELIZED COST FOR THE ROXBORO COAL STATION
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EXHIBIT C-7-E	NET BOOK VALUE OF THE NCEMPA GENERATING ASSETS BY PLANT
EXHIBIT C-8-E	CALCULATION OF REMAINING LIFE OF ASSETS PURCHASED FOR LEVELIZATION
EXHIBIT C-9-E	MACRS TAX DEPRECIATION RATES
EXHIBIT C-10-E	COMPOSITE DEPRECIATION RATES FOR EACH NCEMPA GENERATION ASSET PURCHASED
EXHIBIT C-11-E	BOOK DEPRECIATION EXPENSE FOR EACH NCEMPA GENERATION ASSET PURCHASED
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EXHIBIT D-1B-E	ACCUMULATED DEFERRED INCOME TAXES ASSOCIATED WITH NUCLEAR FUEL SINCE THE DATE OF PURCHASE
EXHIBIT D-1C-E	TAX VERSUS BOOK DEPRECIATION ASSOCIATED WITH NUCLEAR FUEL ADDITIONS SINCE THE DATE OF PURCHASE
EXHIBIT D-2-E	ESTIMATED MATERIALS AND SUPPLIES BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
EXHIBIT D-3-E	DEFERRED TAX ASSET RELATED TO NCEMPA'S NUCLEAR DECOMMISSIONING FUNDS TRANSFERRED TO DEP
EXHIBIT D-4-E	ESTIMATED DRY CASK STORAGE BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF JOINT AGENCY ASSET RIDER
LISTING OF EXHIBITS

EXHIBIT E-E	CALCULATION OF REVENUE REQUIREMENT RELATED TO CAPITAL ADDITIONS TO PLANT IN SERVICE SINCE THE PURCHASE DATE
EXHIBIT E-1-E	ACTUAL CAPITAL ADDITIONS SUMMARY BY GENERATING UNIT FROM DATE OF PURCHASE
EXHIBIT E-2-E	ACTUAL CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH FROM DATE OF PURCHASE THROUGH DECEMBER 31, 2019
EXHIBIT E-3-E	ACTUAL DEPRECIATION EXPENSE on CAPITAL ADDITIONS by GENERATING UNIT by month FROM DATE of PURCHASE through DECEMBER 31, 2019
EXHIBIT E-4-E	ESTIMATED ACCUMULATED DEPRECIATION BALANCES on ACTUAL CAPITAL ADDITIONS by GENERATING UNIT through the end of the RATE PERIOD
EXHIBIT E-5-E	ESTIMATED ACCUMULATED DEFERRED INCOME TAXES on ACTUAL CAPITAL ADDITIONS by GENERATING UNIT through the end of the RATE PERIOD
EXHIBIT E-6-E	ESTIMATED AVERAGE NET INCREMENTAL CAPITAL ADDITIONS BY GENERATING UNIT FOR THE NEXT RATE PERIOD
EXHIBIT E-7-E	ESTIMATED INCREMENTAL CAPITAL ADDITIONS BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
EXHIBIT E-8-E	ESTIMATED ACCUMULATED DEPRECIATION ON CAPITAL ADDITIONS BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
EXHIBIT E-9-E	DEFERRED TAXES ON ESTIMATED CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH THROUGH THE END OF THE NEXT RATE PERIOD
EXHIBIT F-E	CALCULATION OF INCREMENTAL OPERATING EXPENSES AND REDUCTION OF OTHER ELECTRIC REVENUE
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EXHIBIT G-E	NO LONGER NEEDED
EXHIBIT G-1-E	NO LONGER NEEDED
EXHIBIT H-E	NO LONGER NEEDED
EXHIBIT I-E	PRODUCTION DEMAND ALLOCATION FACTORS INCLUDING ADJUSTMENT FOR NCEMPA ADDITIONAL SALES
EXHIBIT J-E	COST OF CAPITAL AND TAX RATES
EXHIBIT K-E	BILLING DETERMINANTS FOR THE TWELVE MONTH PERIOD ENDED NOVEMBER 30, 2021
EXHIBIT A - TU	CALCULATION OF JOINT AGENCY ASSET RIDER
EXHIBIT A-1 -TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
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**SUMMARY OF EXHIBITS
DOCKET E-2, SUB 1253**

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF JOINT AGENCY ASSET RIDER
LISTING OF EXHIBITS

EXHIBIT A-3 -TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - SMALL GENERAL SERVICE
EXHIBIT A-4 -TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - MEDIUM GENERAL SERVICE - kWh BILLED
EXHIBIT A-5 -TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - SEASONAL INTERMITTENT
EXHIBIT A-6 -TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - TRAFFIC SIGNAL
EXHIBIT A-7 -TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - MEDIUM GENERAL SERVICE - kW BILLED
EXHIBIT A-8 -TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - LARGE GENERAL SERVICE CUSTOMER CLASS
EXHIBIT B - TU	CALCULATION OF NC RETAIL NCEMPA RIDER REVENUE for TEST YEAR ENDING DECEMBER 31, 2019
EXHIBIT C - TU	SUMMARY OF REVENUE ASSOCIATED WITH LEVELIZED RECOVERY OF INCREMENTAL COSTS TO BE INCLUDED IN THE JOINT AGENCY PURCHASE RIDER for TEST YEAR ENDING DECEMBER 31, 2019
EXHIBIT C-1 ESTIMATE - TU	LEVELIZED COST FOR THE HARRIS NUCLEAR PLANT - ESTIMATE
EXHIBIT C-1 ACTUAL- TU	LEVELIZED COST FOR THE HARRIS NUCLEAR PLANT - ACTUAL
EXHIBIT C-2 ESTIMATE -TU	LEVELIZED COST FOR THE BRUNSWICK UNIT 1 NUCLEAR PLANT - ESTIMATE
EXHIBIT C-2 ACTUAL -TU	LEVELIZED COST FOR THE BRUNSWICK UNIT 1 NUCLEAR PLANT - ACTUAL
EXHIBIT C-3 ESTIMATE - TU	LEVELIZED COST FOR THE BRUNSWICK UNIT 2 NUCLEAR PLANT - ESTIMATE
EXHIBIT C-3 ACTUAL - TU	LEVELIZED COST FOR THE BRUNSWICK UNIT 2 NUCLEAR PLANT - ACTUAL
EXHIBIT C-4 ESTIMATE - TU	LEVELIZED COST FOR THE MAYO COAL STATION - ESTIMATE
EXHIBIT C-4 ACTUAL - TU	LEVELIZED COST FOR THE MAYO COAL STATION - ACTUAL
EXHIBIT C-5 ESTIMATE -TU	LEVELIZED COST FOR THE ROXBORO COAL STATION - ESTIMATE
EXHIBIT C-5 ACTUAL - TU	LEVELIZED COST FOR THE ROXBORO COAL STATION - ACTUAL
EXHIBIT C-6 ESTIMATE - TU	LEVELIZED COST FOR THE ACQUISITION ADJUSTMENT - ESTIMATE
EXHIBIT C-6 ACTUAL - TU	LEVELIZED COST FOR THE ACQUISITION ADJUSTMENT - ACTUAL
EXHIBIT C-7 - TU	NET BOOK VALUE OF THE NCEMPA GENERATING ASSETS BY PLANT

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF JOINT AGENCY ASSET RIDER
LISTING OF EXHIBITS

EXHIBIT C-8 - TU	CALCULATION OF REMAINING LIFE OF ASSETS PURCHASED FOR LEVELIZATION
EXHIBIT C-9 - TU	MACRS TAX DEPRECIATION RATES
EXHIBIT C-10 - TU	COMPOSITE DEPRECIATION RATES FOR EACH NCEMPA GENERATION ASSET PURCHASED
EXHIBIT C-11 - TU	BOOK DEPRECIATION EXPENSE FOR EACH NCEMPA GENERATION ASSET PURCHASED
EXHIBIT D - TU	CALCULATION OF REVENUE REQUIREMENT FOR ACQUISITION COSTS EXCLUDED FROM THE LEVELIZATION
EXHIBIT D-1A - TU	ACTUAL NET NUCLEAR FUEL BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2019
EXHIBIT D-1B - TU	ACCUMULATED DEFERRED INCOME TAXES ASSOCIATED WITH NUCLEAR FUEL SINCE THE DATE OF PURCHASE
EXHIBIT D-1C - TU	TAX VERSUS BOOK DEPRECIATION ASSOCIATED WITH NUCLEAR FUEL ADDITIONS SINCE THE DATE OF PURCHASE
EXHIBIT D-2 - TU	ACTUAL MATERIALS AND SUPPLIES BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2019
EXHIBIT D-3 - TU	DEFERRED TAX ASSET RELATED TO NCEMPA'S NUCLEAR DECOMMISSIONING FUNDS TRANSFERRED TO DEP
EXHIBIT D-4 - TU	ACTUAL DRY CASK STORAGE BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2019
EXHIBIT E - TU	CALCULATION OF REVENUE REQUIREMENT RELATED TO CAPITAL ADDITIONS TO PLANT IN SERVICE SINCE THE PURCHASE DATE
EXHIBIT E-1 - TU	ACTUAL CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE
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EXHIBIT E-3 - TU	DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE
EXHIBIT E-4 - TU	DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE VINTAGE YEAR 2019 ADDITIONS
EXHIBIT E-5 - TU	DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE VINTAGE YEAR 2018 ADDITIONS
EXHIBIT E-6 - TU	DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE VINTAGE YEAR 2017 ADDITIONS
EXHIBIT E-7 - TU	DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE VINTAGE YEAR 2016 ADDITIONS
EXHIBIT E-8 - TU	DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE VINTAGE YEAR 2015 ADDITIONS
EXHIBIT F - TU	CALCULATION OF INCREMENTAL OPERATING EXPENSES AND REDUCTION OF OTHER ELECTRIC REVENUE
EXHIBIT F-1 - TU	CALCULATION OF INCREMENTAL NUCLEAR DECOMMISSIONING EXPENSE

**SUMMARY OF EXHIBITS
DOCKET E-2, SUB 1253**

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF JOINT AGENCY ASSET RIDER
LISTING OF EXHIBITS

EXHIBIT G - TU	NO LONGER NEEDED
EXHIBIT G-1 - TU	NO LONGER NEEDED
EXHIBIT H - TU	NO LONGER NEEDED
EXHIBIT I - TU	PRODUCTION DEMAND ALLOCATION FACTORS INCLUDING ADJUSTMENT FOR NCEMPA ADDITIONAL SALES
EXHIBIT J - TU	COST OF CAPITAL AND TAX RATES
EXHIBIT K - TU	BILLING DETERMINANTS FOR THE TWELVE MONTH PERIOD ENDED NOVEMBER 30, 2021
EXHIBIT L	FUEL SAVINGS BY CUSTOMER CLASS RELATED TO FACILITIES ACQUIRED FROM NCEMPA

**SUMMARY RATE
DOCKET E-2, SUB 1253**

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF JOINT AGENCY ASSET RIDER - SUMMARY RATE

Line <u>No.</u>	<u>Description</u>	Prospective <u>Rate (a)</u> (Col. A)	Rolling Recovery <u>Factor (b)</u> (Col. B)	Combined <u>Rate</u> (Col. C) = A + B	
Allocation of monthly revenue to customer groups:					
Customers billed based on KWH					
1	Residential	\$ 0.00459	\$ (0.00080)	\$ 0.00379	per KWH
2	Small General Service	\$ 0.00559	\$ (0.00198)	\$ 0.00361	per KWH
3	Medium General Service -KWH	\$ 0.00439	\$ (0.00170)	\$ 0.00269	per KWH
4	Seasonal Intermittent	\$ 0.00468	\$ (0.00402)	\$ 0.00066	per KWH
5	Lighting	\$ -	\$ -	\$ -	per KWH
6	Traffic Signal	\$ 0.00255	\$ (0.00061)	\$ 0.00194	per KWH
Customers billed based on KW					
7	Medium General Service -KW	\$ 1.44	\$ (0.38)	\$ 1.06	per KW
8	Large General Service	\$ 1.50	\$ 0.06	\$ 1.56	per KW

Notes:

- (a) From Exhibit A-E, Col E.
- (b) From Exhibit A-TU, Col J.

EXHIBIT A - E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF JOINT AGENCY ASSET RIDER
FOR DECEMBER 2020 - NOVEMBER 2021

Line No.	Description	Demand Allocation Factors To Customer Classes (b) (Col. A)	NC Retail Amount (Thousands of Dollars) (Col. B)	Demand KW (c) (Col. C)	Energy KWH (c.) (Col. D)	Prospective Rate (Col. E)
1	Total annual revenue for calculation of joint agency asset rider		<u>\$ 154,703</u> (a)			
	Allocation of monthly revenue to customer classes:					
	Customers billed based on KWH					
2	Residential	48.0063%	\$ 74,267		16,171,290,361	\$ 0.00459 per KWH
3	Small General Service	6.4492%	\$ 9,977		1,784,993,077	\$ 0.00559 per KWH
4	Medium General Service -KWH	0.0242%	\$ 37		8,518,624	\$ 0.00439 per KWH
5	Seasonal Intermittent	0.1403%	\$ 217		46,369,127	\$ 0.00468 per KWH
6	Lighting	0.0000%	\$ -			
7	Traffic Signal	0.0077%	\$ 12		4,691,443	\$ 0.00255 per KWH
		<u>54.6277%</u>	<u>\$ 84,511</u>			
	Customers billed based on KW					
8	Medium General Service -KW	29.1495%	\$ 45,095	31,324,056		\$ 1.44 per KW
9	Large General Service	16.2228%	\$ 25,097	16,682,531		\$ 1.50 per KW
		<u>45.3723%</u>	<u>\$ 70,192</u>			
10		<u>100.0000%</u>	<u>\$ 154,703</u>			

Notes:

- (a) From Exhibit B-E, Line 7
- (b) From Exhibit I-E, Column D
- (c) From Exhibit K-E, Billing Determinants for the Twelve Months Ended November 30, 2021

EXHIBIT B - E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
COST COMPONENTS OF JOINT AGENCY ASSET RIDER
CALCULATION OF NC RETAIL NCEMPA ANNUAL RIDER REVENUE
FOR DECEMBER 2020 - NOVEMBER 2021
(Thousands of Dollars)

Line No.	<u>Description</u>	<u>NC Retail Annual Revenue Amount (f) (Col A)</u>
1	Levelized recovery of pretax cost of certain acquisition costs at the purchase date	\$ 56,265 (a)
2	Incremental pretax cost for acquisition costs not included in the levelization of costs	\$ 8,488 (b)
3	Incremental pretax cost for financing and operating costs related to capital additions since the purchase date	\$ 20,660 (c)
4	Incremental pretax cost for operating costs on acquired assets	<u>\$ 69,088 (d)</u>
5	Total annual pre-tax deferred cost for joint agency asset rider (Line 1 + Line 2 + Line 3 + Line 4)	\$ 154,502
6	Regulatory fee (Line 8 / (1 - 0.140%) x 0.140%)	<u>\$ 201 (e)</u>
7	Total annual revenue for calculation of joint agency asset rider (Line 7 + Line 8)	<u>\$ 154,703</u>

Notes:

- (a) From Exhibit C-E, Line 7
- (b) From Exhibit D-E, Line 10
- (c) From Exhibit E-E, Line 13
- (d) From Exhibit F-E, Line 14
- (e) From Exhibit J-E, Line 12, Regulatory fee percentage 0.130%
- (f) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2019 cost of service study of 60.75069%

EXHIBIT C - E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
SUMMARY OF ANNUAL LEVELIZATION REVENUE TO BE INCLUDED IN THE JOINT AGENCY PURCHASE RIDER
FOR DECEMBER 2020 - NOVEMBER 2021
(Thousands of Dollars)

Line No.	<u>Description</u>	Annual NC Retail Revenue Amount (Col A)
1	Levelized Revenue related to purchase of the Harris Nuclear Unit 1	\$ 20,547 (a)
2	Levelized Revenue related to purchase of the Brunswick Nuclear Unit 1	\$ 6,011 (b)
3	Levelized Revenue related to purchase of the Brunswick Nuclear Unit 2	\$ 5,998 (c)
4	Levelized Revenue related to purchase of the Mayo Coal Unit	\$ 4,887 (d)
5	Levelized Revenue related to purchase of the Roxboro Coal Unit	\$ 621 (e)
6	Levelized Revenue related to the Acquisition costs above net book value for the above plants	\$ 18,201 (f)
7	Total annual levelized revenue (Line 1 + Line 2 + Line 3 + Line 4 + Line 5 + Line 6)	<u>\$ 56,265</u>

Notes:

- (a) From Exhibit C-1-E
- (b) From Exhibit C-2-E
- (c) From Exhibit C-3-E
- (d) From Exhibit C-4-E
- (e) From Exhibit C-5-E
- (f) From Exhibit C-6-E

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE HARRIS NUCLEAR PLANT
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

ASSUMPTIONS:	ESTIMATE	REVISIONS FOR 2018	REVISIONS FOR 2019
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 895,848 (a)		
LAND COST AT JULY 31, 2015	\$ 10,289 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 500,188 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$405,929		
RETIREMENT DATE	10/24/2046 (a)		
LEVELIZATION PERIOD IN MONTHS	375 (a)		
TAX LIFE	15 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (c)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.4416% (d)	6.4476% (e)
DEPRECIATION RATE	1.5349% (a)	(d)	
FIRST YEAR BOOK DEPRECIATION RATE	0.6395% (a)		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	1.9440% (d)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (d)	
NC RETAIL ALLOCATION FACTOR	61.52780% (b)		

REVISIONS BASED ON 2018 TEST YEAR ACTUALS & UPDATED COMPOSITE TAX RATE BASED ON CHANGE IN NC CORPORATE TAX RATE

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Beg Balance July 31, 2015	\$ 244,678																
2015	\$ 241,130	5.000%	\$ 11,924	\$ 8,377	\$ 2,945	\$ 2,945	\$ 3,548	\$ 241,431	\$ 2,161	\$ 5,438	\$ 2,949	\$ 14,096		\$ 9,585	\$ 4,511	\$ 4,586	
2016	\$ 232,590	9.500%	\$ 22,778	\$ 14,238	\$ 4,925	\$ 7,870	\$ 8,540	\$ 231,452	\$ 4,971	\$ 12,512	\$ 6,617	\$ 32,641		\$ 22,272	\$ 10,369	\$ 15,655	
2017	\$ 223,776	8.550%	\$ 20,750	\$ 11,936	\$ 249	\$ 8,119	\$ 8,814	\$ 218,467	\$ 4,692	\$ 11,810	\$ 6,087	\$ 31,404		\$ 22,179	\$ 9,225	\$ 26,290	
2018	\$ 215,997	7.700%	\$ 18,745	\$ 10,966	\$ 2,577	\$ 10,696	\$ 7,779	\$ 210,479	\$ 4,183	\$ 10,951	\$ 3,364	\$ 26,276		\$ 20,565	\$ 5,711	\$ 33,963	\$ 31,905
2019	\$ 208,218	6.930%	\$ 16,870	\$ 9,092	\$ 2,107	\$ 12,903	\$ 7,779	\$ 200,358	\$ 3,895	\$ 10,314	\$ 3,111	\$ 25,099	\$ 23,579				
2020	\$ 200,440	6.230%	\$ 15,166	\$ 7,388	\$ 1,712	\$ 14,515	\$ 7,779	\$ 190,670	\$ 3,707	\$ 9,816	\$ 2,960	\$ 24,261	\$ 21,411				
2021	\$ 192,661	5.900%	\$ 14,363	\$ 6,584	\$ 1,526	\$ 16,040	\$ 7,779	\$ 181,273	\$ 3,524	\$ 9,332	\$ 2,814	\$ 23,449	\$ 19,441				
2022	\$ 184,882	5.910%	\$ 14,367	\$ 6,609	\$ 1,531	\$ 17,566	\$ 7,779	\$ 171,968	\$ 3,343	\$ 8,853	\$ 2,670	\$ 22,645	\$ 17,637				
2023	\$ 177,103	5.910%	\$ 14,367	\$ 6,609	\$ 1,531	\$ 19,097	\$ 7,779	\$ 162,661	\$ 3,162	\$ 8,374	\$ 2,525	\$ 21,840	\$ 15,980				
2024	\$ 169,324	5.910%	\$ 14,367	\$ 6,609	\$ 1,531	\$ 20,622	\$ 7,779	\$ 153,354	\$ 2,981	\$ 7,895	\$ 2,381	\$ 21,035	\$ 14,459				
2025	\$ 161,546	5.910%	\$ 14,367	\$ 6,609	\$ 1,531	\$ 22,154	\$ 7,779	\$ 144,047	\$ 2,800	\$ 7,416	\$ 2,236	\$ 20,231	\$ 13,064				
2026	\$ 153,767	5.910%	\$ 14,367	\$ 6,609	\$ 1,526	\$ 23,679	\$ 7,779	\$ 134,740	\$ 2,619	\$ 6,936	\$ 2,092	\$ 19,426	\$ 11,784				
2027	\$ 145,988	5.910%	\$ 14,367	\$ 6,609	\$ 1,531	\$ 25,210	\$ 7,779	\$ 125,433	\$ 2,438	\$ 6,457	\$ 1,947	\$ 18,622	\$ 10,612				
2028	\$ 138,209	5.900%	\$ 14,363	\$ 6,584	\$ 1,526	\$ 26,736	\$ 7,779	\$ 116,125	\$ 2,257	\$ 5,978	\$ 1,803	\$ 17,817	\$ 9,539				
2029	\$ 130,430	5.910%	\$ 14,367	\$ 6,609	\$ 1,531	\$ 28,267	\$ 7,779	\$ 106,818	\$ 2,077	\$ 5,499	\$ 1,658	\$ 17,013	\$ 8,556				
2030	\$ 122,652	2.950%	\$ 7,182	\$ (597)	\$ (138)	\$ 28,129	\$ 7,779	\$ 98,343	\$ 1,912	\$ 5,063	\$ 1,527	\$ 16,280	\$ 7,692				
2031	\$ 114,873	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 26,326	\$ 7,779	\$ 91,535	\$ 1,779	\$ 4,712	\$ 1,421	\$ 15,692	\$ 6,965				
2032	\$ 107,094	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 24,524	\$ 7,779	\$ 85,558	\$ 1,663	\$ 4,405	\$ 1,328	\$ 15,175	\$ 6,327				
2033	\$ 99,315	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 22,722	\$ 7,779	\$ 79,582	\$ 1,547	\$ 4,097	\$ 1,236	\$ 14,658	\$ 5,742				
2034	\$ 91,536	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 20,919	\$ 7,779	\$ 73,605	\$ 1,431	\$ 3,789	\$ 1,143	\$ 14,142	\$ 5,204				
2035	\$ 83,758	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 19,117	\$ 7,779	\$ 67,629	\$ 1,315	\$ 3,482	\$ 1,050	\$ 13,625	\$ 4,710				
2036	\$ 75,979	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 17,315	\$ 7,779	\$ 61,652	\$ 1,199	\$ 3,174	\$ 957	\$ 13,108	\$ 4,257				
2037	\$ 68,200	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 15,512	\$ 7,779	\$ 55,676	\$ 1,082	\$ 2,866	\$ 864	\$ 12,592	\$ 3,842				
2038	\$ 60,421	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 13,710	\$ 7,779	\$ 49,700	\$ 966	\$ 2,559	\$ 772	\$ 12,075	\$ 3,461				
2039	\$ 52,642	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 11,908	\$ 7,779	\$ 43,723	\$ 850	\$ 2,251	\$ 679	\$ 11,558	\$ 3,112				
2040	\$ 44,864	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 10,106	\$ 7,779	\$ 37,747	\$ 734	\$ 1,943	\$ 586	\$ 11,042	\$ 2,793				
2041	\$ 37,085	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 8,303	\$ 7,779	\$ 31,770	\$ 618	\$ 1,636	\$ 493	\$ 10,525	\$ 2,501				
2042	\$ 29,306	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 6,501	\$ 7,779	\$ 25,794	\$ 501	\$ 1,328	\$ 400	\$ 10,009	\$ 2,234				
2043	\$ 21,527	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 4,698	\$ 7,779	\$ 19,817	\$ 385	\$ 1,020	\$ 308	\$ 9,492	\$ 1,990				
2044	\$ 13,748	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 2,896	\$ 7,779	\$ 13,841	\$ 269	\$ 713	\$ 215	\$ 8,975	\$ 1,768				
2045	\$ 5,970	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 1,094	\$ 7,779	\$ 7,864	\$ 153	\$ 405	\$ 122	\$ 8,459	\$ 1,565				
2046	TEN MONTHS \$ (384)	0.000%	\$ -	\$ (6,353)	\$ (1,472)	\$ (379)	\$ 6,353	\$ 2,436	\$ 47	\$ 125	\$ 38	\$ 6,564	\$ 1,141				
TOTAL			\$ 242,780	\$ (2,281)			\$ 245,061		\$ 65,263	\$ 171,148	\$ 58,353	\$ 539,824	\$ 231,365				

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (d) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.

	2018 Ending Deferral	Future Revenue Streams 2019 Forward	Total
Net present value	\$ 31,905	\$ 231,365	\$ 263,270
Annual payment	\$ 2,490	\$ 18,057	\$ 20,547
Monthly payment	\$ 208	\$ 1,505	\$ 1,712

EXHIBIT C-2-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE BRUNSWICK UNIT 1 NUCLEAR PLANT
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

ESTIMATE	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:		
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 273,020 (a)	
LAND COST AT July 31, 2015	\$ 1 (a)	
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 168,091 (a)	
NET PLANT EXCLUDING ACQUISITION COSTS	\$104,930	
RETIREMENT DATE	9/8/2036 (a)	
LEVELIZATION PERIOD IN MONTHS	253 (a)	
TAX LIFE	15 (a)	
COMPOSITE TAX RATE	35.16% (a)	23.50% (c)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.4416% (d)
DEPRECIATION RATE	2.5035% (a)	23.17% (e)
FIRST YEAR BOOK DEPRECIATION RATE	1.0431%	6.4476% (e)
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	
NC RETAIL ALLOCATION FACTOR	61.52780% (b)	

REVISIONS BASED ON 2018 TEST YEAR ACTUALS & UPDATED COMPOSITE TAX RATE BASED ON CHANGE IN NC CORPORATE TAX RATE

NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
								INTEREST (Col I)	EQUITY (Col J)							
Beg Balance July 31, 2015	\$ 63,248															
2015	\$ 61,489	5.000%	\$ 3,162	\$ 1,404	\$ 494	\$ 494	\$ 62,122	\$ 556	\$ 1,399	\$ 759	\$ 4,473		\$ 3,035	\$ 1,438	\$ 1,462	
2016	\$ 57,282	9.500%	\$ 6,041	\$ 1,833	\$ 634	\$ 1,128	\$ 58,575	\$ 1,258	\$ 3,167	\$ 1,675	\$ 10,307		\$ 7,046	\$ 3,261	\$ 4,944	
2017	\$ 53,077	8.550%	\$ 5,503	\$ 1,299	\$ (62)	\$ 1,066	\$ 53,849	\$ 1,157	\$ 2,911	\$ 1,500	\$ 9,772		\$ 7,026	\$ 2,746	\$ 8,131	
2018	\$ 50,230	7.700%	\$ 4,971	\$ 2,124	\$ 499	\$ 1,565	\$ 50,338	\$ 1,001	\$ 2,619	\$ 805	\$ 7,271		\$ 6,014	\$ 1,257	\$ 9,979	\$ 9,374
2019	\$ 47,383	6.930%	\$ 4,474	\$ 1,627	\$ 377	\$ 1,942	\$ 47,053	\$ 915	\$ 2,422	\$ 731	\$ 6,914	\$ 6,496				
2020	\$ 44,536	6.230%	\$ 4,022	\$ 1,175	\$ 272	\$ 2,214	\$ 43,882	\$ 853	\$ 2,259	\$ 681	\$ 6,640	\$ 5,860				
2021	\$ 41,689	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 2,437	\$ 40,787	\$ 793	\$ 2,100	\$ 633	\$ 6,373	\$ 5,284				
2022	\$ 38,842	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 2,660	\$ 37,717	\$ 733	\$ 1,942	\$ 586	\$ 6,107	\$ 4,757				
2023	\$ 35,995	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 2,885	\$ 34,647	\$ 674	\$ 1,784	\$ 538	\$ 5,842	\$ 4,274				
2024	\$ 33,148	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 3,107	\$ 31,576	\$ 614	\$ 1,626	\$ 490	\$ 5,577	\$ 3,833				
2025	\$ 30,302	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 3,332	\$ 28,505	\$ 554	\$ 1,467	\$ 443	\$ 5,311	\$ 3,430				
2026	\$ 27,455	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 3,555	\$ 25,435	\$ 494	\$ 1,309	\$ 395	\$ 5,046	\$ 3,061				
2027	\$ 24,608	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 3,779	\$ 22,364	\$ 435	\$ 1,151	\$ 347	\$ 4,780	\$ 2,724				
2028	\$ 21,761	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 4,002	\$ 19,293	\$ 375	\$ 993	\$ 300	\$ 4,515	\$ 2,417				
2029	\$ 18,914	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 4,227	\$ 16,223	\$ 315	\$ 835	\$ 252	\$ 4,249	\$ 2,137				
2030	\$ 16,067	2.950%	\$ 1,905	\$ (942)	\$ (218)	\$ 4,008	\$ 2,847	\$ 260	\$ 688	\$ 208	\$ 4,003	\$ 1,891				
2031	\$ 13,220	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 3,349	\$ 2,847	\$ 213	\$ 564	\$ 170	\$ 3,795	\$ 1,684				
2032	\$ 10,373	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 2,689	\$ 2,847	\$ 171	\$ 452	\$ 136	\$ 3,606	\$ 1,503				
2033	\$ 7,526	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 2,029	\$ 2,847	\$ 128	\$ 339	\$ 102	\$ 3,417	\$ 1,338				
2034	\$ 4,679	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 1,370	\$ 2,847	\$ 86	\$ 227	\$ 68	\$ 3,228	\$ 1,188				
2035	\$ 1,832	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 710	\$ 2,847	\$ 43	\$ 114	\$ 34	\$ 3,039	\$ 1,050				
2036 NINE MONTHS	\$ (130)	0.000%	\$ -	\$ (1,962)	\$ (455)	\$ 255	\$ 1,962	\$ 368	\$ 7	\$ 19	\$ 1,994	\$ 648				
TOTAL		100.000%	\$ 64,385	\$ 1,007		\$ 63,378		\$ 11,634	\$ 30,388	\$ 10,858	\$ 116,258	\$ 53,575				

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
(c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-E Cost of Capital.
(d) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate.
See Exhibit J-E Cost of Capital.

	2018 Ending	Future Revenue Streams	
	Deferral	2019 Forward	Total
Net present value	\$ 9,374	\$ 53,575	\$ 62,950
Annual payment	\$ 895	\$ 5,116	\$ 6,011
Monthly payment	\$ 75	\$ 426	\$ 501

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE BRUNSWICK UNIT 2 NUCLEAR PLANT
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 218,790 (a)		
LAND COST AT July 31, 2015	\$ 615 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 122,314 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$97,091		
RETIREMENT DATE	12/27/2034 (a)		
LEVELIZATION PERIOD IN MONTHS	233 (a)		
TAX LIFE	15 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (c)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.4416% (d)	6.4476% (e)
DEPRECIATION RATE	2.0153% (a)	(d)	
FIRST YEAR BOOK DEPRECIATION RATE	0.8397%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	1.9440% (d)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (d)	
NC RETAIL ALLOCATION FACTOR	61.52780% (b)		

REVISIONS BASED ON 2018 TEST YEAR ACTUALS & UPDATED COMPOSITE TAX RATE BASED ON CHANGE IN NC CORPORATE TAX RATE

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Beg Balance July 31, 2015	\$ 58,523																
2015	\$ 57,353	5.000%	\$ 2,908	\$ 1,737	\$ 611	\$ 611	\$ 1,170	\$ 57,632	\$ 516	\$ 1,298	\$ 704	\$ 3,688		\$ 2,650	\$ 1,038	\$ 1,056	
2016	\$ 54,573	9.500%	\$ 5,554	\$ 2,774	\$ 960	\$ 1,570	\$ 2,780	\$ 54,872	\$ 1,179	\$ 2,966	\$ 1,569	\$ 8,494		\$ 6,204	\$ 2,290	\$ 3,503	
2017	\$ 51,759	8.550%	\$ 5,060	\$ 2,245	\$ 17	\$ 1,588	\$ 2,814	\$ 51,246	\$ 1,101	\$ 2,770	\$ 1,428	\$ 8,113		\$ 6,185	\$ 1,928	\$ 5,743	
2018	\$ 48,707	7.700%	\$ 4,571	\$ 1,519	\$ 357	\$ 1,945	\$ 3,052	\$ 48,466	\$ 963	\$ 2,522	\$ 775	\$ 7,312		\$ 6,002	\$ 1,309	\$ 7,485	\$ 7,032
2019	\$ 45,655	6.930%	\$ 4,114	\$ 1,062	\$ 246	\$ 2,191	\$ 3,052	\$ 45,113	\$ 877	\$ 2,322	\$ 700	\$ 6,952	\$ 6,531				
2020	\$ 42,603	6.230%	\$ 3,698	\$ 646	\$ 150	\$ 2,341	\$ 3,052	\$ 41,863	\$ 814	\$ 2,155	\$ 650	\$ 6,671	\$ 5,887				
2021	\$ 39,551	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,445	\$ 3,052	\$ 38,684	\$ 752	\$ 1,991	\$ 601	\$ 6,396	\$ 5,303				
2022	\$ 36,499	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,549	\$ 3,052	\$ 35,528	\$ 691	\$ 1,829	\$ 552	\$ 6,123	\$ 4,769				
2023	\$ 33,447	5.910%	\$ 3,508	\$ 456	\$ 106	\$ 2,655	\$ 3,052	\$ 32,371	\$ 629	\$ 1,666	\$ 503	\$ 5,850	\$ 4,280				
2024	\$ 30,396	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,759	\$ 3,052	\$ 29,214	\$ 568	\$ 1,504	\$ 454	\$ 5,577	\$ 3,834				
2025	\$ 27,344	5.910%	\$ 3,508	\$ 456	\$ 106	\$ 2,865	\$ 3,052	\$ 26,057	\$ 507	\$ 1,341	\$ 405	\$ 5,304	\$ 3,425				
2026	\$ 24,292	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,969	\$ 3,052	\$ 22,901	\$ 445	\$ 1,179	\$ 356	\$ 5,032	\$ 3,052				
2027	\$ 21,240	5.910%	\$ 3,508	\$ 456	\$ 106	\$ 3,075	\$ 3,052	\$ 19,744	\$ 384	\$ 1,016	\$ 307	\$ 4,759	\$ 2,712				
2028	\$ 18,188	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 3,179	\$ 3,052	\$ 16,587	\$ 322	\$ 854	\$ 258	\$ 4,486	\$ 2,401				
2029	\$ 15,136	5.910%	\$ 3,508	\$ 456	\$ 106	\$ 3,285	\$ 3,052	\$ 13,430	\$ 261	\$ 691	\$ 209	\$ 4,213	\$ 2,119				
2030	\$ 12,084	2.950%	\$ 1,751	\$ (1,301)	\$ (301)	\$ 2,984	\$ 3,052	\$ 10,476	\$ 204	\$ 539	\$ 163	\$ 3,957	\$ 1,870				
2031	\$ 9,032	0.000%	\$ -	\$ (3,052)	\$ (707)	\$ 2,277	\$ 3,052	\$ 7,928	\$ 154	\$ 408	\$ 123	\$ 3,737	\$ 1,659				
2032	\$ 5,980	0.000%	\$ -	\$ (3,052)	\$ (707)	\$ 1,570	\$ 3,052	\$ 5,583	\$ 109	\$ 287	\$ 87	\$ 3,534	\$ 1,474				
2033	\$ 2,929	0.000%	\$ -	\$ (3,052)	\$ (707)	\$ 862	\$ 3,052	\$ 3,239	\$ 63	\$ 167	\$ 50	\$ 3,332	\$ 1,305				
2034 TWELVE MONTHS	\$ (98)	0.000%	\$ -	\$ (3,027)	\$ (701)	\$ 161	\$ 3,027	\$ 903	\$ 18	\$ 46	\$ 14	\$ 3,105	\$ 1,143				
TOTAL		100.000%	\$ 59,198	\$ 577			\$ 58,621		\$ 10,555	\$ 27,555	\$ 9,903	\$ 102,946	\$ 51,763				

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
(c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
(d) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate.
See Exhibit J-E Cost of Capital.

	2018 Ending	Future Revenue Streams	
	Deferral	2019 Forward	Total
Net present value	\$ 7,032	\$ 51,763	\$ 58,795
Annual payment	\$ 717	\$ 5,281	\$ 5,998
Monthly payment	\$ 60	\$ 440	\$ 500

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE MAYO COAL STATION
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 178,639 (a)		
LAND COST AT July 31, 2015	\$ 3,300 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 100,546 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$81,392		
RETIREMENT DATE	6/20/2035 (a)		
LEVELIZATION PERIOD IN MONTHS	239 (a)		
TAX LIFE	20 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (c)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.4416% (d)	6.4476% (e)
DEPRECIATION RATE	3.0024% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	1.2510%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	1.9440% (d)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (d)	
NC RETAIL ALLOCATION FACTOR	61.52780% (b)		

REVISIONS BASED ON 2018 TEST YEAR ACTUALS & UPDATED COMPOSITE TAX RATE BASED ON CHANGE IN NC CORPORATE TAX RATE

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
									INTEREST (Col I)	EQUITY (Col J)							
Beg Balance July 31, 2015	\$ 49,060																
2015	\$ 47,696	3.750%	\$ 1,765	\$ 401	\$ 141	\$ 141	\$ 1,365	\$ 48,307	\$ 432	\$ 1,088	\$ 590	\$ 3,475		\$ 2,495	\$ 980	\$ 996	
2016	\$ 44,412	7.219%	\$ 3,416	\$ 133	\$ 45	\$ 187	\$ 3,283	\$ 45,890	\$ 986	\$ 2,481	\$ 1,312	\$ 8,062		\$ 5,755	\$ 2,306	\$ 3,457	
2017	\$ 41,104	6.677%	\$ 3,198	\$ (110)	\$ (87)	\$ 100	\$ 3,308	\$ 42,592	\$ 915	\$ 2,303	\$ 1,187	\$ 7,712		\$ 5,737	\$ 1,975	\$ 5,742	
2018	\$ 38,735	6.177%	\$ 2,968	\$ 599	\$ 141	\$ 240	\$ 2,369	\$ 39,750	\$ 790	\$ 2,068	\$ 635	\$ 5,863		\$ 4,891	\$ 972	\$ 7,135	\$ 6,702
2019	\$ 36,366	5.713%	\$ 2,745	\$ 376	\$ 87	\$ 328	\$ 2,369	\$ 37,267	\$ 724	\$ 1,919	\$ 579	\$ 5,591	\$ 5,252				
2020	\$ 33,997	5.285%	\$ 2,539	\$ 170	\$ 39	\$ 367	\$ 2,369	\$ 34,834	\$ 677	\$ 1,793	\$ 541	\$ 5,380	\$ 4,748				
2021	\$ 31,628	4.888%	\$ 2,349	\$ (20)	\$ (5)	\$ 362	\$ 2,369	\$ 32,448	\$ 631	\$ 1,670	\$ 504	\$ 5,174	\$ 4,290				
2022	\$ 29,259	4.522%	\$ 2,173	\$ (196)	\$ (45)	\$ 317	\$ 2,369	\$ 30,104	\$ 585	\$ 1,550	\$ 467	\$ 4,971	\$ 3,872				
2023	\$ 26,890	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ 265	\$ 2,369	\$ 27,784	\$ 540	\$ 1,430	\$ 431	\$ 4,771	\$ 3,491				
2024	\$ 24,521	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ 212	\$ 2,369	\$ 25,467	\$ 495	\$ 1,311	\$ 395	\$ 4,571	\$ 3,142				
2025	\$ 22,152	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ 160	\$ 2,369	\$ 23,150	\$ 450	\$ 1,192	\$ 359	\$ 4,370	\$ 2,822				
2026	\$ 19,783	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ 108	\$ 2,369	\$ 20,834	\$ 405	\$ 1,073	\$ 323	\$ 4,170	\$ 2,530				
2027	\$ 17,414	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ 56	\$ 2,369	\$ 18,517	\$ 360	\$ 953	\$ 287	\$ 3,970	\$ 2,262				
2028	\$ 15,045	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ 4	\$ 2,369	\$ 16,200	\$ 315	\$ 834	\$ 252	\$ 3,769	\$ 2,018				
2029	\$ 12,676	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ (49)	\$ 2,369	\$ 13,883	\$ 270	\$ 715	\$ 216	\$ 3,569	\$ 1,795				
2030	\$ 10,307	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ (101)	\$ 2,369	\$ 11,566	\$ 225	\$ 595	\$ 180	\$ 3,369	\$ 1,592				
2031	\$ 7,938	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ (153)	\$ 2,369	\$ 9,249	\$ 180	\$ 476	\$ 144	\$ 3,169	\$ 1,406				
2032	\$ 5,569	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ (205)	\$ 2,369	\$ 6,933	\$ 135	\$ 357	\$ 108	\$ 2,968	\$ 1,238				
2033	\$ 3,200	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ (257)	\$ 2,369	\$ 4,616	\$ 90	\$ 238	\$ 72	\$ 2,768	\$ 1,084				
2034	\$ 831	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ (310)	\$ 2,369	\$ 2,299	\$ 45	\$ 118	\$ 36	\$ 2,568	\$ 945				
2035 SIX MONTHS	\$ (289)	2.231%	\$ 1,072	\$ (48)	\$ (11)	\$ (321)	\$ 1,120	\$ 586	\$ 11	\$ 30	\$ 9	\$ 1,170	\$ 405				
TOTAL		100.000%	\$ 47,950	\$ (1,399)		\$ 49,349	\$ 492,276	\$ 9,261	\$ 24,194	\$ 8,626	\$ 91,429	\$ 42,890					

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
(c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
(d) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate.
See Exhibit J-E Cost of Capital.

	2018 Ending Deferral	Future Revenue Streams 2019 Forward	Total
Net present value	\$ 6,702	\$ 42,890	\$ 49,593
Annual payment	\$ 660	\$ 4,226	\$ 4,887
Monthly payment	\$ 55	\$ 352	\$ 407

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE ROXBORO COAL STATION
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 72,950 (a)		
LAND COST AT JULY 31, 2015	\$ 1 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 62,539 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$10,412		
RETIREMENT DATE	6/20/2035 (a)	6/20/2033 (e)	
LEVELIZATION PERIOD IN MONTHS	239 (a)	215 (e)	
TAX LIFE	20 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (c)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.596% (a)	6.4416% (d)	6.4476% (f)
DEPRECIATION RATE	1.8678% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	0.7783% (a)		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	1.9440% (d)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (d)	
NC RETAIL ALLOCATION FACTOR	61.52780% (b)		

REVISIONS BASED ON 2018 TEST YEAR ACTUALS & UPDATED COMPOSITE TAX RATE BASED ON CHANGE IN NC CORPORATE TAX RATE

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - O)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Beg Balance July 31, 2015	\$ 6,276																
2015	\$ 6,079	3.750%	\$ 235	\$ 38	\$ 13	\$ 13	\$ 197	\$ 6,171	\$ 55	\$ 139	\$ 75	\$ 467		\$ 395	\$ 72	\$ 73	
2016	\$ 5,604	7.219%	\$ 455	\$ (19)	\$ (7)	\$ 7	\$ 475	\$ 5,831	\$ 125	\$ 315	\$ 167	\$ 1,082		\$ 908	\$ 174	\$ 258	
2017	\$ 5,122	6.677%	\$ 426	\$ (55)	\$ (15)	\$ (8)	\$ 482	\$ 5,366	\$ 115	\$ 290	\$ 149	\$ 1,036		\$ 899	\$ 137	\$ 418	
2018	\$ 4,786	6.177%	\$ 396	\$ 59	\$ 14	\$ 6	\$ 336	\$ 4,956	\$ 99	\$ 258	\$ 79	\$ 772		\$ 622	\$ 150	\$ 602	\$ 566
2019	\$ 4,450	5.713%	\$ 366	\$ 30	\$ 7	\$ 12	\$ 336	\$ 4,609	\$ 90	\$ 237	\$ 72	\$ 735	\$ 690				
2020	\$ 4,114	5.285%	\$ 339	\$ 2	\$ 1	\$ 13	\$ 336	\$ 4,269	\$ 83	\$ 220	\$ 66	\$ 705	\$ 622				
2021	\$ 3,777	4.888%	\$ 313	\$ (23)	\$ (5)	\$ 8	\$ 336	\$ 3,935	\$ 77	\$ 203	\$ 61	\$ 676	\$ 561				
2022	\$ 3,441	4.522%	\$ 290	\$ (47)	\$ (11)	\$ (3)	\$ 336	\$ 3,607	\$ 70	\$ 186	\$ 56	\$ 648	\$ 505				
2023	\$ 3,105	4.462%	\$ 286	\$ (50)	\$ (12)	\$ (15)	\$ 336	\$ 3,282	\$ 64	\$ 169	\$ 51	\$ 620	\$ 454				
2024	\$ 2,769	4.461%	\$ 286	\$ (51)	\$ (12)	\$ (27)	\$ 336	\$ 2,957	\$ 57	\$ 152	\$ 46	\$ 592	\$ 407				
2025	\$ 2,432	4.462%	\$ 286	\$ (50)	\$ (12)	\$ (38)	\$ 336	\$ 2,633	\$ 51	\$ 136	\$ 41	\$ 564	\$ 364				
2026	\$ 2,096	4.461%	\$ 286	\$ (51)	\$ (12)	\$ (50)	\$ 336	\$ 2,308	\$ 45	\$ 119	\$ 36	\$ 536	\$ 325				
2027	\$ 1,760	4.462%	\$ 286	\$ (50)	\$ (12)	\$ (62)	\$ 336	\$ 1,984	\$ 39	\$ 102	\$ 31	\$ 508	\$ 289				
2028	\$ 1,423	4.461%	\$ 286	\$ (51)	\$ (12)	\$ (73)	\$ 336	\$ 1,659	\$ 32	\$ 85	\$ 26	\$ 480	\$ 257				
2029	\$ 1,087	4.462%	\$ 286	\$ (50)	\$ (12)	\$ (85)	\$ 336	\$ 1,335	\$ 26	\$ 69	\$ 21	\$ 452	\$ 227				
2030	\$ 751	4.461%	\$ 286	\$ (51)	\$ (12)	\$ (97)	\$ 336	\$ 1,010	\$ 20	\$ 52	\$ 16	\$ 424	\$ 200				
2031	\$ 415	4.462%	\$ 286	\$ (50)	\$ (12)	\$ (109)	\$ 336	\$ 685	\$ 13	\$ 35	\$ 11	\$ 395	\$ 176				
2032	\$ 78	4.461%	\$ 286	\$ (51)	\$ (12)	\$ (120)	\$ 336	\$ 361	\$ 7	\$ 19	\$ 6	\$ 367	\$ 153				
2033 SIX MONTHS	\$ (81)	4.462%	\$ 286	\$ 127	\$ 29	\$ (91)	\$ 159	\$ 104	\$ 2	\$ 5	\$ 2	\$ 168	\$ 66				
TOTAL		100.000%	\$ 5,964	\$ (393)			\$ 6,357		\$ 1,070	\$ 2,790	\$ 1,010	\$ 11,227	\$ 5,296				

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study.
(c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
(d) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(e) From Exhibit C-8-E, Line 2
(f) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.

	2018 Ending Deferral	Future Revenue Streams 2019 Forward	Total
Net present value	\$ 566	\$ 5,296	\$ 5,861
Annual payment	\$ 60	\$ 561	\$ 621
Monthly payment	\$ 5	\$ 47	\$ 52

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE ACQUISITION ADJUSTMENT
TOTAL COMPANY AMOUNTS (NC RETAIL ALLOCATION FACTORS TO BE APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS)
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:			
ACQUISITION COSTS	\$ 349,802 (a)		
LAST MONTH OF AMORTIZATION	12/31/2042 (a)		
LEVELIZATION PERIOD IN MONTHS	329 (a)		
TAX LIFE	15 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (c)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.4416% (d)	6.4476% (e)
AMORTIZATION RATE	3.6474% (a)		
FIRST YEAR AMORTIZATION RATE	1.5198%		
WEIGHTED INTEREST RATE	2.1479% (a)	1.9440% (d)	
WEIGHTED NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (d)	
NC RETAIL ALLOCATION FACTOR	61.52780% (b)		

REVISIONS BASED ON 2018 TEST YEAR ACTUALS & UPDATED COMPOSITE TAX RATE BASED ON CHANGE IN NC CORPORATE TAX RATE

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK AMORTIZATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Beg Balance July 31, 2015	\$ 210,847																
2015	\$ 207,643	5.000%	\$ 10,542	\$ 7,338	\$ 2,580	\$ 2,580	\$ 3,204	\$ 207,955	\$ 1,861	\$ 4,684	\$ 2,540	\$ 12,290		\$ 8,500	\$ 3,790	\$ 3,853	
2016	\$ 199,911	9.500%	\$ 20,138	\$ 12,406	\$ 4,291	\$ 6,871	\$ 7,732	\$ 199,051	\$ 4,275	\$ 10,761	\$ 5,690	\$ 28,458		\$ 19,824	\$ 8,634	\$ 13,072	
2017	\$ 192,085	8.550%	\$ 18,345	\$ 10,519	\$ 240	\$ 7,112	\$ 7,826	\$ 187,477	\$ 4,027	\$ 10,135	\$ 5,223	\$ 27,211		\$ 19,746	\$ 7,465	\$ 18,067	
2018	\$ 184,235	7.700%	\$ 16,572	\$ 8,722	\$ 2,050	\$ 9,162	\$ 7,850	\$ 180,023	\$ 3,578	\$ 9,366	\$ 2,877	\$ 23,672		\$ 18,219	\$ 5,452	\$ 24,929	\$ 23,419
2019	\$ 176,385	6.930%	\$ 14,915	\$ 7,065	\$ 1,637	\$ 10,798	\$ 7,850	\$ 170,330	\$ 3,311	\$ 8,769	\$ 2,644	\$ 22,574	\$ 21,207				
2020	\$ 168,534	6.230%	\$ 13,409	\$ 5,558	\$ 1,288	\$ 12,086	\$ 7,850	\$ 161,017	\$ 3,130	\$ 8,289	\$ 2,500	\$ 21,769	\$ 19,212				
2021	\$ 160,684	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 13,210	\$ 7,850	\$ 151,961	\$ 2,954	\$ 7,823	\$ 2,359	\$ 20,986	\$ 17,399				
2022	\$ 152,834	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 14,333	\$ 7,850	\$ 142,988	\$ 2,780	\$ 7,361	\$ 2,220	\$ 20,211	\$ 15,741				
2023	\$ 144,984	5.910%	\$ 12,720	\$ 4,870	\$ 1,128	\$ 15,461	\$ 7,850	\$ 134,012	\$ 2,605	\$ 6,899	\$ 2,081	\$ 19,435	\$ 14,220				
2024	\$ 137,134	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 16,585	\$ 7,850	\$ 125,036	\$ 2,431	\$ 6,437	\$ 1,941	\$ 18,659	\$ 12,825				
2025	\$ 129,284	5.910%	\$ 12,720	\$ 4,870	\$ 1,128	\$ 17,713	\$ 7,850	\$ 116,060	\$ 2,256	\$ 5,975	\$ 1,802	\$ 17,883	\$ 11,548				
2026	\$ 121,433	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 18,836	\$ 7,850	\$ 107,084	\$ 2,082	\$ 5,513	\$ 1,662	\$ 17,107	\$ 10,377				
2027	\$ 113,583	5.910%	\$ 12,720	\$ 4,870	\$ 1,128	\$ 19,965	\$ 7,850	\$ 98,108	\$ 1,907	\$ 5,051	\$ 1,523	\$ 16,331	\$ 9,307				
2028	\$ 105,733	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 21,088	\$ 7,850	\$ 89,132	\$ 1,733	\$ 4,589	\$ 1,384	\$ 15,555	\$ 8,328				
2029	\$ 97,883	5.910%	\$ 12,720	\$ 4,870	\$ 1,128	\$ 22,216	\$ 7,850	\$ 80,156	\$ 1,558	\$ 4,126	\$ 1,244	\$ 14,779	\$ 7,433				
2030	\$ 90,033	2.950%	\$ 6,349	\$ (1,501)	\$ (348)	\$ 21,868	\$ 7,850	\$ 71,916	\$ 1,398	\$ 3,702	\$ 1,117	\$ 14,067	\$ 6,646				
2031	\$ 82,183	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 20,049	\$ 7,850	\$ 65,149	\$ 1,267	\$ 3,354	\$ 1,011	\$ 13,482	\$ 5,984				
2032	\$ 74,332	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 18,231	\$ 7,850	\$ 59,117	\$ 1,149	\$ 3,043	\$ 918	\$ 12,961	\$ 5,404				
2033	\$ 66,482	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 16,412	\$ 7,850	\$ 53,086	\$ 1,032	\$ 2,733	\$ 824	\$ 12,439	\$ 4,873				
2034	\$ 58,632	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 14,593	\$ 7,850	\$ 47,055	\$ 915	\$ 2,422	\$ 731	\$ 11,918	\$ 4,386				
2035	\$ 50,782	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 12,774	\$ 7,850	\$ 41,024	\$ 798	\$ 2,112	\$ 637	\$ 11,396	\$ 3,940				
2036	\$ 42,932	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 10,955	\$ 7,850	\$ 34,992	\$ 680	\$ 1,801	\$ 543	\$ 10,875	\$ 3,532				
2037	\$ 35,082	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 9,136	\$ 7,850	\$ 28,961	\$ 563	\$ 1,491	\$ 450	\$ 10,354	\$ 3,159				
2038	\$ 27,231	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 7,317	\$ 7,850	\$ 22,930	\$ 446	\$ 1,180	\$ 356	\$ 9,832	\$ 2,818				
2039	\$ 19,381	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 5,498	\$ 7,850	\$ 16,898	\$ 329	\$ 870	\$ 262	\$ 9,311	\$ 2,507				
2040	\$ 11,531	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 3,680	\$ 7,850	\$ 10,867	\$ 211	\$ 559	\$ 169	\$ 8,790	\$ 2,223				
2041	\$ 3,681	0.000%	\$ -	\$ (7,850)	\$ (1,819)	\$ 1,861	\$ 7,850	\$ 4,836	\$ 94	\$ 249	\$ 75	\$ 8,268	\$ 1,965				
2042	\$ -	0.000%	\$ -	\$ (3,681)	\$ (853)	\$ 1,008	\$ 3,681	\$ 406	\$ 8	\$ 21	\$ 6	\$ 3,716	\$ 829				
		100.000%	\$ 214,641	\$ 3,794			\$ 210,847		\$ 49,377	\$ 129,315	\$ 44,790	\$ 434,330	\$ 195,862				

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
(c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-E Cost of Capital.
(d) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate.
See Exhibit J-E Cost of Capital.

	2018 Ending	Future Revenue Streams	
	Deferral	2019 Forward	Total
Net present value	\$ 23,419	\$ 195,862	\$ 219,281
Annual payment	\$ 1,944	\$ 16,257	\$ 18,201
Monthly payment	\$ 162	\$ 1,355	\$ 1,517

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
NET BOOK VALUE OF THE NCEMPA GENERATING ASSETS BY PLANT
(Thousands of Dollars)

Line No.	Plant	Calculation of Net Book Value as of: 7/31/2015 (Col A)
<u>Gross plant excluding Nuclear Fuel and land</u>		
1	Roxboro Unit 4 (including Roxboro Common)	\$ 72,950
2	Mayo Plant	\$ 178,639
3	Brunswick Unit 1	\$ 273,020
4	Brunswick Unit 2 (including Brunswick Common)	\$ 218,790
5	Harris Plant	\$ 895,848
6	Total NCEMPA gross book value of generation assets purchased	\$ 1,639,247
<u>Land recorded in plant in service</u>		
7	Roxboro Unit 4 (including Roxboro Common)	\$ 1
8	Mayo Plant	\$ 3,300
9	Brunswick Unit 1	\$ 1
10	Brunswick Unit 2 (including Brunswick Common)	\$ 615
11	Harris Plant	\$ 10,269
12	Total NCEMPA book value of land purchased	\$ 14,185
<u>Net Nuclear Fuel</u>		
13	Brunswick Unit 1	\$ 16,582
14	Brunswick Unit 2 (including Brunswick Common)	\$ 24,823
15	Harris Plant	\$ 8,642
16	Net Nuclear Fuel in the Reactor	\$ 50,047
17	Nuclear Fuel CWIP	\$ 33,378
18	Total NCEMPA net book value of Nuclear Fuel	\$ 83,425
<u>Accumulated Depreciation</u>		
19	Roxboro Unit 4 (including Roxboro Common)	\$ (62,539)
20	Mayo Plant	\$ (100,546)
21	Brunswick Unit 1	\$ (168,091)
22	Brunswick Unit 2 (including Brunswick Common)	\$ (122,314)
23	Harris Plant	\$ (500,188)
24	Total NCEMPA book value of accumulated depreciation on assets purchased	\$ (953,678)
<u>CWIP Balance including 2015 expenditures</u>		
25	Roxboro Unit 4 (including Roxboro Common)	\$ 3,018
26	Mayo Plant	\$ (598)
27	Brunswick Unit 1	\$ 18,789
28	Brunswick Unit 2 (including Brunswick Common)	\$ 13,784
29	Harris Plant	\$ 26,787
30	Total NCEMPA book value of CWIP assets acquired	\$ 61,780
<u>Net Book Value including net Nuclear Fuel and CWIP</u>		
31	Roxboro Unit 4 (including Roxboro Common)	\$ 13,430
32	Mayo Plant	\$ 80,795
33	Brunswick Unit 1	\$ 140,300
34	Brunswick Unit 2 (including Brunswick Common)	\$ 135,698
35	Harris Plant	\$ 441,358
36	Nuclear Fuel CWIP	\$ 33,378
37	Total NCEMPA book value of purchased assets	\$ 844,959
38	Materials and Supplies Inventory	\$ 55,815
39	Total NCEMPA book value of purchased assets	\$ 900,773
40	Purchase cost to be recorded as Acquisition Adjustment	\$ 349,802
41	Total Purchase Price of Assets Acquired (see Note)	\$ 1,250,575
Note:		
42	Total purchased price of assets acquired excluding 2015 construction expenditures	\$ 1,200,000
43	Total 2015 construction expenditures included in NCEMPA's book value at July 31, 2015	\$ 50,575
44	Total Purchase price of assets acquired	\$ 1,250,575
45	NCEMPA's nuclear decommissioning trust funds transferred to DEP's trust funds	\$ 261,077
46	NCEMPA's internal nuclear decommissioning funds transferred to DEP's trust funds	\$ 26,000
47	Total	\$ 287,077

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF REMAINING LIFE OF ASSETS PURCHASED FOR LEVELIZATION

Line No.	Plant	Retirement Date (Col A)	Calculation of Remaining Life (months) (Col B)	Calculation of Remaining Life (months) at 12/31/2017 (Col C)
1	Closing Date of Purchase		7/31/2015	
	<u>Generating Plant Description:</u>			
2	Roxboro Unit 4 (including Roxboro Common)	6/20/2033 (a)	214.67 (a)	185.67
3	Mayo Plant	6/20/2035	238.67	209.67
4	Brunswick Unit 1	9/8/2036	253.27	224.27
5	Brunswick Unit 2	12/27/2034	232.90	203.90
6	Harris Plant	10/24/2046	374.80	345.80

Notes:

- (a) The retirement date for Roxboro was updated in DEP's general rate case proceeding under Docket E-2, Sub 1142.

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
MACRS TAX DEPRECIATION RATES
FOR 20 YEAR, 15 YEAR AND 5 YEAR ASSETS

Year from Asset Acquisition	MACRS Annual Rate - 20 Year	MACRS Annual Rate - 15 Year	MACRS Annual Rate - 5 Year
	Applicable to: Mayo and Roxboro (Col A)	Applicable to: Brunswick Nuclear & Harris Nuclear & Acquisition Adjustment (Col B)	Applicable to: Nuclear Fuel (Col C)
1	3.750%	5.000%	20.000%
2	7.219%	9.500%	32.000%
3	6.677%	8.550%	19.200%
4	6.177%	7.700%	11.520%
5	5.713%	6.930%	11.520%
6	5.285%	6.230%	5.760%
7	4.888%	5.900%	
8	4.522%	5.900%	
9	4.462%	5.910%	
10	4.461%	5.900%	
11	4.462%	5.910%	
12	4.461%	5.900%	
13	4.462%	5.910%	
14	4.461%	5.900%	
15	4.462%	5.910%	
16	4.461%	2.950%	
17	4.462%		
18	4.461%		
19	4.462%		
20	4.461%		
21	2.231%		
Total	100.00%	100.00%	100.00%

EXHIBIT C-10-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
COMPOSITE DEPRECIATION RATES FOR EACH NCEMPA GENERATION ASSET PURCHASED

Line No.		Estimated Annual Life Rate (Col A)	Estimated Annual COR Rate (Col B)	Estimated Annual Total Rate (Col C)	
1	Brunswick 1 (including common)	2.9200%	0.0777%	2.9977%	(a)
2	Brunswick 2	2.8636%	0.0729%	2.9365%	(a)
3	Harris	1.9748%	0.0697%	2.0445%	(a)
4	Mayo	3.3470%	0.2632%	3.6102%	(a)
5	Roxboro 4 (excluding common)	1.6948%	0.1320%	1.8268%	(a)
6	Roxboro common	3.1628%	0.2330%	3.3958%	(a)
7	Roxboro combined (including common)	2.3847%	0.1800%	2.5647%	(a)

Notes:

- (a) Depreciation rates were revised in connection with DEP's general rate case under Docket E-2, Sub 1142. Updated composite rates were determined based on the underlying rates as approved by the Commission.

EXHIBIT C-11-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
BOOK DEPRECIATION EXPENSE FOR EACH NCEMPA GENERATION ASSET PURCHASED
STARTING IN 2018

Line No.		Gross Depreciable Plant at Acquisition (Col A) (a)	Cost of Removal Percentage (Col B) (b)	Gross Estimated Cost of Removal Cost (Col C)	NC Retail Share of Cost of Removal (Col D)	NC Retail End of Period Investment Balance at 12/31/ 2017 (Col E) (c)	Total Costs Subject to Recovery (Col F)	Remaining Asset Life (months) (Col G) (d)	Book Depreciation Expense (Col H)
				= A x B	=C x Line 1		= D + E		= F / G * 12 months
1	NC Retail Allocation Factor		61.33723% (e)						
2	Brunswick 1 (including common)	\$ 273,020	0.0777%	\$ 212	\$ 130	\$ 53,077	\$ 53,207	224.27	\$ 2,847
3	Brunswick 2	\$ 218,790	0.0729%	\$ 159	\$ 98	\$ 51,759	\$ 51,857	203.90	\$ 3,052
4	Harris	\$ 895,848	0.0697%	\$ 624	\$ 383	\$ 223,776	\$ 224,159	345.80	\$ 7,779
5	Mayo	\$ 178,639	0.2632%	\$ 470	\$ 288	\$ 41,104	\$ 41,393	209.67	\$ 2,369
6	Roxboro combined (including common)	\$ 72,950	0.1800%	\$ 131	\$ 81	\$ 5,122	\$ 5,203	185.67	\$ 336

Notes:

- (a) From Exhibit C-7-E: Plant Costs, Line 1 - 5.
- (b) From Exhibit C-10-E: Composite Depreciation Rates, Column B
- (c) From Exhibit C-1-E to C-6-E, Column A, NC Retail Investment balance as of 2017.
- (d) From Exhibit C-8-E: Calculation of Remaining Life, Column C.
- (e) From Exhibit I-E: Demand Allocator to NC Retail from 2017 cost of service study as adjusted for NCEMPA Purchase

EXHIBIT D-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF REVENUE REQUIREMENT FOR ACQUISITION COSTS EXCLUDED FROM THE LEVELIZATION
EXCLUDING CWIP
FOR DECEMBER 2020 - NOVEMBER 2021
(Thousands of Dollars)

Line No.		Amount (Col A)
1	Average Net Nuclear Fuel Inventory excluding CWIP	\$ 64,654 (a)
2	Average Deferred Tax Asset (Liability) Associated with Nuclear Fuel	\$ 1,650 (b)
3	Average Materials and Supplies Inventory	\$ 60,000 (c)
4	Average Dry Cask Storage	\$ 3,791 (d)
5	Total average system investment for the rate period (Line 1 + Line 2 + Line 3 + Line 4)	<u>\$ 130,096</u>
6	Allocated to NC retail (Line 5 x 60.75069%)	<u>\$ 79,034 (e)</u>
7	Rate base pre-tax annual cost of capital	8.6440% (f)
8	Total annual NC retail revenues required for financing costs on above investments (Line 6 x Line 7)	<u>\$ 6,832</u>
9	NC retail pre-tax return on deferred tax assets related to NCEMPA's nuclear decommissioning funds	\$ 1,656 (g)
10	Total annual NC retail revenues required for financing costs (Line 8 + Line 9)	<u><u>\$ 8,488</u></u>

Notes:

- (a) From Exhibit D-1A-E: Net Nuclear Fuel, Line 14
- (b) From Exhibit D-1B-E: Accumulated Deferred Taxes Associated with Nuclear Fuel, Line 25
- (c) From Exhibit D-2-E: Materials &Supplies, Line 14
- (d) From Exhibit D-4-E: Dry Cask Storage, Line 14
- (e) From Exhibit I-E: Demand Allocator to NC Retail from 2019 cost of service study of: 60.75069%
- (f) From Exhibit J-E: Cost of Capital, Line 3, Column K
- (g) From Exhibit D-3-E: Deferred tax asset , Column K

EXHIBIT D-1A-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC

NCEMPA GENERATION ASSET PURCHASE

ESTIMATED NET NUCLEAR FUEL BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD

(EXCLUDES NUCLEAR FUEL CWIP BALANCES)

(Thousands of Dollars)

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col C)	Total (Col D)
Next Rate Period: December 2020 - November 2021					
1	November	\$ 37,812	\$ 11,071	\$ 8,469	\$ 57,352
2	December	\$ 37,086	\$ 10,338	\$ 7,684	\$ 55,108
3	January	\$ 36,361	\$ 9,591	\$ 6,870	\$ 52,822
4	February	\$ 35,695	\$ 25,832	\$ 6,145	\$ 67,673
5	March	\$ 34,949	\$ 25,679	\$ 5,357	\$ 65,985
6	April	\$ 34,256	\$ 24,982	\$ 15,647	\$ 74,885
7	May	\$ 33,534	\$ 24,246	\$ 15,349	\$ 73,129
8	June	\$ 32,864	\$ 23,554	\$ 14,608	\$ 71,026
9	July	\$ 32,162	\$ 22,842	\$ 13,858	\$ 68,862
10	August	\$ 31,431	\$ 22,128	\$ 13,091	\$ 66,650
11	September	\$ 30,733	\$ 21,437	\$ 12,367	\$ 64,537
12	October	\$ 30,016	\$ 20,710	\$ 11,615	\$ 62,341
13	November	\$ 29,309	\$ 19,995	\$ 10,833	\$ 60,137
14	Average Balance for Next Rate Period	\$ 33,555	\$ 20,185	\$ 10,915	\$ 64,654

EXHIBIT D-1B-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
ACCUMULATED DEFERRED INCOME TAXES ASSOCIATED WITH NUCLEAR FUEL SINCE THE DATE OF PURCHASE
(Thousands of Dollars)

Line No.	ADIT Expense Associated with Nuclear Fuel			
	Brunswick 1 (Col A) (a)	Brunswick 2 (Col B) (b)	Harris (Col C) (c)	Total (Col D) (d)
Current Rate Period: January 2020 - November 2020				
1	2020 January	\$ (33)	\$ (66)	\$ (74) \$ (172)
2	2020 February	\$ (17)	\$ (45)	\$ (60) \$ (123)
3	2020 March	\$ 122	\$ (57)	\$ (68) \$ (3)
4	2020 April	\$ (17)	\$ (57)	\$ (56) \$ (130)
5	2020 May	\$ (21)	\$ (57)	\$ (63) \$ (140)
6	2020 June	\$ (15)	\$ (50)	\$ (54) \$ (120)
7	2020 July	\$ (14)	\$ (57)	\$ (63) \$ (134)
8	2020 August	\$ (19)	\$ (56)	\$ (57) \$ (132)
9	2020 September	\$ (18)	\$ (53)	\$ (55) \$ (126)
10	2020 October	\$ (23)	\$ (58)	\$ (62) \$ (143)
11	2020 November	\$ (17)	\$ (57)	\$ (66) \$ (141)
Next Rate Period: December 2020 - November 2021				
12	2020 December	\$ (19)	\$ (59)	\$ (67) \$ (144)
13	2021 January	\$ (30)	\$ (37)	\$ (57) \$ (124)
14	2021 February	\$ (16)	\$ (2)	\$ (36) \$ (54)
15	2021 March	\$ (35)	\$ 101	\$ (51) \$ 14
16	2021 April	\$ (23)	\$ (25)	\$ 2 \$ (46)
17	2021 May	\$ (30)	\$ (34)	\$ 63 \$ (1)
18	2021 June	\$ (18)	\$ (24)	\$ (40) \$ (81)
19	2021 July	\$ (25)	\$ (29)	\$ (42) \$ (96)
20	2021 August	\$ (32)	\$ (29)	\$ (46) \$ (107)
21	2021 September	\$ (24)	\$ (24)	\$ (36) \$ (84)
22	2021 October	\$ (28)	\$ (32)	\$ (43) \$ (103)
23	2021 November	\$ (26)	\$ (30)	\$ (49) \$ (105)

ADIT Asset (Liability) Balance Associated with Nuclear Fuel			
Brunswick 1 (Col E)	Brunswick 2 (Col F)	Harris (Col G)	Total (Col H)
Beginning Balance	\$ 20	\$ (532)	\$ 349 \$ (163)
	\$ 53	\$ (466)	\$ 423 \$ 9
	\$ 70	\$ (421)	\$ 483 \$ 132
	\$ (52)	\$ (364)	\$ 551 \$ 135
	\$ (34)	\$ (308)	\$ 607 \$ 265
	\$ (13)	\$ (251)	\$ 670 \$ 406
	\$ 2	\$ (201)	\$ 724 \$ 525
	\$ 16	\$ (144)	\$ 787 \$ 659
	\$ 35	\$ (88)	\$ 844 \$ 792
	\$ 54	\$ (36)	\$ 900 \$ 918
	\$ 76	\$ 23	\$ 961 \$ 1,060
	\$ 94	\$ 80	\$ 1,027 \$ 1,201
	\$ 113	\$ 139	\$ 1,094 \$ 1,346
	\$ 143	\$ 176	\$ 1,151 \$ 1,470
	\$ 159	\$ 177	\$ 1,187 \$ 1,524
	\$ 195	\$ 76	\$ 1,238 \$ 1,509
	\$ 217	\$ 101	\$ 1,237 \$ 1,555
	\$ 247	\$ 136	\$ 1,174 \$ 1,556
	\$ 264	\$ 160	\$ 1,214 \$ 1,638
	\$ 289	\$ 188	\$ 1,256 \$ 1,733
	\$ 321	\$ 217	\$ 1,302 \$ 1,840
	\$ 344	\$ 241	\$ 1,338 \$ 1,924
	\$ 373	\$ 273	\$ 1,381 \$ 2,027
	\$ 399	\$ 303	\$ 1,430 \$ 2,131
Estimated Accumulated Deferred Tax Asset / (Liability) as of November 30, 2021			
	\$ 399	\$ 303	\$ 1,430 \$ 2,131

Average balance for the Next Rate Period	\$ 243	\$ 174	\$ 1,233	\$ 1,650
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Notes:

- (a) Calculated as Column A from Exhibit D-1C-E times the composite tax rate (e)
(b) Calculated as Column B from Exhibit D-1C-E times the composite tax rate (e)
(c) Calculated as Column C from Exhibit D-1C-E times the composite tax rate (e)
(d) Calculated as Column D from Exhibit D-1C-E times the composite tax rate (e)
(e) Composite tax rate from Exhibit J-E, Line 11, Column K 23.17%

EXHIBIT D-1C-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
TAX VERSUS BOOK DEPRECIATION ASSOCIATED WITH NUCLEAR FUEL ADDITIONS SINCE THE DATE OF PURCHASE
(Thousands of Dollars)

Line No.	TAX DEPRECIATION EXPENSE MINUS BOOK AMORTIZATION				TAX BASIS DEPRECIATION EXPENSE ON NUCLEAR FUEL BY MONTH				BOOK AMORTIZATION EXPENSE ON NUCLEAR FUEL BY MONTH					
	Brunswick 1	Brunswick 2	Harris	Total	Brunswick 1	Brunswick 2	Harris	Total	Brunswick 1	Brunswick 2	Harris	Total		
	(Col A)	(Col B)	(Col C)	(Col D)	(Col E)	(Col F)	(Col G)	(Col H)	(Col I)	(Col J)	(Col K)	(Col L)		
= E - I														
= F - J														
= G - K														
= H - L														
Current Rate Period: January 2020 - November 2020														
1	2020	January	\$ (143)	\$ (283)	\$ (318)	\$ (744)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 794	\$ 763	\$ 815	\$ 2,372
3	2020	February	\$ (75)	\$ (194)	\$ (260)	\$ (529)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 726	\$ 674	\$ 757	\$ 2,157
4	2020	March	\$ 525	\$ (245)	\$ (292)	\$ (12)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 126	\$ 725	\$ 789	\$ 1,640
5	2020	April	\$ (75)	\$ (245)	\$ (242)	\$ (562)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 727	\$ 725	\$ 739	\$ 2,190
6	2020	May	\$ (89)	\$ (245)	\$ (272)	\$ (606)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 740	\$ 725	\$ 769	\$ 2,234
7	2020	June	\$ (67)	\$ (217)	\$ (232)	\$ (516)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 718	\$ 697	\$ 729	\$ 2,144
8	2020	July	\$ (62)	\$ (245)	\$ (272)	\$ (579)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 713	\$ 725	\$ 769	\$ 2,207
9	2020	August	\$ (82)	\$ (241)	\$ (248)	\$ (571)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 734	\$ 721	\$ 745	\$ 2,199
10	2020	September	\$ (78)	\$ (227)	\$ (239)	\$ (544)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 730	\$ 706	\$ 736	\$ 2,172
11	2020	October	\$ (99)	\$ (252)	\$ (265)	\$ (616)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 750	\$ 732	\$ 762	\$ 2,244
12	2020	November	\$ (75)	\$ (248)	\$ (286)	\$ (609)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 726	\$ 727	\$ 783	\$ 2,237
Next Rate Period: December 2019 - November 2020														
13	2020	December	\$ (81)	\$ (253)	\$ (288)	\$ (623)	\$ 651	\$ 480	\$ 497	\$ 1,628	\$ 733	\$ 733	\$ 785	\$ 2,251
14	2021	January	\$ (130)	\$ (158)	\$ (246)	\$ (534)	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 732	\$ 747	\$ 814	\$ 2,293
15	2021	February	\$ (71)	\$ (7)	\$ (156)	\$ (234)	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 673	\$ 595	\$ 724	\$ 1,992
16	2021	March	\$ (152)	\$ 435	\$ (221)	\$ 63	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 754	\$ 153	\$ 789	\$ 1,696
17	2021	April	\$ (98)	\$ (109)	\$ 8	\$ (199)	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 699	\$ 697	\$ 560	\$ 1,957
18	2021	May	\$ (127)	\$ (148)	\$ 270	\$ (5)	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 729	\$ 736	\$ 298	\$ 1,763
19	2021	June	\$ (76)	\$ (104)	\$ (172)	\$ (351)	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 678	\$ 692	\$ 740	\$ 2,110
20	2021	July	\$ (106)	\$ (123)	\$ (183)	\$ (412)	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 708	\$ 712	\$ 751	\$ 2,171
21	2021	August	\$ (137)	\$ (126)	\$ (198)	\$ (461)	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 739	\$ 714	\$ 766	\$ 2,219
22	2021	September	\$ (103)	\$ (102)	\$ (157)	\$ (361)	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 705	\$ 690	\$ 725	\$ 2,120
23	2021	October	\$ (122)	\$ (139)	\$ (184)	\$ (444)	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 724	\$ 727	\$ 752	\$ 2,203
24	2021	November	\$ (112)	\$ (127)	\$ (213)	\$ (452)	\$ 602	\$ 588	\$ 568	\$ 1,759	\$ 714	\$ 716	\$ 781	\$ 2,211
25	Total		\$ (1,315)	\$ (959)	\$ (1,739)	\$ (4,014)	\$ 7,271	\$ 6,953	\$ 6,747	\$ 20,972	\$ 8,587	\$ 7,912	\$ 8,486	\$ 24,985

EXHIBIT D-2-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC

NCEMPA GENERATION ASSET PURCHASE

ESTIMATED MATERIALS AND SUPPLIES BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD

(Thousands of Dollars)

Line No.		Brunswick Common (Col A) (a)	Harris (Col B)	Mayo (Col C)	Roxboro Common (Col D) (b)	Total (Col E)
Next Rate Period: December 2020 - November 2021						
1	2020 November	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
2	2021 December	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
3	2021 January	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
4	2021 February	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
5	2021 March	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
6	2021 April	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
7	2021 May	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
8	2021 June	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
9	2021 July	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
10	2021 August	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
11	2021 September	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
12	2021 October	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
13	2021 November	\$ 36,000	\$ 20,000	\$ 2,400	\$ 1,600	\$ 60,000
14	Average Balance for Next Rate Period	<u>\$ 36,000</u>	<u>\$ 20,000</u>	<u>\$ 2,400</u>	<u>\$ 1,600</u>	<u>\$ 60,000</u>

Notes:

(a) Material and supplies inventory is not assigned at the generating unit level. All inventory is assigned to Brunswick Common. Approximately 18.33% of the inventory assigned to Brunswick Common has been captured under this rider.

(b) Material and supplies inventory is not assigned at the generating unit level. All inventory that could be used at the four generating units at Roxboro is assigned to the Roxboro Common. Approximately 3.77% of the inventory assigned to Roxboro Common has been captured under this rider.

EXHIBIT D-3-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
DEFERRED TAX ASSET RELATED TO NCEMPA'S NUCLEAR DECOMMISSIONING FUNDS TRANSFERRED TO DEP
(Thousands of Dollars)

	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Estimate	
ASSUMPTIONS:							
DECOMMISSIONING FUNDS TRANSFERRED	\$ 287,077						(a)
TAX LIFE USED FOR ACQUIRED NCEMPA ASSETS	15						(b)
COMPOSITE TAX RATE	35.16%	34.59%	34.01%	23.50%	23.17%	23.17%	(c)
AFTER TAX COST OF CAPITAL	6.6189%			6.4416%			(c)
WEIGHTED ANNUAL INTEREST RATE	2.1479%			1.9440%			(c)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060%			5.1480%			(c)
NC RETAIL ALLOCATION FACTOR	60.27603%	60.60076%	61.33723%	61.52780%	60.75069%	60.75069%	(d)

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (b) (Col B)	ANNUAL REDUCTION IN TAX DEPRECIATION (Col C)	TAX DEPR. NOT ALLOWED CURRENTLY (Col D)	ANNUAL DEF. TAXES FOR NON DEDUCTIBLE (Col E)	DEFERRED TAX ASSET BALANCE (Col F)	AVERAGE INVESTMENT FOR THE YEAR (Col G)	COST OF CAPITAL		INCOME TAXES (Col J)	NC RETAIL REVENUE (Col K)
								INTEREST (Col H)	EQUITY (Col I)		
Beg Balance July 31, 2015	\$ 173,039										
2015 FIVE MONTHS	\$ -	5.000%	\$ 8,652	\$ 8,652	\$ 3,042	\$ 3,042	\$ 634	\$ 14	\$ 34	\$ 19	\$ 66
2016	\$ -	9.500%	\$ 16,527	\$ 16,527	\$ 5,717	\$ 8,759	\$ 5,900	\$ 127	\$ 319	\$ 169	\$ 614
2017	\$ -	8.550%	\$ 15,055	\$ 15,055	\$ 696	\$ 9,455	\$ 11,128	\$ 239	\$ 602	\$ 310	\$ 1,151
2018	\$ -	7.700%	\$ 13,601	\$ 13,601	\$ 3,196	\$ 12,651	\$ 11,053	\$ 219	\$ 575	\$ 176	\$ 970
2019	\$ -	6.930%	\$ 12,086	\$ 12,086	\$ 2,800	\$ 15,452	\$ 14,051	\$ 273	\$ 723	\$ 218	\$ 1,215
2020	\$ -	6.230%	\$ 10,865	\$ 10,865	\$ 2,517	\$ 17,969	\$ 16,710	\$ 325	\$ 860	\$ 259	\$ 1,444
2021	\$ -	5.900%	\$ 10,290	\$ 10,290	\$ 2,384	\$ 20,353	\$ 19,161	\$ 372	\$ 986	\$ 297	\$ 1,656

Note: The Company will receive a future tax deduction at the time nuclear decommissioning costs are incurred. This schedule shows the annual revenue required for the Company recover the pre-tax financing costs of the deferred tax asset recorded as an offset to the tax depreciation assumed in the levelization schedules.

Notes: (a) From Exhibit C-7-E (c) From Exhibit J-E
(b) From Exhibit C-9-E, Col B. (d) From Exhibit I-E

EXHIBIT D-4 -E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS

NCEMPA GENERATION ASSET PURCHASE

ESTIMATED DRY CASK STORAGE BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD

(Thousands of Dollars)

Line No.		Brunswick Common (Col A) (a)	Total (Col B)
Next Rate Period: December 2020 - November 2021			
1	2020 November	\$ 3,791	\$ 3,791
2	2020 December	\$ 3,791	\$ 3,791
3	2021 January	\$ 3,791	\$ 3,791
4	2021 February	\$ 3,791	\$ 3,791
5	2021 March	\$ 3,791	\$ 3,791
6	2021 April	\$ 3,791	\$ 3,791
7	2021 May	\$ 3,791	\$ 3,791
8	2021 June	\$ 3,791	\$ 3,791
9	2021 July	\$ 3,791	\$ 3,791
10	2021 August	\$ 3,791	\$ 3,791
11	2021 September	\$ 3,791	\$ 3,791
12	2021 October	\$ 3,791	\$ 3,791
13	2021 November	\$ 3,791	\$ 3,791
14	Average Balance for Next Rate Period	<u>\$ 3,791</u>	<u>\$ 3,791</u>

Notes:

- (a) Dry cask storage is not assigned or at the generating unit level. All inventory is assigned to Brunswick Common. Approximately 18.33% of the inventory assigned to Brunswick Common has been captured under this rider.

EXHIBIT E-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF REVENUE REQUIREMENT RELATED TO CAPITAL ADDITIONS TO PLANT IN SERVICE SINCE THE PURCHASE DATE
RELATED TO PURCHASE FROM NCEMPA
(Thousands of Dollars)

Line No.		NC retail Amount (Col A)
1	Average incremental rate base for actual capital additions to plant in service through the end of the next rate period allocated to NCEMPA	\$ 241,646 (a)
2	Average incremental rate base for estimated capital additions to plant in service through the end of the next rate period allocated to NCEMPA	\$ 37,769 (b)
3	Total average net plant in service on capital additions for the next rate period (Line 1 + Line 2)	<u>\$ 279,415</u>
4	Allocation to NC retail (Line 3 x Line 11)	<u>\$ 169,747</u>
5	Pre tax cost of capital on Rate base	8.6440% (c)
6	Total annual NC retail revenues required for cost of capital on above investments (Line 4 x Line 5)	<u>\$ 14,673</u>
Incremental operating expenses related to capital additions:		
7	Annual depreciation expense on actual capital additions for the next rate period	\$ 8,695 (d)
8	Annual depreciation expense on estimated capital additions for the next rate period	\$ 1,161 (e)
9	Other operating expenses related to capital additions for the next rate period	\$ -
10	Total annual operating expenses related to capital additions for the next rate period (Line 7 + Line 8 + Line 9)	<u>\$ 9,856</u>
11	NC retail allocation factor	60.75069% (f)
12	Total annual operating expenses related to capital additions for the next rate period allocated to NC retail (Line 10 x Line 11)	<u>\$ 5,988</u>
13	Total annual NC retail revenues required for financial and operating expenses related to capital additions since the acquisition date (Line 6 + Line 12)	<u><u>\$ 20,660</u></u>

- Notes:
- (a) From Exhibit E-1-E: Summary of Actual Capital Additions, Line 8, Column E
 - (b) From Exhibit E-6-E: Summary of Estimated Capital Additions, Line 8, Column D
 - (c) From Exhibit J-E: Cost of Capital, Line 3, Column K
 - (d) From Exhibit E-4-E, Line 26, Column H
 - (e) From Exhibit E-8-E: Summary of Estimated Accumulated Depreciation, Line 29, Column P
 - (f) From Exhibit I-E: Demand Allocator to NC Retail from 2019 cost of service study as adjusted for NCEMPA Purchase

EXHIBIT E-1-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
ACTUAL CAPITAL ADDITIONS SUMMARY BY GENERATING UNIT FROM DATE OF PURCHASE
(Thousands of Dollars)

Line No.		Cumulative Actual Capital Additions (Col A) (a)	Actual Accumulated Depreciation (Col B) (b)	Accumulated Depreciation Thru End of Next Rate Period (Col C) (c)	Accumulated Deferred Income Taxes Thru End of Next Rate Period (Col D) (d)	Average Rate Base for Actual Capital Additions (Col E) = A + B + C + D
1	Brunswick 1	\$ 96,010	\$ (5,956)	\$ (4,822)	\$ (12,716)	\$ 72,517
2	Brunswick 2	\$ 61,356	\$ (2,879)	\$ (2,413)	\$ (5,718)	\$ 50,346
3	Brunswick Common	\$ -	\$ -	\$ -	\$ -	\$ -
4	Harris	\$ 95,340	\$ (3,589)	\$ (3,296)	\$ (12,447)	\$ 76,009
5	Mayo	\$ 19,069	\$ (532)	\$ (545)	\$ (1,431)	\$ 16,562
6	Roxboro 4	\$ 14,300	\$ (407)	\$ (330)	\$ (1,421)	\$ 12,143
7	Roxboro Common	\$ 16,605	\$ (628)	\$ (551)	\$ (1,356)	\$ 14,070
8	Total	<u>\$ 302,681</u>	<u>\$ (13,991)</u>	<u>\$ (11,956)</u>	<u>\$ (35,089)</u>	<u>\$ 241,646</u>

Notes:

- (a) From Exhibit E-2-E, Line 16
- (b) From Exhibit E-3-E, Line 16
- (c) From Exhibit E-4-E, Line 27
- (d) From Exhibit E-5-E, Column J, Lines 1 - 7

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
ACTUAL CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH FROM DATE OF PURCHASE THROUGH DECEMBER 31, 2019
(Thousands of Dollars)

Line No.	ACTUAL CAPITAL ADDITIONS FOR THE MONTH																	
			Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)		Harris (Col D)		Mayo (Col E)		Roxboro 4 (Col F)		Roxboro Common (Col G)		Total (Col H)			
Prior Rate Period: December 2018 - November 2019																		
1	2019	Beginning Balance	\$	76,722	\$	34,157	\$	-	\$	66,385	\$	4,161	\$	14,144	\$	8,909	\$	204,477
2	2019	January	\$	1,369	\$	322	\$	-	\$	195	\$	116	\$	(8)	\$	1,356	\$	3,348
3	2019	February	\$	101	\$	36			\$	(92)	\$	3	\$	12	\$	89	\$	149
4	2019	March	\$	1,226	\$	1,921	\$	-	\$	449	\$	6,266	\$	15	\$	473	\$	10,350
5	2019	April	\$	463	\$	13,693	\$	-	\$	1,396	\$	2,671	\$	(4)	\$	4,820	\$	23,038
6	2019	May	\$	3,978	\$	1,902	\$	-	\$	75	\$	4,413	\$	66	\$	253	\$	10,688
7	2019	June	\$	2,785	\$	4,228	\$	-	\$	670	\$	110	\$	(8)	\$	177	\$	7,963
8	2019	July	\$	372	\$	339	\$	-	\$	2,082	\$	164	\$	(4)	\$	120	\$	3,074
9	2019	August	\$	233	\$	142	\$	-	\$	64	\$	169	\$	(10)	\$	171	\$	771
10	2019	September	\$	133	\$	(6)	\$	-	\$	941	\$	116	\$	(0)	\$	44	\$	1,228
11	2019	October	\$	606	\$	188	\$	-	\$	1,120	\$	405	\$	(3)	\$	72	\$	2,389
12	2019	November	\$	911	\$	(42)	\$	-	\$	14,553	\$	252	\$	60	\$	57	\$	15,791
13		Total	<u>\$</u>	<u>88,898</u>	<u>\$</u>	<u>56,880</u>	<u>\$</u>	<u>-</u>	<u>\$</u>	<u>87,838</u>	<u>\$</u>	<u>18,847</u>	<u>\$</u>	<u>14,260</u>	<u>\$</u>	<u>16,541</u>	<u>\$</u>	<u>283,264</u>
Current Rate Period: December 2019 - November 2020																		
14	2019	December	\$	7,112	\$	4,475	\$	-	\$	7,502	\$	223	\$	40	\$	65	\$	19,417
15		Total	<u>\$</u>	<u>7,112</u>	<u>\$</u>	<u>4,475</u>	<u>\$</u>	<u>-</u>	<u>\$</u>	<u>7,502</u>	<u>\$</u>	<u>223</u>	<u>\$</u>	<u>40</u>	<u>\$</u>	<u>65</u>	<u>\$</u>	<u>19,417</u>
16		Total to date	<u>\$</u>	<u>96,010</u>	<u>\$</u>	<u>61,356</u>	<u>\$</u>	<u>-</u>	<u>\$</u>	<u>95,340</u>	<u>\$</u>	<u>19,069</u>	<u>\$</u>	<u>14,300</u>	<u>\$</u>	<u>16,605</u>	<u>\$</u>	<u>302,681</u>

DUKE ENERGY PROGRESS, LLC

NCEMPA GENERATION ASSET PURCHASE

ACTUAL DEPRECIATION EXPENSE on CAPITAL ADDITIONS by GENERATING UNIT by month FROM DATE of PURCHASE through DECEMBER 31, 2019

(Thousands of Dollars)

			DEPRECIATION EXPENSE ON ACTUAL CAPITAL ADDITIONS BY MONTH							
Line No.			Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
Prior Rate Period: December 2018 - November 2019										
1	2019	Beginning Balance	\$ 3,114	\$ 1,520	\$ -	\$ 1,873	\$ 237	\$ 165	\$ 283	\$ 7,192
2	2019	January	\$ 195	\$ 77	\$	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
3	2019	February	\$ 200	\$ 76	\$	\$ 133	\$ 12	\$ 20	\$ 22	\$ 463
4	2019	March	\$ 200	\$ 76	\$	\$ 133	\$ 12	\$ 20	\$ 22	\$ 463
5	2019	April	\$ 204	\$ 80	\$	\$ 134	\$ 19	\$ 20	\$ 24	\$ 480
6	2019	May	\$ 206	\$ 117	\$	\$ 138	\$ 26	\$ 20	\$ 31	\$ 537
7	2019	June	\$ 215	\$ 122	\$	\$ 138	\$ 30	\$ 20	\$ 32	\$ 556
8	2019	July	\$ 267	\$ 134	\$	\$ 139	\$ 30	\$ 20	\$ 32	\$ 622
9	2019	August	\$ 268	\$ 135	\$	\$ 143	\$ 30	\$ 20	\$ 32	\$ 628
10	2019	September	\$ 270	\$ 136	\$	\$ 142	\$ 30	\$ 20	\$ 33	\$ 631
11	2019	October	\$ 270	\$ 136	\$	\$ 148	\$ 31	\$ 20	\$ 33	\$ 637
12	2019	November	\$ 272	\$ 135	\$	\$ 150	\$ 31	\$ 20	\$ 33	\$ 642
13		Total	\$ 5,681	\$ 2,744	\$ -	\$ 3,402	\$ 500	\$ 387	\$ 595	\$ 13,309
Current Rate Period: December 2019 - November 2020										
14	2019	December	\$ 274	\$ 135	\$	\$ 187	\$ 32	\$ 20	\$ 33	\$ 682
15		Total	\$ 274	\$ 135	\$ -	\$ 187	\$ 32	\$ 20	\$ 33	\$ 682
16		Total depreciation expense to date	\$ 5,956	\$ 2,879	\$ -	\$ 3,589	\$ 532	\$ 407	\$ 628	\$ 13,991

DUKE ENERGY PROGRESS, LLC

NCEMPA GENERATION ASSET PURCHASE

ESTIMATED ACCUMULATED DEPRECIATION BALANCES on ACTUAL CAPITAL ADDITIONS by GENERATING UNIT through the end of the RATE PERIOD

(Thousands of Dollars)

		ADDITIONAL ESTIMATED DEPRECIATION EXPENSE ON ACTUAL CAPITAL ADDITIONS											
Line No.			Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)		Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)		Total (Col H)	
Current Rate Period: December 2019 - November 2020													
1	2019	December											(a)
2	2020	January	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
3	2020	February	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
4	2020	March	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
5	2020	April	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
6	2020	May	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
7	2020	June	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
8	2020	July	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
9	2020	August	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
10	2020	September	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
11	2020	October	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
12	2020	November	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
13	Total		\$ 3,215	\$ 1,608	\$ -	\$ 2,197	\$ 363	\$ 220	\$ 367	\$ 7,971			
Next Rate Period: December 2020 - November 2021													
14	2020	December	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
15	2021	January	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
16	2021	February	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
17	2021	March	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
18	2021	April	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
19	2021	May	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
20	2021	June	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
21	2021	July	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
22	2021	August	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
23	2021	September	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
24	2021	October	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
25	2021	November	\$ 292	\$ 146	\$ -	\$ 200	\$ 33	\$ 20	\$ 33	\$ 725			
26	Total Estimated Additional Depreciation Expense		\$ 3,507	\$ 1,755	\$ -	\$ 2,397	\$ 396	\$ 240	\$ 400	\$ 8,695			
Average Balance of Accumulated Depreciation on actual capital additions in the next rate period (b)													
27			\$ (4,822)	\$ (2,413)	\$ -	\$ (3,296)	\$ (545)	\$ (330)	\$ (551)	\$ (11,956)			

Notes:

(a) Estimated depreciation expense for December 2019 is not needed for this schedule. Actual depreciation expense for 2019 is captured on E-3-E for rider purposes.

(b) Amount reflects the weighted average ending balance based on monthly activity.

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
ESTIMATED ACCUMULATED DEFERRED INCOME TAXES on ACTUAL CAPITAL ADDITIONS by GENERATING UNIT through the end of the RATE PERIOD
(Thousands of Dollars)

Line No.		Cumulative Additions through December 31, 2016 (Col A) (a)	Deferred Tax Percentage Vintage Years 2015 and 2016 (Col B) (b)	Calculated Deferred Taxes Vintage Years 2015 and 2016 (Col C) = A x B	Cumulative Additions YTD Ending December 31, 2017 (Col D) (c)	Deferred Tax Percentage Vintage Years 2017 (Col E)(b)	Calculated Deferred Taxes Vintage Years 2017 (Col F) = D x E	Cumulative Additions YTD Ending December 31, 2018 (Col G) (d)	Deferred Tax Percentage Vintage Years 2018 (Col H)(b)	Calculated Deferred Taxes Vintage Years 2018 (Col I) = G x H	Cumulative Additions YTD Ending December 31, 2019 (Col J) (e)	Deferred Tax Percentage Vintage Years 2019 (Col K)(b)	Calculated Deferred Taxes Vintage Years 2019 (Col L) = G x H	Total Deferred Taxes (Col J) = C + F + I + L
1	Brunswick 1	\$ 24,007	24%	\$ (5,762)	\$ 21,085	12%	\$ (2,530)	\$ 31,630	10%	\$ (3,163)	\$ 19,288	7%	\$ (1,261)	\$ (12,716)
2	Brunswick 2	\$ 13,753	13%	\$ (1,788)	\$ 16,927	12%	\$ (2,031)	\$ 3,477	9%	\$ (313)	\$ 27,199	6%	\$ (1,586)	\$ (5,718)
3	Brunswick Common	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -
4	Harris	\$ 29,472	16%	\$ (4,716)	\$ 15,466	15%	\$ (2,320)	\$ 21,446	13%	\$ (2,788)	\$ 28,956	9%	\$ (2,623)	\$ (12,447)
5	Mayo	\$ 1,982	14%	\$ (277)	\$ 1,353	12%	\$ (162)	\$ 826	10%	\$ (83)	\$ 14,909	6%	\$ (909)	\$ (1,431)
6	Roxboro 4	\$ 860	14%	\$ (120)	\$ 3,258	12%	\$ (391)	\$ 10,026	9%	\$ (902)	\$ 157	5%	\$ (7)	\$ (1,421)
7	Roxboro Common	\$ 3,360	14%	\$ (470)	\$ 1,055	12%	\$ (127)	\$ 4,494	9%	\$ (404)	\$ 7,696	5%	\$ (355)	\$ (1,356)
7		<u>\$ 73,435</u>		<u>\$ (13,133)</u>	<u>\$ 59,144</u>		<u>\$ (7,561)</u>	<u>\$ 71,899</u>		<u>\$ (7,653)</u>	<u>\$ 95,204</u>		<u>\$ (6,740)</u>	<u>\$ (35,089)</u>

- Notes:
- (a) From Exhibit E-5-E, Col A as filed in E-2, Sub 1176
 - (b) Amounts represent deferred taxes as a percentage of gross capital additions.
 - (c) From Exhibit E-5-E, Col D as filed in E-2, Sub 1176
 - (d) From Exhibit E-5-E, Col I as filed in E-2, Sub 1207
 - (e) From Exhibit E-2-E, Line 16 minus Line 1

EXHIBIT E-6-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC

NCEMPA GENERATION ASSET PURCHASE

ESTIMATED AVERAGE NET INCREMENTAL CAPITAL ADDITIONS BY GENERATING UNIT FOR THE NEXT RATE PERIOD

(Thousands of Dollars)

Line No.		Estimated Average Capital Additions (a) (Col A)	Estimated Average Accumulated Depreciation (b) (Col B)	Estimated Average Accumulated Deferred Tax Asset (Liability) (c) (Col C)	Average Rate Base for Estimated Capital Additions (Col D) = A + B + C
1	Brunswick 1	\$ 29,826	\$ (601)	\$ (1,843)	\$ 27,382
2	Brunswick 2	\$ -	\$ -	\$ -	\$ -
3	Brunswick Common	\$ -	\$ -	\$ -	\$ -
4	Harris	\$ 8,715	\$ (108)	\$ (727)	\$ 7,879
5	Mayo	\$ 1,936	\$ (28)	\$ (106)	\$ 1,802
6	Roxboro 4	\$ 447	\$ (7)	\$ (21)	\$ 420
7	Roxboro Common	\$ 307	\$ (7)	\$ (13)	\$ 287
8	Grand Total	<u>\$ 41,230</u>	<u>\$ (751)</u>	<u>\$ (2,710)</u>	<u>\$ 37,769</u>

Notes:

- (a) From Exhibit E-7-E: Estimated Capital Additions, Line 27
- (b) From Exhibit E-8-E: Estimated Capital Additions, Line 27
- (c) From Exhibit E-9-E: Estimated Capital Additions, Line 53

EXHIBIT E-7-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC

NCEMPA GENERATION ASSET PURCHASE

ESTIMATED INCREMENTAL CAPITAL ADDITIONS BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD

(Thousands of Dollars)

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
Current Rate Period: December 2019 - November 2020									
1	2019 December								(a)
2	2020 January	\$ 1	\$ -	\$ -	\$ 20	\$ -	\$ -	\$ -	\$ 21
3	2020 February	\$ 1	\$ -	\$ -	\$ 16	\$ -	\$ -	\$ -	\$ 16
4	2020 March	\$ 4,516	\$ -	\$ -	\$ 1,732	\$ -	\$ 0	\$ 0	\$ 6,248
5	2020 April	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 30	\$ 11	\$ 44
6	2020 May	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 115	\$ 43	\$ 161
7	2020 June	\$ 10,890	\$ -	\$ -	\$ 1,553	\$ 130	\$ 234	\$ 88	\$ 12,895
8	2020 July	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 5	\$ 2	\$ 10
9	2020 August	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 2	\$ 1	\$ 5
10	2020 September	\$ 3,324	\$ -	\$ -	\$ 1,420	\$ 44	\$ 15	\$ 6	\$ 4,809
11	2020 October	\$ 0	\$ -	\$ -	\$ 2	\$ 42	\$ 21	\$ 8	\$ 73
12	2020 November	\$ 0	\$ -	\$ -	\$ 2	\$ 244	\$ 11	\$ 4	\$ 262
13	Total	\$ 18,731	\$ -	\$ -	\$ 4,754	\$ 460	\$ 434	\$ 164	\$ 24,543
Next Rate Period: December 2020 - November 2021									
14	2020 December	\$ 3,054	\$ -	\$ -	\$ 394	\$ 862	\$ 12	\$ 129	\$ 4,450
15	2021 January	\$ 1,307	\$ -	\$ -	\$ 671	\$ 387	\$ -	\$ -	\$ 2,365
16	2021 February	\$ 1,584	\$ -	\$ -	\$ 706	\$ -	\$ -	\$ -	\$ 2,290
17	2021 March	\$ 4,450	\$ -	\$ -	\$ 706	\$ -	\$ 0	\$ 1	\$ 5,157
18	2021 April	\$ 1,354	\$ -	\$ -	\$ 912	\$ 54	\$ -	\$ -	\$ 2,320
19	2021 May	\$ 1,387	\$ -	\$ -	\$ 1,171	\$ -	\$ 4	\$ 47	\$ 2,610
20	2021 June	\$ 1,199	\$ -	\$ -	\$ 733	\$ 776	\$ 0	\$ 0	\$ 2,708
21	2021 July	\$ 1,277	\$ -	\$ -	\$ 760	\$ -	\$ -	\$ -	\$ 2,037
22	2021 August	\$ 1,283	\$ -	\$ -	\$ 730	\$ -	\$ -	\$ -	\$ 2,013
23	2021 September	\$ 1,280	\$ -	\$ -	\$ 727	\$ 50	\$ 0	\$ 0	\$ 2,057
24	2021 October	\$ 1,299	\$ -	\$ -	\$ 726	\$ -	\$ 1	\$ 12	\$ 2,037
25	2021 November	\$ 1,243	\$ -	\$ -	\$ 823	\$ 360	\$ 2	\$ 22	\$ 2,451
26	Total Estimated Capital Additions	\$ 39,448	\$ -	\$ -	\$ 13,811	\$ 2,950	\$ 454	\$ 375	\$ 57,038
27	Average Balance of Estimated Capital additions in the next rate period (b)	\$ 29,826	\$ -	\$ -	\$ 8,715	\$ 1,936	\$ 447	\$ 307	\$ 41,230

Notes:

- (a) Estimated capital additions for December 2019 are not needed for this schedule. Actual capital additions for December 2019 are captured on E-2-E for rider purposes.
- (b) Amount reflects the weighted average ending balance based on monthly activity.

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
ESTIMATED ACCUMULATED DEPRECIATION ON CAPITAL ADDITIONS BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
(Thousands of Dollars)

Line No.	CAPITAL ADDITIONS								
	Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)	
Current Rate Period: December 2019 - November 2020									
1	2019 December								
2	2020 January	\$ 1	\$ -	\$ 20	\$ -	\$ -	\$ -	\$ 21	
3	2020 February	\$ 1	\$ -	\$ 16	\$ -	\$ -	\$ -	\$ 16	
4	2020 March	\$ 4,516	\$ -	\$ 1,732	\$ -	\$ 0	\$ 0	\$ 6,248	
5	2020 April	\$ 0	\$ -	\$ 3	\$ -	\$ 30	\$ 11	\$ 44	
6	2020 May	\$ 0	\$ -	\$ 3	\$ -	\$ 115	\$ 43	\$ 161	
7	2020 June	\$ 10,890	\$ -	\$ 1,553	\$ 130	\$ 234	\$ 88	\$ 12,895	
8	2020 July	\$ 0	\$ -	\$ 2	\$ -	\$ 5	\$ 2	\$ 10	
9	2020 August	\$ 0	\$ -	\$ 2	\$ -	\$ 2	\$ 1	\$ 5	
10	2020 September	\$ 3,324	\$ -	\$ 1,420	\$ 44	\$ 15	\$ 6	\$ 4,809	
11	2020 October	\$ 0	\$ -	\$ 2	\$ 42	\$ 21	\$ 8	\$ 73	
12	2020 November	\$ 0	\$ -	\$ 2	\$ 244	\$ 11	\$ 4	\$ 262	
13	Total	\$ 18,731	\$ -	\$ -	\$ 4,754	\$ 460	\$ 434	\$ 164	\$ 24,543
Next Rate Period: December 2020 - November 2021									
14	2020 December	\$ 3,054	\$ -	\$ -	\$ 394	\$ 862	\$ 12	\$ 129	\$ 4,450
15	2021 January	\$ 1,307	\$ -	\$ -	\$ 671	\$ 387	\$ -	\$ -	\$ 2,365
16	2021 February	\$ 1,584	\$ -	\$ -	\$ 706	\$ -	\$ -	\$ -	\$ 2,290
17	2021 March	\$ 4,450	\$ -	\$ -	\$ 706	\$ -	\$ 0	\$ 1	\$ 5,157
18	2021 April	\$ 1,354	\$ -	\$ -	\$ 912	\$ 54	\$ -	\$ -	\$ 2,320
19	2021 May	\$ 1,387	\$ -	\$ -	\$ 1,171	\$ -	\$ 4	\$ 47	\$ 2,610
20	2021 June	\$ 1,199	\$ -	\$ -	\$ 733	\$ 776	\$ 0	\$ 0	\$ 2,708
21	2021 July	\$ 1,277	\$ -	\$ -	\$ 760	\$ -	\$ -	\$ -	\$ 2,037
22	2021 August	\$ 1,283	\$ -	\$ -	\$ 730	\$ -	\$ -	\$ -	\$ 2,013
23	2021 September	\$ 1,280	\$ -	\$ -	\$ 727	\$ 50	\$ 0	\$ 0	\$ 2,057
24	2021 October	\$ 1,299	\$ -	\$ -	\$ 726	\$ -	\$ 1	\$ 12	\$ 2,037
25	2021 November	\$ 1,243	\$ -	\$ -	\$ 823	\$ 360	\$ 2	\$ 22	\$ 2,451
26	Total	\$ 39,448	\$ -	\$ -	\$ 13,811	\$ 2,950	\$ 454	\$ 375	\$ 57,038

27 Average Balance of Estimated Accumulated depreciation in the next rate period (b)

28 Depreciation Rate (c)

29 Depreciation expense on estimated capital additions in the next rate period (sum of Lines 14 through 25)

Notes:

(a) Estimated depreciation expense for December 2019 is not needed for this schedule. Actual depreciation expense for 2019 is captured on E-3-E for rider purposes.

(b) Amount reflects the weighted average ending balance based on monthly activity.

(c) From Exhibit C-10-E

DEPRECIATION EXPENSE										
Brunswick 1 (Col I)	Brunswick 2 (Col J)	Brunswick Common (Col K)	Harris (Col L)	Mayo (Col M)	Roxboro 4 (Col N)	Roxboro Common (Col O)	Total (Col P)			
(a)										
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ -			
\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ -			
\$ 11	\$ -	\$ -	\$ 3	\$ -	\$ 0	\$ 0	\$ 14			
\$ 11	\$ -	\$ -	\$ 3	\$ -	\$ 0	\$ 0	\$ 14			
\$ 11	\$ -	\$ -	\$ 3	\$ -	\$ 0	\$ 0	\$ 15			
\$ 38	\$ -	\$ -	\$ 6	\$ 0	\$ 1	\$ 0	\$ 46			
\$ 38	\$ -	\$ -	\$ 6	\$ 0	\$ 1	\$ 0	\$ 46			
\$ 38	\$ -	\$ -	\$ 6	\$ 0	\$ 1	\$ 0	\$ 46			
\$ 47	\$ -	\$ -	\$ 8	\$ 1	\$ 1	\$ 0	\$ 56			
\$ 47	\$ -	\$ -	\$ 8	\$ 1	\$ 1	\$ 0	\$ 57			
\$ 243	\$ -	\$ -	\$ 42	\$ 2	\$ 3	\$ 2	\$ 293			
\$ 47	\$ -	\$ -	\$ 8	\$ 1	\$ 1	\$ 0	\$ 57			
\$ 54	\$ -	\$ -	\$ 9	\$ 4	\$ 1	\$ 1	\$ 69			
\$ 58	\$ -	\$ -	\$ 10	\$ 5	\$ 1	\$ 1	\$ 74			
\$ 62	\$ -	\$ -	\$ 11	\$ 5	\$ 1	\$ 1	\$ 79			
\$ 73	\$ -	\$ -	\$ 12	\$ 5	\$ 1	\$ 1	\$ 92			
\$ 76	\$ -	\$ -	\$ 14	\$ 5	\$ 1	\$ 1	\$ 97			
\$ 80	\$ -	\$ -	\$ 16	\$ 5	\$ 1	\$ 1	\$ 102			
\$ 83	\$ -	\$ -	\$ 17	\$ 8	\$ 1	\$ 1	\$ 109			
\$ 86	\$ -	\$ -	\$ 18	\$ 8	\$ 1	\$ 1	\$ 113			
\$ 89	\$ -	\$ -	\$ 20	\$ 8	\$ 1	\$ 1	\$ 118			
\$ 92	\$ -	\$ -	\$ 21	\$ 8	\$ 1	\$ 1	\$ 123			
\$ 95	\$ -	\$ -	\$ 22	\$ 8	\$ 1	\$ 1	\$ 127			
\$ 1,137	\$ -	\$ -	\$ 221	\$ 72	\$ 11	\$ 13	\$ 1,454			

\$ (601)	\$ -	\$ -	\$ (108)	\$ (28)	\$ (7)	\$ (7)	\$ (751)
2.9977%	2.9365%	0.0000%	2.0445%	3.6102%	1.8268%	3.3958%	
\$ 894	\$ -	\$ -	\$ 178	\$ 70	\$ 8	\$ 10	\$ 1,161

EXHIBIT E-9-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
DEFERRED TAXES ON ESTIMATED CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH THROUGH THE END OF THE NEXT RATE PERIOD
RELATED TO PURCHASE FROM NCEMPA
(Thousands of Dollars)

Line No.	DEFERRED TAX BALANCES							
	Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2019 - 2020 (a)	7%	6%		9%	6%	5%	5%
	Capital Additions							
	2020							
2	Gross Capital Additions in December	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - (b)
3	Gross Capital Additions in January	\$ 1	\$ -	\$ -	\$ 20	\$ -	\$ -	\$ 21 (b)
4	Gross Capital Additions in February	\$ 1	\$ -	\$ -	\$ 16	\$ -	\$ -	\$ 16 (b)
5	Gross Capital Additions in March	\$ 4,516	\$ -	\$ -	\$ 1,732	\$ -	\$ 0	\$ 6,248 (b)
6	Gross Capital Additions in April	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 30	\$ 11 (b)
7	Gross Capital Additions in May	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 115	\$ 43 (b)
8	Gross Capital Additions in June	\$ 10,890	\$ -	\$ -	\$ 1,553	\$ 130	\$ 234	\$ 12,895 (b)
9	Gross Capital Additions in July	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 5	\$ 2 (b)
10	Gross Capital Additions in August	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 2	\$ 1 (b)
11	Gross Capital Additions in September	\$ 3,324	\$ -	\$ -	\$ 1,420	\$ 44	\$ 15	\$ 4,809 (b)
12	Gross Capital Additions in October	\$ 0	\$ -	\$ -	\$ 2	\$ 42	\$ 21	\$ 8 (b)
13	Gross Capital Additions in November	\$ 0	\$ -	\$ -	\$ 2	\$ 244	\$ 11	\$ 4 (b)
	2021							
14	Gross Capital Additions in December	\$ 3,054	\$ -	\$ -	\$ 394	\$ 862	\$ 12	\$ 4,450 (b)
15	Gross Capital Additions in January	\$ 1,307	\$ -	\$ -	\$ 671	\$ 387	\$ -	\$ 2,365 (b)
16	Gross Capital Additions in February	\$ 1,584	\$ -	\$ -	\$ 706	\$ -	\$ -	\$ 2,290 (b)
17	Gross Capital Additions in March	\$ 4,450	\$ -	\$ -	\$ 706	\$ -	\$ 0	\$ 5,157 (b)
18	Gross Capital Additions in April	\$ 1,354	\$ -	\$ -	\$ 912	\$ 54	\$ -	\$ 2,320 (b)
19	Gross Capital Additions in May	\$ 1,387	\$ -	\$ -	\$ 1,171	\$ -	\$ 4	\$ 2,610 (b)
20	Gross Capital Additions in June	\$ 1,199	\$ -	\$ -	\$ 733	\$ 776	\$ 0	\$ 2,708 (b)
21	Gross Capital Additions in July	\$ 1,277	\$ -	\$ -	\$ 760	\$ -	\$ -	\$ 2,037 (b)
22	Gross Capital Additions in August	\$ 1,283	\$ -	\$ -	\$ 730	\$ -	\$ -	\$ 2,013 (b)
23	Gross Capital Additions in September	\$ 1,280	\$ -	\$ -	\$ 727	\$ 50	\$ 0	\$ 2,057 (b)
24	Gross Capital Additions in October	\$ 1,299	\$ -	\$ -	\$ 726	\$ -	\$ 1	\$ 2,037 (b)
25	Gross Capital Additions in November	\$ 1,243	\$ -	\$ -	\$ 823	\$ 360	\$ 2	\$ 2,451 (b)
26	Balance at November 30, 2020	\$ 39,448	\$ -	\$ -	\$ 13,811	\$ 2,950	\$ 454	\$ 375 \$ 57,038
	Deferred Tax Expense / (Benefit) (c)							
	2019							
27	Deferred Taxes in December	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
28	Deferred Taxes in January	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	Deferred Taxes in February	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ 2
30	Deferred Taxes in March	\$ 0	\$ -	\$ -	\$ 1	\$ -	\$ -	\$ 1
31	Deferred Taxes in April	\$ 295	\$ -	\$ -	\$ 157	\$ -	\$ 0	\$ 452
32	Deferred Taxes in May	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 1	\$ 1
33	Deferred Taxes in June	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 5	\$ 5
34	Deferred Taxes in July	\$ 712	\$ -	\$ -	\$ 141	\$ 8	\$ 11	\$ 875
35	Deferred Taxes in August	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 0	\$ 0
36	Deferred Taxes in September	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 0	\$ 0
37	Deferred Taxes in October	\$ 217	\$ -	\$ -	\$ 129	\$ 3	\$ 1	\$ 350
38	Deferred Taxes in November	\$ 0	\$ -	\$ -	\$ 0	\$ 3	\$ 1	\$ 4
39	Total	\$ 1,224	\$ -	\$ -	\$ 431	\$ 13	\$ 20	\$ 1,695
	2020							
40	Deferred Taxes in December	\$ 0	\$ -	\$ -	\$ 0	\$ 15	\$ 1	\$ 0
41	Deferred Taxes in January	\$ 200	\$ -	\$ -	\$ 36	\$ 53	\$ 1	\$ 294
42	Deferred Taxes in February	\$ 85	\$ -	\$ -	\$ 61	\$ 24	\$ -	\$ 170
43	Deferred Taxes in March	\$ 103	\$ -	\$ -	\$ 64	\$ -	\$ -	\$ 167
44	Deferred Taxes in April	\$ 291	\$ -	\$ -	\$ 64	\$ -	\$ 0	\$ 355
45	Deferred Taxes in May	\$ 89	\$ -	\$ -	\$ 83	\$ 3	\$ -	\$ 174
46	Deferred Taxes in June	\$ 91	\$ -	\$ -	\$ 106	\$ -	\$ 0	\$ 199
47	Deferred Taxes in July	\$ 78	\$ -	\$ -	\$ 66	\$ 47	\$ 0	\$ 192
48	Deferred Taxes in August	\$ 83	\$ -	\$ -	\$ 69	\$ -	\$ -	\$ 152
49	Deferred Taxes in September	\$ 84	\$ -	\$ -	\$ 66	\$ -	\$ -	\$ 150
50	Deferred Taxes in October	\$ 84	\$ -	\$ -	\$ 66	\$ 3	\$ 0	\$ 153
51	Deferred Taxes in November	\$ 85	\$ -	\$ -	\$ 66	\$ -	\$ 0	\$ 151
52	Balance at November 30, 2020	\$ 2,497	\$ -	\$ -	\$ 1,177	\$ 158	\$ 21	\$ 16 \$ 3,869
53	Average Balance of Accumulated Deferred Tax Asset (Liability) on actual capital additions in the next rate period (d)	\$ (1,843)	\$ -	\$ -	\$ (727)	\$ (106)	\$ (21)	\$ (13) \$ (2,710)

- Notes:
- (a) Amounts represent deferred taxes as a percentage of gross capital additions.
- (b) From Exhibit E-7-E: Estimated Capital Additions.
- (c) Depreciation commences in the month subsequent to the asset being placed in service. Deferred taxes associated with book versus tax timing difference differences will also commence in the month subsequent to the asset being placed in service.
- (d) Amount reflects the weighted average ending balance based on monthly activity.

EXHIBIT F-E
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF INCREMENTAL OPERATING EXPENSES AND REDUCTION OF OTHER ELECTRIC REVENUE
RESULTING FROM ACQUIRING NCEMPA ASSETS

Line No.	Description	FERC Account Number (Col A)	Annual System Incremental Amount (a) (dollars) (Col B)	Annual Amount (Thousands of dollars) NC Retail (c) (Col C)
1	Roxboro 4 O&M	500-514	\$ 1,354,593	\$ 823
2	Mayo 1 O&M	500-514	\$ 2,588,736	\$ 1,573
3	Brunswick Plant O&M	517-532	\$ 38,404,777	\$ 23,331
4	Harris 1 O&M	517-532	\$ 24,092,654	\$ 14,636
5	A&G Expenses	929	\$ 28,158,423	\$ 17,106
6	Payroll Taxes	408	\$ 3,294,905	\$ 2,002
7	General Plant Return	454	\$ 2,643,636	\$ 1,606
8	Dispatch Fee	456	\$ 35,971	\$ 22
9	Auxiliary Power	447	\$ 603,944	\$ 367
10	Site Representative	456	\$ 4,908	\$ 3
11	NCEMPA Revenue Included in Cost of Service for a Return on Coal Inventory	454	\$ 155,229	\$ 94
12	Property Taxes	408	\$ 7,423,817	\$ 4,510.0202
13	Incremental Nuclear Decommissioning Costs	403		\$ 3,015.0320 (b)
14	Total			\$ 69,088

Notes:

- (a) Annual system amounts on lines 1-11 are estimates of the amounts that would have been billed to NCEMPA for the next rate period.
- (b) From Exhibit F-1-E, Line 7
- (c) Calculated as Column B x NC Retail Allocation from 2019 cost of service study of from Exhibit I -E 60.75069%

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF INCREMENTAL NUCLEAR DECOMMISSIONING EXPENSE
(Dollars)

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col C)	Robinson (Col D)	Total (Col E)
<u>Decommissioning recovered in existing base rates:</u>						
1	NC Retail Nuclear decommissioning expense included in base rates	\$ 8,276,237	\$ 2,497,488	\$ 6,386,945	\$ 2,429,615	\$ 19,590,285
2	NC retail allocation factor used in rate case - 2016 Cost of Service	60.6008%	60.6008%	60.6008%	60.6008%	
3	System Amount including NCEMPA's ownership (Line 7 / Line 8)	\$ 13,656,976	\$ 4,121,213	\$ 10,539,374	\$ 4,009,213	\$ 32,326,776
4	NCEMPA's ownership %	18.33%	18.33%	16.17%	0.00%	
5	Incremental decommissioning related to purchase from NCEMPA (Line 9 * Line 10)	\$ 2,503,324	\$ 755,418	\$ 1,704,217	\$ -	\$ 4,962,959
6	NC retail allocation factor - 2019 Cost of Service	60.7507%	60.7507%	60.7507%	60.7507%	
7	NC retail's incremental nuclear decommissioning expense (Line 11 x Line 12)	\$ 1,520,787	\$ 458,922	\$ 1,035,324	\$ -	\$ 3,015,032

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
PRODUCTION DEMAND ALLOCATION FACTORS INCLUDING ADJUSTMENT FOR NCEMPA ADDITIONAL SALES
Retail Per Books Cost of Service Study - 12 Months Ending December 31, 2019

Line No.	Rate Schedule	Summer CP Demand (KW) (Col A)	Ratio of Each Rate Schedule To Total (Col B)	Rate Class	NC Retail Allocation Factors	
					Percent of System (Col C)	Class Percent of Total NC Retail (Col D)
1	NC RES	3,527,429	0.283229	Residential Class	29.16417%	48.0063%
2	NC RES-TOU	104,780	0.008413	SGS Class	3.91791%	6.4492%
3	NC SGS	482,282	0.038724	MGS Class	17.72321%	29.1737% **
4	NC SGS-CLR	5,669	0.000455	SI Class	0.08524%	0.1403%
5	NC MGS-TOU	1,569,863	0.126049	LGS Class	9.85546%	16.2228%
6	NC MGS	637,449	0.051183	TSS Class	0.00470%	0.0077%
7	NC SI	10,617	0.000852	ALS Class	0.00000%	0.0000%
8	NC LGS	176,647	0.014184	SLS Class	0.00000%	0.0000%
9	NC LGS-TOU	236,639	0.019000	SFLS Class	0.00000%	0.0000%
10	NC LGS-RTP	814,148	0.065371	Total	60.75069%	100.0000%
11	NC TSS	586	0.000047			
12	NC ALS	-	0.000000			
13	NC SLS	-	0.000000			
14	NC SFLS	-	0.000000			
15	Total NCR	7,566,109	0.607507			
16	Total NCWHS incl. NCEMPA	3,643,704	0.292565	**Allocation of MGS Class between kW and kWh billed customers		
				MGS Class - billed on kWh basis	0.08%	0.0242% Note 2
				MGS Class - billed on kW basis	99.92%	29.1495% Note 2
17	Total NC	11,209,813	0.900072			29.1737%
18	SC RES	469,477	0.037696			
19	SC RET	9,126	0.000733			
20	SC SGS	70,598	0.005669			
21	SC SGS-CLR	704	0.000057			
22	SC MGS-TOU	213,833	0.017169			
23	SC MGS	121,250	0.009736			
24	SC SI	3,573	0.000287			
25	SC LGS	99,186	0.007964			
26	SC LGS-TOU	37,176	0.002985			
27	SC LGS-CRTL-TOU	110,463	0.008869			
28	SC LGS-RTP	61,620	0.004948			
29	SC TSS	107	0.000009			
30	SC ALS	-	0.000000			
31	SC SLS	-	0.000000			
32	SC SFLS	-	0.000000			
33	Total SCR	1,197,112	0.096120			
34	SCWHS (Camden)	47,433	0.003809			
35	Total SC	1,244,545	0.099928			
36	Total System with NCEMPA retained capacity	12,454,358	1.000000			

NC Retail Allocation Factor After the Purchase

Total NC Retail Summer CP Demand (Line 15)	7,566,109	60.75069%
Total System with NCEMPA retained capacity (Line 45)	12,454,358	

Note 1: Excludes NCEMC Peaking Capacity

Note 2: Allocated between kW and kWh billed customers using billing determinants. See Notes on Exhibit K-E.

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
COST OF CAPITAL AND TAX RATES

	(Col A)	(Col B)	(Col C)	(Col D)	(Col E)	(Col F)	(Col G)	(Col H)	(Col I)	(Col J)	(Col K)
COST OF CAPITAL APPROVED BY THE NCUC IN DUKE ENERGY PROGRESS, LLC' LAST RATE CASE IN DOCKET NO. E-2, SUB 1142 DATED FEBRUARY 23, 2018:											
Line No.	ITEM	CAPITALIZATION RATIO	APPROVED COST RATE	2018 WEIGHTED COST OF CAPITAL			CAPITALIZATION RATIO	APPROVED COST RATE	2019 & 2020 WEIGHTED COST OF CAPITAL		
				RATE OF RETURN	AFTER TAX	BEFORE TAX			RATE OF RETURN	AFTER TAX	BEFORE TAX
1	LONG TERM DEBT	48.00%	4.05%	1.9440%	1.4872%	1.9440%	48.00%	4.05%	1.9440%	1.4936%	1.9440%
2	COMMON STOCK EQUITY	52.00%	9.90%	5.1480%	5.1480%	6.7300%	52.00%	9.90%	5.1480%	5.1480%	6.7000%
3	TOTAL	100.00%		7.0920%	6.6352%	8.6740%	100.00%		7.0920%	6.6416%	8.6440%
4	Discounted annual rate to convert monthly to annual compounding				6.4416%	8.4200%				6.4476%	8.3900%
5	Discounted monthly rate to convert monthly to annual compounding				0.5368%					0.5373%	
<u>CALCULATION OF COMPOSITE INCOME TAX RATES:</u>											
6	FEDERAL INCOME TAX RATE			2018 Statutory Rate	State Apportionment Factor	2018 Weighted Tax Rate			2019 - 2020 Statutory Rate	State Apportionment Factor	2019 - 2020 Weighted Tax Rate
				21.00%		21.00%			21.00%		21.00%
7	STATE INCOME TAX RATE:										
8	NC			3.000%	84.6380%	2.5391%			2.500%	84.6380%	2.1160%
9	SC			5.000%	12.6000%	0.6300%			5.000%	12.6000%	0.6300%
9	Weighted state income tax rate					3.1691%					2.7460%
10	Federal production tax deduction percentage					0.0000%					0.0000%
11	Total composite federal and state income tax rate					23.50%					23.17%
12	NCUC REGULATORY FEE RATE										
	January 2018 - June 2019		0.140%					0.140%			
	July 2019 Forward							0.130%			

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
BILLING DETERMINANTS FOR THE TWELVE MONTH PERIOD ENDED NOVEMBER 30, 2021

	(Col A)	(Col B)	(Col C)	(Col D)	(Col E)
Line No.	Rate Class	Schedule	Billing Metric	Billing Determinants (kWh)	Billing Determinants (kW)
1	Residential Class	RES	kWh Energy Units	12,519,195,775	
2	Residential Class	RES (EC)	kWh Energy Units	3,199,667,411	
3	Residential Class	R-TOU	kWh Energy Units	37,605,733	
4	Residential Class	R-TOU (EC)	kWh Energy Units	17,240,606	
5	Residential Class	R-TOUD	kWh Energy Units	235,158,424	
6	Residential Class	R-TOUD (EC)	kWh Energy Units	162,422,413	
7	Residential Class	R-TOUE	kWh Energy Units	0	
8	Residential Class	R-TOUE (EC)	kWh Energy Units	0	
9	Total Residential			(a) 16,171,290,361	
10	SGS Class	SGS	kWh Energy Units	1,740,034,450	
11	SGS Class	SGS-TOU-CLR	kWh Energy Units	41,392,405	
12	SGS Class	SGS-TOUE	kWh Energy Units	3,566,223	
13	Total SGS			(a) 1,784,993,077	
14	MGS Class	APH-TES	kW Demand Units		2,536
15	MGS Class	CH-TOUE	kWh Energy Units	7,448,992	
16	MGS Class	CSE	kWh Energy Units	1,053,681	
17	MGS Class	CSG	kWh Energy Units	15,951	
18	MGS Class	SGS-TES	kW Demand Units		42,245
19	MGS Class	SGS-TOU	kW Demand Units		19,334,671
20	MGS Class	MGS	kW Demand Units		11,944,605
21	Total MGS			(a) 8,518,624	31,324,056
22	LGS Class	LGS	kW Demand Units		2,430,721
23	LGS Class	LGS-RTP	kW Demand Units		40,111
24	LGS Class	LGS-RTP-TOU	kW Demand Units		11,004,503
25	LGS Class	LGS-TOU	kW Demand Units		3,207,196
26	Total LGs			(a)	16,682,531
27	SI Class	SI	kWh Energy Units	(b) 46,369,127	
28	TSS Class	TFS	kWh Energy Units	187,098	
29	TSS Class	TSS	kWh Energy Units	4,504,345	
30	Total TSS			(b) 4,691,443	
31	Total All Rates			18,015,862,633	48,006,587

NOTES:

KWh sales for MGS-kWh billed	8,518,624	0.08%
KWh sales for MGS-kW billed	10,279,230,282	99.92%
Total MGS Class KWH Sales for the Year were:	10,287,748,906	

Notes:

- (a) Source: 2020 Spring Sales Forecast
- (b) Source: Monthly CIM Query of Billing Determinants for the twelve month period ended March 31, 2020.

EXHIBIT A - TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF JOINT AGENCY ASSET RIDER

Line No.	Description	Demand Allocation Factors To Customer Classes (e) (Col. A)	Rolling Recovery Factor as of Beginning of Year (Thousands of Dollars) (Col. B)	Revenue Required NC Retail Amount Current Year (Thousands of Dollars) (Col. C)	Revenue Collected NC Retail Amount Current Year (Thousands of Dollars) (Col. D)	Revenue Under / (Over) Collected NC Retail Amount Current Year (Thousands of Dollars) (Col. E) = C - D	Return on Deferred Balance Current Year (Thousands of Dollars) (Col. F)	Rolling Recovery Factor as of End of Year (Thousands of Dollars) (Col. G) =B + E + F	Demand KW (f) (Col. H)	Energy KWH (f) (Col. I)	Rate Rider (Col. J)
1	Rolling Recovery Factor as of 12/31/2018		\$ (33,618) (a)								
2	Revenue Requirement for Test Year Ended 12/31/2019			\$ 147,709 (b)							
3	Return on Rolling Recovery Factor for Test Year Ended 12/31/2019						\$ (2,061) (d)				
4	Total revenue for calculation of joint agency asset rider		<u>\$ (33,618)</u>	<u>\$ 147,709</u>	<u>\$ 139,602 (c)</u>	<u>\$ 8,107</u>	<u>\$ (2,061)</u>	<u>\$ (27,572)</u>			
Allocation of monthly revenue to customer groups:											
Customers billed based on KWH											
5	Residential	48.0063%	\$ (13,398)	\$ 70,909	\$ 69,491	\$ 1,418	\$ (908)	\$ (12,887)		16,171,290,361	\$ (0.00080) per KWH
6	Small General Service	6.4492%	\$ (3,222)	\$ 9,526	\$ 9,619	\$ (93)	\$ (221)	\$ (3,535)		1,784,993,077	\$ (0.00198) per KWH
4	Medium General Service -KWH	0.0242%	\$ (14)	\$ 36	\$ 35	\$ 1	\$ (1)	\$ (15)		8,518,624	\$ (0.00170) per KWH
5	Seasonal Intermittent	0.1403%	\$ (183)	\$ 207	\$ 200	\$ 7	\$ (10)	\$ (186)		46,369,127	\$ (0.00402) per KWH
6	Lighting	0.0000%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		0	\$ - per KWH
7	Traffic Signal	0.0077%	\$ (3)	\$ 11	\$ 11	\$ 0	\$ (0)	\$ (3)		4,691,443	\$ (0.00061) per KWH
		<u>54.6277%</u>	<u>\$ (16,821)</u>	<u>\$ 80,690</u>	<u>\$ 79,355</u>	<u>\$ 1,334</u>	<u>\$ (1,140)</u>	<u>\$ (16,626)</u>		<u>18,015,862,633</u>	
Customers billed based on KW											
8	Medium General Service -KW	29.1495%	\$ (15,435)	\$ 43,056	\$ 38,589	\$ 4,467	\$ (905)	\$ (11,874)	31,324,056		\$ (0.38) per KW
9	Large General Service	16.2228%	\$ (1,363)	\$ 23,962	\$ 21,657	\$ 2,305	\$ (16)	\$ 927	16,682,531		\$ 0.06 per KW
		<u>45.3723%</u>	<u>\$ (16,798)</u>	<u>\$ 67,019</u>	<u>\$ 60,246</u>	<u>\$ 6,772</u>	<u>\$ (921)</u>	<u>\$ (10,946)</u>	<u>48,006,587</u>		
10		<u>100.0000%</u>	<u>\$ (33,618)</u>	<u>\$ 147,709</u>	<u>\$ 139,602</u>	<u>\$ 8,107</u>	<u>\$ (2,061)</u>	<u>\$ (27,572)</u>			

Notes:

- (a) From Exhibit A-1-TU, Line 29, Column H
- (b) From Exhibit B-TU, Line 9, Column M
- (c) From Exhibit A-1-TU, Line 30 - 41, Column B
- (d) From Exhibit A-1-TU, Line 30 - 41, Column G
- (e) From Exhibit I-TU, Column D
- (f) From Exhibit K-TU, Column D and Column E, Billing Determinants for the Twelve Months Ended November 30, 2021

EXHIBIT A-1-TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
(Thousands of Dollars)

Line
No.

Calculation of monthly rate of return :

	January 1 - March 15, 2018				March 16, 2018 forward				2019			
	Composite Income Tax Rate (e.)	Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return	Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return	Composite Income Tax Rate (e.)	Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return	Composite Income Tax Rate (e.)
1 Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (h)	23.1700%				
2 Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (h)					
3 After tax overall return				7.0491% (f)			6.6352% (h)					
4 Discounted monthly after tax overall return				0.5693% (g)			0.5368% (i)					0.5373% (k)

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C)	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H)
	(Col A) (a)	(Col B) (b)	(Col C)	(Col D)	(Col E)	(Col F)	(Col G)	(Col H)
	= A - B							
	= C + D + G							
5 December 2015	\$ 4,936	\$ 1,763	\$ 3,173	\$ -	\$ -	\$ -	\$ -	\$ 3,173
6 January 2016	\$ 4,812	\$ 4,683	\$ 129	\$ 3,173	\$ 2,076	\$ 11	\$ 17	\$ 3,319
7 February	\$ 5,436	\$ 5,543	\$ (107)	\$ 3,319	\$ 2,171	\$ 12	\$ 18	\$ 3,231
8 March	\$ 8,239	\$ 5,397	\$ 2,843	\$ 3,231	\$ 2,113	\$ 12	\$ 18	\$ 6,091
9 April	\$ 4,617	\$ 4,607	\$ 10	\$ 6,091	\$ 3,984	\$ 22	\$ 34	\$ 6,135
10 May	\$ 3,931	\$ 4,603	\$ (671)	\$ 6,135	\$ 4,013	\$ 22	\$ 34	\$ 5,498
11 June	\$ 4,686	\$ 5,359	\$ (663)	\$ 5,498	\$ 3,586	\$ 20	\$ 30	\$ 4,865
12 July	\$ 4,348	\$ 6,071	\$ (1,723)	\$ 4,865	\$ 3,182	\$ 18	\$ 27	\$ 3,168
13 August	\$ 4,460	\$ 6,687	\$ (2,227)	\$ 3,168	\$ 2,073	\$ 11	\$ 17	\$ 959
14 September	\$ 5,152	\$ 6,097	\$ (945)	\$ 959	\$ 627	\$ 3	\$ 5	\$ 19
15 October	\$ 7,149	\$ 4,996	\$ 2,153	\$ 19	\$ 12	\$ 0	\$ 0	\$ 2,172
16 November	\$ 5,043	\$ 4,600	\$ 443	\$ 2,172	\$ 1,421	\$ 8	\$ 12	\$ 2,627
17 December 2016	\$ 5,772	\$ 5,522	\$ 249	\$ 2,627	\$ 1,719	\$ 9	\$ 14	\$ 2,891
18 Cumulative Reg Fee Adjustment (h)	\$ -	\$ 95	\$ (95)	\$ 2,891	\$ (62)	\$ (2)	\$ (3)	\$ 2,793
18 January 2017	\$ 4,739	\$ 7,026	\$ (2,287)	\$ 2,793	\$ 1,843	\$ 10	\$ 15	\$ 522
19 February	\$ 5,044	\$ 5,860	\$ (815)	\$ 522	\$ 344	\$ 2	\$ 3	\$ (291)
20 March	\$ 7,808	\$ 5,866	\$ 1,942	\$ (291)	\$ (192)	\$ (1)	\$ (2)	\$ 1,649
21 April	\$ 6,416	\$ 5,097	\$ 1,319	\$ 1,649	\$ 1,088	\$ 6	\$ 9	\$ 2,978
22 May	\$ 4,983	\$ 5,808	\$ (825)	\$ 2,978	\$ 1,965	\$ 11	\$ 16	\$ 2,170
23 June	\$ 5,552	\$ 6,108	\$ (556)	\$ 2,170	\$ 1,432	\$ 8	\$ 12	\$ 1,626
24 July	\$ 4,618	\$ 7,017	\$ (2,399)	\$ 1,626	\$ 1,073	\$ 6	\$ 9	\$ (765)
25 August	\$ 5,194	\$ 6,940	\$ (1,747)	\$ (765)	\$ (505)	\$ (3)	\$ (4)	\$ (2,516)
26 September	\$ 4,937	\$ 6,465	\$ (1,528)	\$ (2,516)	\$ (1,660)	\$ (9)	\$ (14)	\$ (4,057)
27 October	\$ 4,839	\$ 5,900	\$ (1,062)	\$ (4,057)	\$ (2,677)	\$ (15)	\$ (22)	\$ (5,141)
28 November	\$ 4,866	\$ 5,442	\$ (576)	\$ (5,141)	\$ (3,353)	\$ (19)	\$ (28)	\$ (5,745)
29 December	\$ 5,301	\$ 8,720	\$ (3,419)	\$ (5,745)	\$ (4,395)	\$ (24)	\$ (32)	\$ (9,196)
30 January 2018	\$ 4,905	\$ 16,829	\$ (11,923)	\$ (9,196)	\$ (7,035)	\$ (40)	\$ (52)	\$ (21,171)
31 February	\$ 6,270	\$ 13,864	\$ (7,594)	\$ (21,171)	\$ (16,196)	\$ (92)	\$ (121)	\$ (28,886)
32 March	\$ 12,408	\$ 11,977	\$ 431	\$ (28,886)	\$ (22,098)	\$ (122)	\$ (160)	\$ (28,615)
33 April	\$ 14,862	\$ 11,929	\$ 2,933	\$ (28,615)	\$ (21,890)	\$ (118)	\$ (154)	\$ (25,836)
34 May	\$ 12,720	\$ 11,294	\$ 1,426	\$ (25,836)	\$ (19,764)	\$ (106)	\$ (139)	\$ (24,549)
35 June	\$ 12,297	\$ 13,499	\$ (1,203)	\$ (24,549)	\$ (18,780)	\$ (101)	\$ (132)	\$ (25,884)
36 July	\$ 12,367	\$ 14,826	\$ (2,459)	\$ (25,884)	\$ (19,801)	\$ (106)	\$ (139)	\$ (28,482)
37 August	\$ 12,921	\$ 14,877	\$ (1,957)	\$ (28,482)	\$ (21,789)	\$ (117)	\$ (153)	\$ (30,592)
38 September	\$ 12,757	\$ 13,507	\$ (751)	\$ (30,592)	\$ (23,403)	\$ (126)	\$ (164)	\$ (31,507)
39 October	\$ 12,129	\$ 13,377	\$ (1,248)	\$ (31,507)	\$ (24,103)	\$ (129)	\$ (169)	\$ (32,924)
40 November	\$ 11,987	\$ 11,644	\$ 343	\$ (32,924)	\$ (25,187)	\$ (135)	\$ (177)	\$ (32,757)
41 December	\$ 11,278	\$ 11,963	\$ (686)	\$ (32,757)	\$ (25,059)	\$ (135)	\$ (176)	\$ (33,618)
42 January 2019	\$ 11,548	\$ 12,734	\$ (1,185)	\$ (33,618)	\$ (25,829)	\$ (139)	\$ (181)	\$ (34,984)
43 February	\$ 11,596	\$ 12,324	\$ (728)	\$ (34,984)	\$ (26,879)	\$ (144)	\$ (188)	\$ (35,901)
44 March	\$ 14,552	\$ 10,839	\$ 3,713	\$ (35,901)	\$ (27,582)	\$ (148)	\$ (193)	\$ (32,381)
45 April	\$ 12,051	\$ 10,144	\$ 1,907	\$ (32,381)	\$ (24,878)	\$ (134)	\$ (174)	\$ (30,647)
46 May	\$ 11,760	\$ 10,334	\$ 1,426	\$ (30,647)	\$ (23,546)	\$ (127)	\$ (165)	\$ (29,386)
47 June	\$ 11,820	\$ 11,575	\$ 245	\$ (29,386)	\$ (22,577)	\$ (121)	\$ (158)	\$ (28,299)
48 July	\$ 11,677	\$ 13,431	\$ (1,754)	\$ (29,299)	\$ (22,510)	\$ (121)	\$ (157)	\$ (31,210)
49 August	\$ 12,242	\$ 13,396	\$ (1,153)	\$ (31,210)	\$ (23,979)	\$ (129)	\$ (168)	\$ (32,531)
50 September	\$ 11,796	\$ 12,627	\$ (831)	\$ (32,531)	\$ (24,994)	\$ (134)	\$ (175)	\$ (33,537)
51 October	\$ 13,649	\$ 11,445	\$ 2,204	\$ (33,537)	\$ (25,766)	\$ (138)	\$ (180)	\$ (31,513)
52 November	\$ 12,893	\$ 9,754	\$ 3,139	\$ (31,513)	\$ (24,212)	\$ (130)	\$ (169)	\$ (28,544)
53 December	\$ 12,125	\$ 10,999	\$ 1,125	\$ (28,544)	\$ (21,931)	\$ (118)	\$ (153)	\$ (27,572)
42 Total 2019 Test Year	\$ 139,602	\$ 8,107	\$ -	\$ -	\$ -	\$ -	\$ (2,061)	\$ -

Notes:

- (a) From Exhibit B-TU, Line 9
- (b) From OIM Joint Agency Asset Rider Revenue Report.
- (c) From Exhibit J-TU, Column B, Line 1 and Line 2
- (d) From Exhibit J-TU, Column C, Line 1 and Line 2
- (e) From Exhibit J-TU, Column I, Line 11
- (f) From Exhibit J-TU, Column H, Line 1 - Line 3
- (g) From Exhibit J-TU, Column H, Line 1 - Line 5
- (h) From Exhibit J-TU, Column N, Line 1 - Line 3
- (i) From Exhibit J-TU, Column N, Line 1 - Line 5
- (j) From Exhibit J-TU, Column Q, Line 1 - Line 3
- (k) From Exhibit J-TU, Column Q, Line 1 - Line 5

EXHIBIT A-2 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
RESIDENTIAL CUSTOMER CLASS
(Thousands of Dollars)

Line
No.

Calculation of monthly rate of return :

		January 1 - March 15, 2018			March 16, 2018 forward			2019
		Composite Income Tax Rate (e.)	Capitalization Ratio (c.)	Cost Rate (d.)	Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return	Composite Income Tax Rate (e.)
1	Long-term debt	23.5000%	47.00%	4.57%	48.00%	4.050%	1.4872% (h)	1.4936% (j)
2	Member's equity		53.00%	10.20%	52.00%	9.900%	5.1480% (h)	5.1480% (j)
3	After tax overall return			<u>7.0491% (f)</u>			<u>6.6352% (h)</u>	<u>6.6416% (j)</u>
4	Discounted monthly after tax overall return			<u>0.5693% (g)</u>			<u>0.5368% (i)</u>	<u>0.5373% (k)</u>
5	Demand allocation factor						<u>48.0063%</u>	

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6 December							\$	(2,380)
7 January 2018	\$ 2,433	\$ 10,054	\$ (7,621)	\$ (2,380)	\$ (1,820)	\$ (10)	\$ (14)	\$ (10,014)
8 February	\$ 3,110	\$ 7,168	\$ (4,059)	\$ (10,014)	\$ (7,661)	\$ (44)	\$ (57)	\$ (14,130)
9 March	\$ 6,154	\$ 5,529	\$ 625	\$ (14,130)	\$ (10,809)	\$ (60)	\$ (78)	\$ (13,582)
10 April	\$ 7,371	\$ 5,354	\$ 2,017	\$ (13,582)	\$ (10,390)	\$ (56)	\$ (73)	\$ (11,638)
11 May	\$ 6,309	\$ 4,781	\$ 1,528	\$ (11,638)	\$ (8,903)	\$ (48)	\$ (62)	\$ (10,173)
12 June	\$ 6,099	\$ 6,612	\$ (512)	\$ (10,173)	\$ (7,782)	\$ (42)	\$ (55)	\$ (10,740)
13 July	\$ 6,134	\$ 7,468	\$ (1,335)	\$ (10,740)	\$ (8,216)	\$ (44)	\$ (58)	\$ (12,132)
14 August	\$ 6,409	\$ 7,314	\$ (906)	\$ (12,132)	\$ (9,281)	\$ (50)	\$ (65)	\$ (13,103)
15 September	\$ 6,327	\$ 6,611	\$ (284)	\$ (13,103)	\$ (10,024)	\$ (54)	\$ (70)	\$ (13,457)
16 October	\$ 6,016	\$ 5,952	\$ 64	\$ (13,457)	\$ (10,294)	\$ (55)	\$ (72)	\$ (13,465)
17 November	\$ 5,945	\$ 5,044	\$ 902	\$ (13,465)	\$ (10,301)	\$ (55)	\$ (72)	\$ (12,636)
18 December	\$ 5,594	\$ 6,288	\$ (694)	\$ (12,636)	\$ (9,666)	\$ (52)	\$ (68)	\$ (13,398)
19 January 2019	\$ 5,544	\$ 6,765	\$ (1,221)	\$ (13,398)	\$ (10,294)	\$ (55)	\$ (72)	\$ (14,691)
20 February	\$ 5,567	\$ 6,771	\$ (1,204)	\$ (14,691)	\$ (11,287)	\$ (61)	\$ (79)	\$ (15,974)
21 March	\$ 6,986	\$ 5,292	\$ 1,694	\$ (15,974)	\$ (12,273)	\$ (66)	\$ (86)	\$ (14,366)
22 April	\$ 5,785	\$ 4,625	\$ 1,160	\$ (14,366)	\$ (11,038)	\$ (59)	\$ (77)	\$ (13,283)
23 May	\$ 5,645	\$ 4,582	\$ 1,063	\$ (13,283)	\$ (10,205)	\$ (55)	\$ (71)	\$ (12,291)
24 June	\$ 5,674	\$ 5,804	\$ (130)	\$ (12,291)	\$ (9,443)	\$ (51)	\$ (66)	\$ (12,487)
25 July	\$ 5,605	\$ 6,987	\$ (1,381)	\$ (12,487)	\$ (9,594)	\$ (52)	\$ (67)	\$ (13,936)
26 August	\$ 5,877	\$ 7,030	\$ (1,153)	\$ (13,936)	\$ (10,707)	\$ (58)	\$ (75)	\$ (15,163)
27 September	\$ 5,663	\$ 6,368	\$ (705)	\$ (15,163)	\$ (11,650)	\$ (63)	\$ (81)	\$ (15,949)
28 October	\$ 6,553	\$ 5,086	\$ 1,466	\$ (15,949)	\$ (12,254)	\$ (66)	\$ (86)	\$ (14,569)
29 November	\$ 6,189	\$ 4,359	\$ 1,830	\$ (14,569)	\$ (11,193)	\$ (60)	\$ (78)	\$ (12,816)
30 December	\$ 5,821	\$ 5,823	\$ (2)	\$ (12,816)	\$ (9,847)	\$ (53)	\$ (69)	\$ (12,887)
19 Total 2019 Test Year			<u>\$ (8,856)</u>				<u>\$ (1,652)</u>	

Notes:

- (a) From Exhibit B-TU, Line 9
- (b) From CIM Joint Agency Asset Rider Revenue Report.
- (c) From Exhibit J-TU, Column B, Line 1 and Line 2
- (d) From Exhibit J-TU, Column C, Line 1 and Line 2
- (e) From Exhibit J-TU, Column I, Line 11
- (f) From Exhibit J-TU, Column H, Line 1 - Line 3
- (g) From Exhibit J-TU, Column H, Line 1 - Line 5
- (h) From Exhibit J-TU, Column N, Line 1 - Line 3
- (i) From Exhibit J-TU, Column N, Line 1 - Line 5
- (j) From Exhibit J-TU, Column Q, Line 1 - Line 3
- (k) From Exhibit J-TU, Column Q, Line 1 - Line 5

EXHIBIT A-3 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
SMALL GENERAL SERVICE
(Thousands of Dollars)

Line
No.

Calculation of monthly rate of return :

		January 1 - March 15, 2018			March 16, 2018 forward			2019
		Composite Income Tax Rate (e.)	Capitalization Ratio (c.)	Cost Rate (d.)	Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return	Composite Income Tax Rate (e.)
1	Long-term debt	23.5000%	47.00%	4.57%	48.00%	4.050%	1.4872% (h)	23.1700%
2	Member's equity		53.00%	10.20%	52.00%	9.900%	5.1480% (h)	
3	After tax overall return			<u>7.0491%</u> (f)			<u>6.6352%</u> (h)	<u>6.6416%</u> (i)
4	Discounted monthly after tax overall return			<u>0.5693%</u> (g)			<u>0.5368%</u> (i)	<u>0.5373%</u> (k)
5	Demand allocation factor						<u>6.4492%</u>	

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6 December							\$	(792)
7 January 2018	\$ 302	\$ 1,098	\$ (796)	\$ (792)	\$ (606)	\$ (3)	\$ (5)	\$ (1,592)
8 February	\$ 386	\$ 892	\$ (506)	\$ (1,592)	\$ (1,218)	\$ (7)	\$ (9)	\$ (2,107)
9 March	\$ 764	\$ 752	\$ 12	\$ (2,107)	\$ (1,612)	\$ (9)	\$ (12)	\$ (2,107)
10 April	\$ 915	\$ 759	\$ 156	\$ (1,612)	\$ (1,612)	\$ (9)	\$ (11)	\$ (1,963)
11 May	\$ 783	\$ 739	\$ 44	\$ (1,963)	\$ (1,501)	\$ (8)	\$ (11)	\$ (1,930)
12 June	\$ 757	\$ 967	\$ (210)	\$ (1,930)	\$ (1,476)	\$ (8)	\$ (10)	\$ (2,150)
13 July	\$ 761	\$ 1,052	\$ (291)	\$ (2,150)	\$ (1,645)	\$ (9)	\$ (12)	\$ (2,452)
14 August	\$ 795	\$ 1,071	\$ (276)	\$ (2,452)	\$ (1,876)	\$ (10)	\$ (13)	\$ (2,741)
15 September	\$ 785	\$ 972	\$ (187)	\$ (2,741)	\$ (2,097)	\$ (11)	\$ (15)	\$ (2,943)
16 October	\$ 747	\$ 941	\$ (195)	\$ (2,943)	\$ (2,251)	\$ (12)	\$ (16)	\$ (3,153)
17 November	\$ 738	\$ 844	\$ (106)	\$ (3,153)	\$ (2,412)	\$ (13)	\$ (17)	\$ (3,276)
18 December	\$ 694	\$ 622	\$ 72	\$ (3,276)	\$ (2,506)	\$ (13)	\$ (18)	\$ (3,222)
19 January 2019	\$ 745	\$ 865	\$ (121)	\$ (3,222)	\$ (2,475)	\$ (13)	\$ (17)	\$ (3,360)
20 February	\$ 748	\$ 792	\$ (44)	\$ (3,360)	\$ (2,581)	\$ (14)	\$ (18)	\$ (3,422)
21 March	\$ 938	\$ 720	\$ 219	\$ (3,422)	\$ (2,629)	\$ (14)	\$ (18)	\$ (3,222)
22 April	\$ 777	\$ 675	\$ 102	\$ (3,222)	\$ (2,475)	\$ (13)	\$ (17)	\$ (3,137)
23 May	\$ 758	\$ 715	\$ 43	\$ (3,137)	\$ (2,410)	\$ (13)	\$ (17)	\$ (3,111)
24 June	\$ 762	\$ 833	\$ (71)	\$ (3,111)	\$ (2,390)	\$ (13)	\$ (17)	\$ (3,199)
25 July	\$ 753	\$ 959	\$ (206)	\$ (3,199)	\$ (2,458)	\$ (13)	\$ (17)	\$ (3,422)
26 August	\$ 790	\$ 1,001	\$ (212)	\$ (3,422)	\$ (2,629)	\$ (14)	\$ (18)	\$ (3,652)
27 September	\$ 761	\$ 939	\$ (178)	\$ (3,652)	\$ (2,806)	\$ (15)	\$ (20)	\$ (3,850)
28 October	\$ 880	\$ 833	\$ 47	\$ (3,850)	\$ (2,958)	\$ (16)	\$ (21)	\$ (3,823)
29 November	\$ 831	\$ 621	\$ 210	\$ (3,823)	\$ (2,937)	\$ (16)	\$ (21)	\$ (3,633)
30 December	\$ 782	\$ 664	\$ 118	\$ (3,633)	\$ (2,791)	\$ (15)	\$ (20)	\$ (3,535)
19 Total 2019 Test Year			<u>\$ (2,375)</u>				<u>\$ (368)</u>	

Notes:

- (a) From Exhibit B-TU, Line 9
- (b) From CIM Joint Agency Asset Rider Revenue Report.
- (c) From Exhibit J-TU, Column B, Line 1 and Line 2
- (d) From Exhibit J-TU, Column C, Line 1 and Line 2
- (e) From Exhibit J-TU, Column I, Line 11
- (f) From Exhibit J-TU, Column H, Line 1 - Line 3
- (g) From Exhibit J-TU, Column H, Line 1 - Line 5
- (h) From Exhibit J-TU, Column N, Line 1 - Line 3
- (i) From Exhibit J-TU, Column N, Line 1 - Line 5
- (j) From Exhibit J-TU, Column Q, Line 1 - Line 3
- (k) From Exhibit J-TU, Column Q, Line 1 - Line 5

EXHIBIT A-4 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
MEDIUM GENERAL SERVICE - kWh BILLED
(Thousands of Dollars)

Line
No.

Calculation of monthly rate of return :

January 1 - March 15, 2018				March 16, 2018 forward			2019	
Composite Income Tax Rate (e.)				Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return	Composite Income Tax Rate (e.)	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)		23.1700%	1.4936% (j)
2	Member's equity		53.00%	10.20%	5.4060% (f)			5.1480% (j)
3	After tax overall return				<u>7.0491% (f)</u>	<u>6.6352% (h)</u>		<u>6.6416% (j)</u>
4	Discounted monthly after tax overall return				<u>0.5693% (g)</u>	<u>0.5368% (i)</u>		<u>0.5373% (k)</u>
5	Demand allocation factor					<u>0.0242%</u>		

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6 December								\$ (3)
7 January 2018	\$ 1	\$ 7	\$ (5)	\$ (3)	\$ (2)	\$ (0)	\$ (0)	\$ (9)
8 February	\$ 2	\$ 4	\$ (3)	\$ (9)	\$ (7)	\$ (0)	\$ (0)	\$ (12)
9 March	\$ 3	\$ 3	\$ 0	\$ (12)	\$ (9)	\$ (0)	\$ (0)	\$ (12)
10 April	\$ 4	\$ 3	\$ 1	\$ (12)	\$ (9)	\$ (0)	\$ (0)	\$ (11)
11 May	\$ 3	\$ 2	\$ 1	\$ (11)	\$ (8)	\$ (0)	\$ (0)	\$ (10)
12 June	\$ 3	\$ 3	\$ (0)	\$ (10)	\$ (8)	\$ (0)	\$ (0)	\$ (10)
13 July	\$ 3	\$ 4	\$ (1)	\$ (10)	\$ (8)	\$ (0)	\$ (0)	\$ (12)
14 August	\$ 3	\$ 4	\$ (1)	\$ (12)	\$ (9)	\$ (0)	\$ (0)	\$ (13)
15 September	\$ 3	\$ 4	\$ (1)	\$ (13)	\$ (10)	\$ (0)	\$ (0)	\$ (14)
16 October	\$ 3	\$ 3	\$ (0)	\$ (14)	\$ (10)	\$ (0)	\$ (0)	\$ (14)
17 November	\$ 3	\$ 2	\$ 0	\$ (14)	\$ (11)	\$ (0)	\$ (0)	\$ (13)
18 December	\$ 3	\$ 4	\$ (1)	\$ (13)	\$ (10)	\$ (0)	\$ (0)	\$ (14)
19 January 2019	\$ 3	\$ 4	\$ (1)	\$ (14)	\$ (11)	\$ (0)	\$ (0)	\$ (15)
20 February	\$ 3	\$ 3	\$ (1)	\$ (15)	\$ (12)	\$ (0)	\$ (0)	\$ (16)
21 March	\$ 4	\$ 3	\$ 1	\$ (16)	\$ (12)	\$ (0)	\$ (0)	\$ (15)
22 April	\$ 3	\$ 2	\$ 1	\$ (15)	\$ (12)	\$ (0)	\$ (0)	\$ (15)
23 May	\$ 3	\$ 2	\$ 1	\$ (15)	\$ (11)	\$ (0)	\$ (0)	\$ (14)
24 June	\$ 3	\$ 3	\$ 0	\$ (14)	\$ (11)	\$ (0)	\$ (0)	\$ (14)
25 July	\$ 3	\$ 4	\$ (1)	\$ (14)	\$ (11)	\$ (0)	\$ (0)	\$ (15)
26 August	\$ 3	\$ 4	\$ (1)	\$ (15)	\$ (11)	\$ (0)	\$ (0)	\$ (16)
27 September	\$ 3	\$ 3	\$ (0)	\$ (16)	\$ (12)	\$ (0)	\$ (0)	\$ (16)
28 October	\$ 3	\$ 3	\$ 1	\$ (16)	\$ (13)	\$ (0)	\$ (0)	\$ (16)
29 November	\$ 3	\$ 2	\$ 1	\$ (16)	\$ (12)	\$ (0)	\$ (0)	\$ (15)
30 December	\$ 3	\$ 3	\$ 0	\$ (15)	\$ (11)	\$ (0)	\$ (0)	\$ (15)
19 Total 2019 Test Year			<u>\$ (10)</u>			<u>\$ (2)</u>		

Notes:

- (a) From Exhibit B-TU, Line 9
(b) From CIM Joint Agency Asset Rider Revenue Report.
(c) From Exhibit J-TU, Column B, Line 1 and Line 2
(d) From Exhibit J-TU, Column C, Line 1 and Line 2
(e) From Exhibit J-TU, Column I, Line 11
(f) From Exhibit J-TU, Column H, Line 1 - Line 3
(g) From Exhibit J-TU, Column H, Line 1 - Line 5
(h) From Exhibit J-TU, Column N, Line 1 - Line 3
(i) From Exhibit J-TU, Column N, Line 1 - Line 5
(j) From Exhibit J-TU, Column Q, Line 1 - Line 3
(k) From Exhibit J-TU, Column Q, Line 1 - Line 5

EXHIBIT A-5-TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
SEASONAL INTERMITTENT
(Thousands of Dollars)

Line
No.

Calculation of monthly rate of return :

Calculation of monthly rate of return :		January 1 - March 15, 2018			March 16, 2018 forward			2019		
		Composite Income Tax Rate (e.)	Capitalization Ratio (c.)	Cost Rate (d.)	Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return	Composite Income Tax Rate (e.)		
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (h)	23.1700%	1.4936% (j)
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (h)		5.1480% (j)
3	After tax overall return				7.0491% (f)			6.6352% (h)		6.6416% (j)
4	Discounted monthly after tax overall return				0.5693% (g)			0.5368% (i)		0.5373% (k)
5	Demand allocation factor							0.1403%		

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6 December							\$	20
7 January 2018	\$ 3	\$ 10	\$ (6)	\$ 20	\$ 15	\$ 0	\$ 0	\$ 13
8 February	\$ 4	\$ 8	\$ (4)	\$ 13	\$ 10	\$ 0	\$ 0	\$ 10
9 March	\$ 9	\$ 7	\$ 2	\$ 10	\$ 7	\$ 0	\$ 0	\$ 11
10 April	\$ 11	\$ 9	\$ 2	\$ 11	\$ 9	\$ 0	\$ 0	\$ 13
11 May	\$ 9	\$ 10	\$ (1)	\$ 13	\$ 10	\$ 0	\$ 0	\$ 12
12 June	\$ 9	\$ 16	\$ (7)	\$ 12	\$ 9	\$ 0	\$ 0	\$ 5
13 July	\$ 9	\$ 25	\$ (17)	\$ 5	\$ 4	\$ 0	\$ 0	\$ (12)
14 August	\$ 9	\$ 50	\$ (41)	\$ (12)	\$ (9)	\$ (0)	\$ (0)	\$ (53)
15 September	\$ 9	\$ 87	\$ (78)	\$ (53)	\$ (40)	\$ (0)	\$ (0)	\$ (131)
16 October	\$ 9	\$ 42	\$ (34)	\$ (131)	\$ (100)	\$ (1)	\$ (1)	\$ (165)
17 November	\$ 8	\$ 20	\$ (12)	\$ (165)	\$ (126)	\$ (1)	\$ (1)	\$ (178)
18 December	\$ 8	\$ 12	\$ (4)	\$ (178)	\$ (136)	\$ (1)	\$ (1)	\$ (183)
19 January 2019	\$ 16	\$ 8	\$ 9	\$ (183)	\$ (141)	\$ (1)	\$ (1)	\$ (176)
20 February	\$ 16	\$ 5	\$ 11	\$ (176)	\$ (135)	\$ (1)	\$ (1)	\$ (165)
21 March	\$ 20	\$ 5	\$ 16	\$ (165)	\$ (127)	\$ (1)	\$ (1)	\$ (150)
22 April	\$ 17	\$ 5	\$ 12	\$ (150)	\$ (115)	\$ (1)	\$ (1)	\$ (139)
23 May	\$ 17	\$ 6	\$ 10	\$ (139)	\$ (107)	\$ (1)	\$ (1)	\$ (130)
24 June	\$ 17	\$ 12	\$ 5	\$ (130)	\$ (100)	\$ (1)	\$ (1)	\$ (125)
25 July	\$ 16	\$ 14	\$ 2	\$ (125)	\$ (96)	\$ (1)	\$ (1)	\$ (124)
26 August	\$ 17	\$ 35	\$ (18)	\$ (124)	\$ (95)	\$ (1)	\$ (1)	\$ (142)
27 September	\$ 17	\$ 52	\$ (35)	\$ (142)	\$ (109)	\$ (1)	\$ (1)	\$ (178)
28 October	\$ 19	\$ 36	\$ (16)	\$ (178)	\$ (137)	\$ (1)	\$ (1)	\$ (196)
29 November	\$ 18	\$ 18	\$ 0	\$ (196)	\$ (150)	\$ (1)	\$ (1)	\$ (197)
30 December	\$ 17	\$ 5	\$ 12	\$ (197)	\$ (151)	\$ (1)	\$ (1)	\$ (186)
19 Total 2019 Test Year			\$ (193)				\$ (13)	

Notes:

- (a) From Exhibit B-TU, Line 9
- (b) From CIM Joint Agency Asset Rider Revenue Report.
- (c) From Exhibit J-TU, Column B, Line 1 and Line 2
- (d) From Exhibit J-TU, Column C, Line 1 and Line 2
- (e) From Exhibit J-TU, Column I, Line 11
- (f) From Exhibit J-TU, Column H, Line 1 - Line 3
- (g) From Exhibit J-TU, Column H, Line 1 - Line 5
- (h) From Exhibit J-TU, Column N, Line 1 - Line 3
- (i) From Exhibit J-TU, Column N, Line 1 - Line 5
- (j) From Exhibit J-TU, Column Q, Line 1 - Line 3
- (k) From Exhibit J-TU, Column Q, Line 1 - Line 5

EXHIBIT A-6 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
TRAFFIC SIGNAL
(Thousands of Dollars)

Line
No.

Calculation of monthly rate of return :

January 1 - March 15, 2018				March 16, 2018 forward			2019
Composite Income Tax Rate (e.)	Capitalization Ratio (c.)	Cost Rate (d.)		Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return	Composite Income Tax Rate (e.)
1 Long-term debt	23.5000%	47.00%	1.6431% (f)	48.00%	4.050%	1.4872% (h)	23.1700%
2 Member's equity			5.4060% (f)	52.00%	9.900%	5.1480% (h)	
3 After tax overall return			<u>7.0491% (f)</u>			<u>6.6352% (h)</u>	<u>6.6416% (i)</u>
4 Discounted monthly after tax overall return			<u>0.5693% (g)</u>			<u>0.5368% (i)</u>	<u>0.5373% (k)</u>
5 Demand allocation factor						<u>0.0077%</u>	

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6 December							\$	(1)
7 January 2018	\$ 0	\$ 1	\$ (1)	(1) \$	(0) \$	(0) \$	(0) \$	(1)
8 February	\$ 0	\$ 1	\$ (1)	(1) \$	(1) \$	(0) \$	(0) \$	(2)
9 March	\$ 1	\$ 1	\$ (0)	(2) \$	(1) \$	(0) \$	(0) \$	(2)
10 April	\$ 1	\$ 1	\$ 0	(2) \$	(2) \$	(0) \$	(0) \$	(2)
11 May	\$ 1	\$ 1	\$ (0)	(2) \$	(2) \$	(0) \$	(0) \$	(2)
12 June	\$ 1	\$ 1	\$ (0)	(2) \$	(2) \$	(0) \$	(0) \$	(2)
13 July	\$ 1	\$ 1	\$ (0)	(2) \$	(2) \$	(0) \$	(0) \$	(2)
14 August	\$ 1	\$ 1	\$ (0)	(2) \$	(2) \$	(0) \$	(0) \$	(3)
15 September	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
16 October	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
17 November	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
18 December	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
19 January 2019	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
20 February	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
21 March	\$ 1	\$ 1	\$ 0	(3) \$	(2) \$	(0) \$	(0) \$	(3)
22 April	\$ 1	\$ 1	\$ 0	(3) \$	(2) \$	(0) \$	(0) \$	(3)
23 May	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
24 June	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
25 July	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
26 August	\$ 1	\$ 1	\$ 0	(3) \$	(2) \$	(0) \$	(0) \$	(3)
27 September	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
28 October	\$ 1	\$ 1	\$ 0	(3) \$	(2) \$	(0) \$	(0) \$	(3)
29 November	\$ 1	\$ 1	\$ 0	(3) \$	(2) \$	(0) \$	(0) \$	(3)
30 December	\$ 1	\$ 1	\$ 0	(3) \$	(2) \$	(0) \$	(0) \$	(3)
19 Total			<u>\$ (2)</u>			<u>\$ (0)</u>		

Notes:

- (a) From Exhibit B-TU, Line 9
- (b) From CIM Joint Agency Asset Rider Revenue Report.
- (c) From Exhibit J-TU, Column B, Line 1 and Line 2
- (d) From Exhibit J-TU, Column C, Line 1 and Line 2
- (e) From Exhibit J-TU, Column I, Line 11
- (f) From Exhibit J-TU, Column H, Line 1 - Line 3
- (g) From Exhibit J-TU, Column H, Line 1 - Line 5
- (h) From Exhibit J-TU, Column N, Line 1 - Line 3
- (i) From Exhibit J-TU, Column N, Line 1 - Line 5
- (j) From Exhibit J-TU, Column Q, Line 1 - Line 3
- (k) From Exhibit J-TU, Column Q, Line 1 - Line 5

EXHIBIT A-7 - TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
MEDIUM GENERAL SERVICE - kW BILLED
(Thousands of Dollars)

Line
No.

Calculation of monthly rate of return :

		January 1 - March 15, 2018				March 16, 2018 forward				2019	
		Composite Income Tax Rate (e.)	Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return	Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return		Composite Income Tax Rate (e.)	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (h)		23.1700%	1.4936% (j)
2	Member's equity				5.4060% (f)	52.00%	9.900%	5.1480% (h)			5.1480% (j)
3	After tax overall return		53.00%	10.20%	<u>7.0491% (f)</u>			<u>6.6352% (h)</u>			<u>6.6416% (j)</u>
4	Discounted monthly after tax overall return				<u>0.5693% (g)</u>			<u>0.5368% (i)</u>			<u>0.5373% (k)</u>
5	Demand allocation factor										<u>29.1495%</u>

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6 December								\$ (5,743)
7 January 2018	\$ 1,381	\$ 4,151	\$ (2,770)	\$ (5,743)	\$ (4,393)	\$ (25)	\$ (33)	\$ (8,545)
8 February	\$ 1,765	\$ 3,951	\$ (2,185)	\$ (8,545)	\$ (6,537)	\$ (37)	\$ (49)	\$ (10,779)
9 March	\$ 3,494	\$ 3,873	\$ (379)	\$ (10,779)	\$ (8,246)	\$ (46)	\$ (60)	\$ (11,218)
10 April	\$ 4,185	\$ 3,897	\$ 288	\$ (11,218)	\$ (8,582)	\$ (46)	\$ (60)	\$ (10,990)
11 May	\$ 3,581	\$ 3,862	\$ (281)	\$ (10,990)	\$ (8,408)	\$ (45)	\$ (59)	\$ (11,330)
12 June	\$ 3,462	\$ 3,970	\$ (507)	\$ (11,330)	\$ (8,668)	\$ (47)	\$ (61)	\$ (11,898)
13 July	\$ 3,482	\$ 4,164	\$ (682)	\$ (11,898)	\$ (9,102)	\$ (49)	\$ (64)	\$ (12,644)
14 August	\$ 3,638	\$ 4,278	\$ (640)	\$ (12,644)	\$ (9,673)	\$ (52)	\$ (68)	\$ (13,352)
15 September	\$ 3,592	\$ 3,915	\$ (323)	\$ (13,352)	\$ (10,214)	\$ (55)	\$ (72)	\$ (13,746)
16 October	\$ 3,415	\$ 4,275	\$ (860)	\$ (13,746)	\$ (10,516)	\$ (56)	\$ (74)	\$ (14,680)
17 November	\$ 3,375	\$ 3,785	\$ (409)	\$ (14,680)	\$ (11,230)	\$ (60)	\$ (79)	\$ (15,168)
18 December	\$ 3,175	\$ 3,361	\$ (186)	\$ (15,168)	\$ (11,604)	\$ (62)	\$ (81)	\$ (15,435)
19 January 2019	\$ 3,366	\$ 3,292	\$ 74	\$ (15,435)	\$ (11,859)	\$ (64)	\$ (83)	\$ (15,444)
20 February	\$ 3,380	\$ 3,135	\$ 245	\$ (15,444)	\$ (11,866)	\$ (64)	\$ (83)	\$ (15,282)
21 March	\$ 4,242	\$ 3,133	\$ 1,108	\$ (15,282)	\$ (11,741)	\$ (63)	\$ (82)	\$ (14,256)
22 April	\$ 3,513	\$ 3,099	\$ 414	\$ (14,256)	\$ (10,953)	\$ (59)	\$ (77)	\$ (13,919)
23 May	\$ 3,428	\$ 3,244	\$ 184	\$ (13,919)	\$ (10,694)	\$ (57)	\$ (75)	\$ (13,809)
24 June	\$ 3,445	\$ 3,160	\$ 286	\$ (13,809)	\$ (10,610)	\$ (57)	\$ (74)	\$ (13,598)
25 July	\$ 3,404	\$ 3,483	\$ (80)	\$ (13,598)	\$ (10,447)	\$ (56)	\$ (73)	\$ (13,751)
26 August	\$ 3,569	\$ 3,389	\$ 179	\$ (13,751)	\$ (10,565)	\$ (57)	\$ (74)	\$ (13,645)
27 September	\$ 3,438	\$ 3,341	\$ 98	\$ (13,645)	\$ (10,484)	\$ (56)	\$ (73)	\$ (13,621)
28 October	\$ 3,979	\$ 3,500	\$ 479	\$ (13,621)	\$ (10,465)	\$ (56)	\$ (73)	\$ (13,215)
29 November	\$ 3,758	\$ 3,018	\$ 741	\$ (13,215)	\$ (10,153)	\$ (55)	\$ (71)	\$ (12,546)
30 December	\$ 3,534	\$ 2,795	\$ 740	\$ (12,546)	\$ (9,639)	\$ (52)	\$ (67)	\$ (11,874)
19 Total			<u>\$ (4,467)</u>				<u>\$ (1,664)</u>	

Notes:

- (a) From Exhibit B-TU, Line 9
- (b) From CIM Joint Agency Asset Rider Revenue Report.
- (c) From Exhibit J-TU, Column B, Line 1 and Line 2
- (d) From Exhibit J-TU, Column C, Line 1 and Line 2
- (e) From Exhibit J-TU, Column I, Line 11
- (f) From Exhibit J-TU, Column H, Line 1 - Line 3
- (g) From Exhibit J-TU, Column H, Line 1 - Line 5
- (h) From Exhibit J-TU, Column N, Line 1 - Line 3
- (i) From Exhibit J-TU, Column N, Line 1 - Line 5
- (j) From Exhibit J-TU, Column Q, Line 1 - Line 3
- (k) From Exhibit J-TU, Column Q, Line 1 - Line 5

EXHIBIT A-8 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
LARGE GENERAL SERVICE CUSTOMER CLASS
(Thousands of Dollars)

Line
No.

Calculation of monthly rate of return :		January 1 - March 15, 2018			March 16, 2018 forward			2019	
		Composite Income <u>Tax Rate (e)</u>	Capitalization <u>Ratio (c)</u>	Cost <u>Rate (d)</u>	Capitalization <u>Ratio (c)</u>	Cost <u>Rate (d)</u>	After Tax Weighted Rate <u>Rate of Return</u>	Composite Income <u>Tax Rate (e)</u>	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (h)	1.4936% (j)
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (h)	5.1480% (j)
3	After tax overall return				<u>7.0491% (f)</u>		<u>6.6352% (h)</u>	<u>6.6416% (j)</u>	
4	Discounted monthly after tax overall return				<u>0.5693% (g)</u>		<u>0.5368% (i)</u>	<u>0.5373% (k)</u>	
5	Demand allocation factor						<u>16.2228%</u>		

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6 December							\$	(297)
7 January 2018	\$ 784	\$ 1,509	\$ (725)	\$ (297)	\$ (227)	(1) \$	(2) \$	(1,023)
8 February	\$ 1,002	\$ 1,839	\$ (837)	\$ (1,023)	\$ (783)	(4) \$	(6) \$	(1,866)
9 March	\$ 1,984	\$ 1,813	\$ 171	\$ (1,866)	\$ (1,427)	(8) \$	(10) \$	(1,705)
10 April	\$ 2,376	\$ 1,906	\$ 469	\$ (1,705)	\$ (1,305)	(7) \$	(9) \$	(1,245)
11 May	\$ 2,033	\$ 1,899	\$ 134	\$ (1,245)	\$ (953)	(5) \$	(7) \$	(1,118)
12 June	\$ 1,966	\$ 1,931	\$ 35	\$ (1,118)	\$ (855)	(5) \$	(6) \$	(1,088)
13 July	\$ 1,977	\$ 2,111	\$ (134)	\$ (1,088)	\$ (833)	(4) \$	(6) \$	(1,228)
14 August	\$ 2,066	\$ 2,159	\$ (93)	\$ (1,228)	\$ (940)	(5) \$	(7) \$	(1,328)
15 September	\$ 2,039	\$ 1,918	\$ 121	\$ (1,328)	\$ (1,016)	(5) \$	(7) \$	(1,214)
16 October	\$ 1,939	\$ 2,162	\$ (223)	\$ (1,214)	\$ (929)	(5) \$	(7) \$	(1,444)
17 November	\$ 1,916	\$ 1,947	\$ (31)	\$ (1,444)	\$ (1,104)	(6) \$	(8) \$	(1,482)
18 December	\$ 1,803	\$ 1,675	\$ 128	\$ (1,482)	\$ (1,134)	(6) \$	(8) \$	(1,363)
19 January 2019	\$ 1,873	\$ 1,799	\$ 75	\$ (1,363)	\$ (1,047)	(6) \$	(7) \$	(1,295)
20 February	\$ 1,881	\$ 1,617	\$ 265	\$ (1,295)	\$ (995)	(5) \$	(7) \$	(1,038)
21 March	\$ 2,361	\$ 1,686	\$ 675	\$ (1,038)	\$ (797)	(4) \$	(6) \$	(368)
22 April	\$ 1,955	\$ 1,736	\$ 219	\$ (368)	\$ (283)	(2) \$	(2) \$	(151)
23 May	\$ 1,908	\$ 1,784	\$ 124	\$ (151)	\$ (116)	(1) \$	(1) \$	(28)
24 June	\$ 1,918	\$ 1,762	\$ 156	\$ (28)	\$ (22)	(0) \$	(0) \$	127
25 July	\$ 1,894	\$ 1,983	\$ (89)	\$ 127	\$ 98	1	1	39
26 August	\$ 1,986	\$ 1,935	\$ 51	\$ 39	\$ 30	0	0	90
27 September	\$ 1,914	\$ 1,923	\$ (10)	\$ 90	\$ 69	0	0	81
28 October	\$ 2,214	\$ 1,987	\$ 227	\$ 81	\$ 62	0	0	308
29 November	\$ 2,092	\$ 1,736	\$ 356	\$ 308	\$ 237	1	2	666
30 December	\$ 1,967	\$ 1,709	\$ 258	\$ 666	\$ 511	3	4	927
19 Total			<u>\$ 1,322</u>			<u>\$</u>	<u>(97)</u>	

Notes:

- (a) From Exhibit B-TU, Line 9
- (b) From CIM Joint Agency Asset Rider Revenue Report.
- (c) From Exhibit J-TU, Column B, Line 1 and Line 2
- (d) From Exhibit J-TU, Column C, Line 1 and Line 2
- (e) From Exhibit J-TU, Column I, Line 11
- (f) From Exhibit J-TU, Column H, Line 1 - Line 3
- (g) From Exhibit J-TU, Column H, Line 1 - Line 5
- (h) From Exhibit J-TU, Column N, Line 1 - Line 3
- (i) From Exhibit J-TU, Column N, Line 1 - Line 5
- (j) From Exhibit J-TU, Column Q, Line 1 - Line 3
- (k) From Exhibit J-TU, Column Q, Line 1 - Line 5

Notes:		
(a)	From Exhibit C-TU, Line 24	
(b)	From Exhibit D-TU, Line 11	
(c)	From Exhibit E-TU, Line 14	
(d)	From Exhibit F-TU, Line 15	
(e)	From Exhibit G-TU, Line 4	
(f)	From Exhibit H-TU, Line 48	
(g)	From Exhibit J-TU, Line 12: Regulatory fee percentage	<div>January - June 0.140%</div> <div>July - December 0.130%</div>

EXHIBIT C-TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
SUMMARY OF REVENUE ASSOCIATED WITH LEVELIZED RECOVERY OF INCREMENTAL COSTS TO BE INCLUDED IN THE JOINT AGENCY PURCHASE RIDER for TEST YEAR ENDING DECEMBER 31, 2019
(Thousands of Dollars)

Line No.	Description	For the Month												Year to Date
		January NC Retail Revenue Amount (Col A)	February NC Retail Revenue Amount (Col B)	March NC Retail Revenue Amount (Col C)	April NC Retail Revenue Amount (Col D)	May NC Retail Revenue Amount (Col E)	June NC Retail Revenue Amount (Col F)	July NC Retail Revenue Amount (Col G)	August NC Retail Revenue Amount (Col H)	September NC Retail Revenue Amount (Col I)	October NC Retail Revenue Amount (Col J)	November NC Retail Revenue Amount (Col K)	December NC Retail Revenue Amount (Col L)	Total NC Retail Revenue Amount (Col M)
1	Revenue related to purchase of the Harris Nuclear Unit 1													
2	Levelized Revenue	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 20,547 (a)
3	Change in Revenue Requirement - Actual vs. Estimated	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2 (b)
3	Total Harris Nuclear Unit 1 (Line 2 + Line 3)	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,712	\$ 1,713	\$ 1,713	\$ 1,713	\$ 20,549
4	Revenue related to purchase of the Brunswick Nuclear Unit 1													
5	Levelized Revenue	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 6,011 (c)
6	Change in Revenue Requirement - Actual vs. Estimated	\$ -	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1 (d)
7	Total Brunswick Nuclear Unit 1 (Line 5 + Line 6)	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 6,011
8	Revenue related to purchase of the Brunswick Nuclear Unit 2													
9	Levelized Revenue	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 5,998 (e)
10	Change in Revenue Requirement - Actual vs. Estimated	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2 (f)
11	Total Brunswick Nuclear Unit 2 (Line 9 + Line 10)	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,000
12	Revenue related to purchase of the Mayo Coal Unit													
13	Levelized Revenue	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 4,887 (g)
14	Change in Revenue Requirement - Actual vs. Estimated	\$ -	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0 (h)
15	Total Mayo Coal Unit (Line 13 + Line 14)	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 407	\$ 4,887
16	Revenue related to purchase of the Roxboro Coal Unit													
17	Levelized Revenue	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 621 (i)
18	Change in Revenue Requirement - Actual vs. Estimated	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ 0	\$ 0	\$ -	\$ 0 (j)
19	Total Roxboro Coal Unit (Line 17 + Line 18)	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 621
20	Revenue related to the Acquisition costs above net book value for the above plants													
21	Levelized Revenue	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 18,201 (k)
22	Change in Revenue Requirement - Actual vs. Estimated	\$ 0	\$ 0	\$ -	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2 (l)
23	Total Acquisition costs above net book value for above plants (Line 21 + Line 22)	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 1,517	\$ 18,203
24	Total monthly levelized revenue (Line 3 + Line 7 + Line 11 + Line 15 + Line 19 + Line 23)	\$ 4,689	\$ 4,689	\$ 4,689	\$ 4,689	\$ 4,689	\$ 4,689	\$ 4,689	\$ 4,689	\$ 4,690	\$ 4,690	\$ 4,690	\$ 4,690	\$ 56,272

- Notes:
- (a) From Exhibit C1-Actual-TU, Col P.
(b) From Exhibit C1-Actual-TU, Col O.
(c) From Exhibit C2-Actual-TU, Col P.
(d) From Exhibit C2-Actual-TU, Col O.
(e) From Exhibit C3-Actual-TU, Col P.
(f) From Exhibit C3-Actual-TU, Col O.
(g) From Exhibit C4-Actual-TU, Col P.
(h) From Exhibit C4-Actual-TU, Col O.
(i) From Exhibit C5-Actual-TU, Col P.
(j) From Exhibit C5-Actual-TU, Col O.
(k) From Exhibit C6-Actual-TU, Col P.
(l) From Exhibit C6-Actual-TU, Col O.

EXHIBIT C-1-ESTIMATE TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE HARRIS NUCLEAR PLANT - ESTIMATE
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

ESTIMATE				REVISIONS FOR 2018			REVISIONS FOR 2019												
ASSUMPTIONS:																			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015		\$	895,848	(a)															
LAND COST AT JULY 31, 2015		\$	10,269	(a)															
ACCUMULATED DEPRECIATION AT JULY 31, 2015		\$	500,188	(a)															
NET PLANT EXCLUDING ACQUISITION COSTS		\$405,929																	
RETIREMENT DATE		10/24/2046 (a)																	
LEVELIZATION PERIOD IN MONTHS		375 (a)																	
TAX LIFE		15 (a)																	
COMPOSITE TAX RATE		35.16% (a)																	
AFTER TAX COST OF CAPITAL		6.5956% (a)																	
DEPRECIATION RATE		1.5349% (a)																	
FIRST YEAR BOOK DEPRECIATION RATE		0.6395% (a)																	
WEIGHTED ANNUAL INTEREST RATE		2.1479% (a)																	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE		5.4060% (a)																	
NC RETAIL ALLOCATION FACTOR		61.52780% (b)																	
REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING																			
YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)		
									INTEREST (Col I)	EQUITY (Col J)									
Beg Balance July 31, 2015	\$ 244,678																		
2015	\$ 241,130	5.000%	\$ 11,924	\$ 8,377	\$ 2,945	\$ 2,945	\$ 3,548	\$ 241,431	\$ 2,161	\$ 5,438	\$ 2,949	\$ 14,096		\$ 9,585	\$ 4,511	\$ 4,586			
2016	\$ 232,590	9.500%	\$ 22,778	\$ 14,238	\$ 4,925	\$ 7,870	\$ 8,540	\$ 231,452	\$ 4,971	\$ 12,512	\$ 6,617	\$ 32,641		\$ 22,272	\$ 10,369	\$ 15,655			
2017	\$ 223,777	8.550%	\$ 20,750	\$ 11,936	\$ 249	\$ 8,119,220	\$ 8,813	\$ 218,467	\$ 4,692	\$ 11,810	\$ 6,087	\$ 31,403		\$ 22,179	\$ 9,224	\$ 26,290			
2018	\$ 215,998	7.700%	\$ 18,745	\$ 10,966	\$ 2,577	\$ 10,696	\$ 7,779	\$ 210,479	\$ 4,183	\$ 10,951	\$ 3,364	\$ 26,276		\$ 20,565	\$ 5,711	\$ 33,963	\$ 31,905		
2019	January	\$ 215,349	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 10,872	\$ 648	\$ 204,890	\$ 332	\$ 879	\$ 265	\$ 2,124						
	February	\$ 214,701	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 11,047	\$ 648	\$ 204,066	\$ 331	\$ 875	\$ 264	\$ 2,118						
	March	\$ 214,053	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 11,223	\$ 648	\$ 203,242	\$ 329	\$ 872	\$ 263	\$ 2,112						
	April	\$ 213,405	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 11,398	\$ 648	\$ 202,418	\$ 328	\$ 868	\$ 262	\$ 2,106						
	May	\$ 212,757	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 11,574	\$ 648	\$ 201,594	\$ 327	\$ 865	\$ 261	\$ 2,100						
	June	\$ 212,108	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 11,750	\$ 648	\$ 200,771	\$ 325	\$ 861	\$ 260	\$ 2,095						
	July	\$ 211,460	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 11,925	\$ 648	\$ 199,947	\$ 324	\$ 858	\$ 259	\$ 2,089						
	August	\$ 210,812	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 12,101	\$ 648	\$ 199,123	\$ 323	\$ 854	\$ 258	\$ 2,083						
	September	\$ 210,164	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 12,276	\$ 648	\$ 198,299	\$ 321	\$ 851	\$ 257	\$ 2,077						
	October	\$ 209,515	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 12,452	\$ 648	\$ 197,476	\$ 320	\$ 847	\$ 255	\$ 2,071						
	November	\$ 208,867	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 12,627	\$ 648	\$ 196,652	\$ 319	\$ 844	\$ 254	\$ 2,065						
	December	\$ 208,219	6.930%	\$ 1,406	\$ 758	\$ 176	\$ 12,803	\$ 648	\$ 195,828	\$ 317	\$ 840	\$ 253	\$ 2,059	\$ 23,579					
2020	\$ 200,440	6.230%	\$ 15,166	\$ 7,388	\$ 1,712	\$ 14,514	\$ 7,779	\$ 190,671	\$ 3,707	\$ 9,816	\$ 2,960	\$ 24,261	\$ 21,411						
2021	\$ 192,661	5.900%	\$ 14,363	\$ 6,584	\$ 1,526	\$ 16,040	\$ 7,779	\$ 181,273	\$ 3,524	\$ 9,332	\$ 2,814	\$ 23,449	\$ 19,441						
2022	\$ 184,882	5.900%	\$ 14,363	\$ 6,584	\$ 1,526	\$ 17,566	\$ 7,779	\$ 171,969	\$ 3,343	\$ 8,853	\$ 2,670	\$ 22,645	\$ 17,637						
2023	\$ 177,104	5.910%	\$ 14,387	\$ 6,609	\$ 1,531	\$ 19,097	\$ 7,779	\$ 162,662	\$ 3,162	\$ 8,374	\$ 2,525	\$ 21,840	\$ 15,980						
2024	\$ 169,325	5.900%	\$ 14,363	\$ 6,584	\$ 1,526	\$ 20,622	\$ 7,779	\$ 153,355	\$ 2,981	\$ 7,895	\$ 2,381	\$ 21,036	\$ 14,459						
2025	\$ 161,546	5.910%	\$ 14,387	\$ 6,609	\$ 1,531	\$ 22,154	\$ 7,779	\$ 144,047	\$ 2,800	\$ 7,416	\$ 2,236	\$ 20,231	\$ 13,064						
2026	\$ 153,767	5.900%	\$ 14,363	\$ 6,584	\$ 1,526	\$ 23,679	\$ 7,779	\$ 134,740	\$ 2,619	\$ 6,936	\$ 2,092	\$ 19,426	\$ 11,784						
2027	\$ 145,988	5.910%	\$ 14,387	\$ 6,609	\$ 1,531	\$ 25,210	\$ 7,779	\$ 125,433	\$ 2,438	\$ 6,457	\$ 1,947	\$ 18,622	\$ 10,612						
2028	\$ 138,210	5.900%	\$ 14,363	\$ 6,584	\$ 1,526	\$ 26,736	\$ 7,779	\$ 116,126	\$ 2,257	\$ 5,978	\$ 1,803	\$ 17,817	\$ 9,539						
2029	\$ 130,431	5.910%	\$ 14,387	\$ 6,609	\$ 1,531	\$ 28,267	\$ 7,779	\$ 106,819	\$ 2,077	\$ 5,499	\$ 1,658	\$ 17,013	\$ 8,556						
2030	\$ 122,652	2.950%	\$ 7,182	\$ (597)	\$ (138)	\$ 28,129	\$ 7,779	\$ 98,344	\$ 1,912	\$ 5,063	\$ 1,527	\$ 16,280	\$ 7,692						
2031	\$ 114,873	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 26,326	\$ 7,779	\$ 91,535	\$ 1,779	\$ 4,712	\$ 1,421	\$ 15,692	\$ 6,965						
2032	\$ 107,094	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 24,524	\$ 7,779	\$ 85,559	\$ 1,663	\$ 4,405	\$ 1,328	\$ 15,175	\$ 6,327						
2033	\$ 99,315	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 22,722	\$ 7,779	\$ 79,582	\$ 1,547	\$ 4,097	\$ 1,236	\$ 14,658	\$ 5,742						
2034	\$ 91,537	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 20,919	\$ 7,779	\$ 73,606	\$ 1,431	\$ 3,789	\$ 1,143	\$ 14,142	\$ 5,204						
2035	\$ 83,758	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 19,117	\$ 7,779	\$ 67,629	\$ 1,315	\$ 3,482	\$ 1,050	\$ 13,625	\$ 4,710						
2036	\$ 75,979	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 17,315	\$ 7,779	\$ 61,653	\$ 1,199	\$ 3,174	\$ 957	\$ 13,108	\$ 4,257						
2037	\$ 68,200	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 15,512	\$ 7,779	\$ 55,676	\$ 1,082	\$ 2,866	\$ 864	\$ 12,592	\$ 3,842						
2038	\$ 60,421	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 13,710	\$ 7,779	\$ 49,700	\$ 966	\$ 2,559	\$ 772	\$ 12,075	\$ 3,461						
2039	\$ 52,643	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 11,907	\$ 7,779	\$ 43,723	\$ 850	\$ 2,251	\$ 679	\$ 11,558	\$ 3,112						
2040	\$ 44,864	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 10,105	\$ 7,779	\$ 37,747	\$ 734	\$ 1,943	\$ 596	\$ 11,042	\$ 2,793						
2041	\$ 37,085	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 8,303	\$ 7,779	\$ 31,770	\$ 618	\$ 1,636	\$ 493	\$ 10,525	\$ 2,501						
2042	\$ 29,306	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 6,500	\$ 7,779	\$ 25,794	\$ 501	\$ 1,328	\$ 400	\$ 10,009	\$ 2,234						
2043	\$ 21,527	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 4,698	\$ 7,779	\$ 19,817	\$ 385	\$ 1,020	\$ 308	\$ 9,492	\$ 1,990						
2044	\$ 13,749	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 2,896	\$ 7,779	\$ 13,841	\$ 269	\$ 713	\$ 215	\$ 8,975	\$ 1,768						
2045	\$ 5,970	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 1,093	\$ 7,779	\$ 7,865	\$ 153	\$ 405	\$ 122	\$ 8,459	\$ 1,565						
2046	TEN MONTHS	\$ (383)	0.000%	\$ -	\$ (6,352)	\$ (1,472)	\$ (378)	\$ 6,352	\$ 2,436	\$ 47	\$ 125	\$ 38	\$ 6,563	\$ 1,141					
TOTAL			\$ 242,780		\$ (2,280)		\$ 245,060		\$ 65,263		\$ 171,148	\$ 58,353	\$ 539,825	\$ 231,366					

Notes:

(a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.

(b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study

(c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.

(d) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.

(e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate.

See Exhibit J-E Cost of Capital.

	2018		Future	
	Ending	2018	Revenue Streams	Total
Date	Balance	2018	2018	2018
Net present value	\$ 31,905	\$ 231,366	\$ 263,271	
Annual payment	\$ 2,490	\$ 18,057	\$ 20,547	
Monthly payment	\$ 208	\$ 1,505	\$ 1,712	

EXHIBIT C-1 ACTUAL -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE HARRIS NUCLEAR PLANT - ACTUAL
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	2018	2019
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 895,848 (a)		
LAND COST AT JULY 31, 2015	\$ 10,289 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 500,188 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$405,929		
RETIREMENT DATE	10/24/2046 (a)		
LEVELIZATION PERIOD IN MONTHS	375 (a)	345.80	
TAX LIFE	15 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (b)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.4416% (c)	6.4476% (e)
DEPRECIATION RATE	1.5349% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	0.6395% (a)		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	1.9440% (c)	1.9440% (c)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (c)	5.1480% (c)
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	61.52780% (d)	60.75069% (f)

REVISIONS BASED ON 2017 TEST YEAR ACTUALS

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
Beg Balance July 31, 2015	\$ 244,678																		
2015			\$ 11,924	\$ 8,377	\$ 2,945	\$ 2,945	\$ 3,548	\$ 241,445	\$ 2,161	\$ 5,439	\$ 2,949	\$ 14,096				\$ 9,585	\$ 4,511	\$ 4,586	
2016			\$ 22,778	\$ 14,237	\$ 4,925	\$ 7,870	\$ 8,541	\$ 231,451	\$ 4,971	\$ 12,512	\$ 6,617	\$ 32,641				\$ 22,272	\$ 10,369	\$ 15,655	
2017			\$ 20,750	\$ 11,936	\$ 249	\$ 8,119	\$ 8,814	\$ 218,467	\$ 4,692	\$ 11,810	\$ 6,087	\$ 31,403				\$ 22,179	\$ 9,225	\$ 26,290	
2018			\$ 18,745	\$ 10,966	\$ 2,577	\$ 10,696	\$ 7,779	\$ 210,480	\$ 4,183	\$ 10,951	\$ 3,364	\$ 26,276				\$ 20,565	\$ 5,711	\$ 33,971	error in prior ye
2019	January	\$ 215,350	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 10,868	\$ 648	\$ 204,892	\$ 332	\$ 879	\$ 265	\$ 2,124	\$ 2,124	\$ 0	\$ 1,712	\$ 412	\$ 34,568	
	February	\$ 214,702	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 11,039	\$ 648	\$ 204,072	\$ 331	\$ 875	\$ 264	\$ 2,118	\$ 2,118	\$ 0	\$ 1,712	\$ 406	\$ 35,162	
	March	\$ 214,053	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 11,211	\$ 648	\$ 203,253	\$ 329	\$ 872	\$ 263	\$ 2,112	\$ 2,112	\$ 0	\$ 1,712	\$ 400	\$ 35,753	
	April	\$ 213,405	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 11,382	\$ 648	\$ 202,433	\$ 328	\$ 868	\$ 262	\$ 2,107	\$ 2,106	\$ 0	\$ 1,712	\$ 394	\$ 36,341	
	May	\$ 212,757	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 11,553	\$ 648	\$ 201,613	\$ 327	\$ 865	\$ 261	\$ 2,101	\$ 2,100	\$ 0	\$ 1,712	\$ 388	\$ 36,927	
	June	\$ 212,109	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 11,725	\$ 648	\$ 200,794	\$ 325	\$ 861	\$ 260	\$ 2,095	\$ 2,095	\$ 0	\$ 1,712	\$ 382	\$ 37,510	
	July	\$ 211,460	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 11,896	\$ 648	\$ 199,974	\$ 324	\$ 858	\$ 259	\$ 2,089	\$ 2,089	\$ 0	\$ 1,712	\$ 377	\$ 38,090	
	August	\$ 210,812	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 12,068	\$ 648	\$ 199,154	\$ 323	\$ 854	\$ 258	\$ 2,083	\$ 2,083	\$ 0	\$ 1,712	\$ 371	\$ 38,667	
	September	\$ 210,164	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 12,239	\$ 648	\$ 198,335	\$ 321	\$ 851	\$ 257	\$ 2,077	\$ 2,077	\$ 0	\$ 1,712	\$ 365	\$ 39,242	
	October	\$ 209,516	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 12,411	\$ 648	\$ 197,515	\$ 320	\$ 847	\$ 256	\$ 2,071	\$ 2,071	\$ 0	\$ 1,712	\$ 359	\$ 39,814	
	November	\$ 208,868	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 12,582	\$ 648	\$ 196,695	\$ 319	\$ 844	\$ 254	\$ 2,065	\$ 2,065	\$ 0	\$ 1,712	\$ 353	\$ 40,382	
	December	\$ 208,219	6.930%	\$ 1,388	\$ 740	\$ 171	\$ 12,753	\$ 648	\$ 195,876	\$ 317	\$ 840	\$ 253	\$ 2,059	\$ 2,059	\$ 0	\$ 1,712	\$ 347	\$ 40,948	
																\$ 20,547	\$ 4,554	\$ 40,948	

Latest Levelized Payment Calculations

	2018 Ending	Future Revenue Streams 2019 Forward	Total
Net present value	\$ 31,905	\$ 231,366	\$ 263,271
Annual payment	\$ 2,490	\$ 18,057	\$ 20,547
Monthly payment	\$ 208	\$ 1,505	\$ 1,712

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (c) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.
- (f) From Exhibit I-TU: Demand Allocator to NC Retail from 2019 Cost of Service study

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE BRUNSWICK UNIT 1 NUCLEAR PLANT - ESTIMATE
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (d) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate.

(f) See Exhibit J-E Cost of Capital.

	2018	Future	
	Ending	Revenue Streams	
	Deferral	2019 Forward	Total
Net present value	\$ 9,374	\$ 53,575	\$ 62,950
Annual payment	\$ 895	\$ 5,116	\$ 6,011
Monthly payment	\$ 75	\$ 426	\$ 501

DUKE ENERGY PROGRESS

NCMPA GENERATION ASSET PURCHASE

LEVELIZED COST FOR THE BRUNSWICK UNIT 1 NUCLEAR PLANT - ACTUAL

NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS

LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR

(Thousands of Dollars)

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (c) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (d) For Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.
- (f) From Exhibit I-TU: Demand Allocator to NC Retail from 2019 Cost of Service study

Latest Levelized Payment Calculations				
	2018	Future		
	Ending	Revenue Streams		
	Deferral	2019 Forward		Total
Net present value	\$ 9,374	\$ 53,575	\$	\$ 62,950
Annual payment	\$ 895	\$ 5,116	\$	\$ 6,011
Monthly payment	\$ 75	\$ 426	\$	\$ 501

**EXHIBIT C-3-ESTIMATE-TU
DOCKET E-2, SUB 1253**

DUKE ENERGY PROGRESS
NCMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE BRUNSWICK UNIT 2 NUCLEAR PLANT - ESTIMATE
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 218,790 (a)		
LAND COST AT JULY 31, 2015	\$ 615 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 122,314 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$97,091		
RETIREMENT DATE	12/27/2034 (a)		
LEVELIZATION PERIOD IN MONTHS	233 (a)	203.90	
TAX LIFE	15 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (c)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5856% (a)	6.4416% (d)	6.4476% (e)
DEPRECIATION RATE	2.0153% (a)	(d)	
FIRST YEAR BOOK DEPRECIATION RATE	0.8397%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	1.9440% (d)	1.9440% (d)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (d)	
NC RETAIL ALLOCATION FACTOR	61.52780% (b)		

REVISIONS BASED ON 2018 TEST YEAR ACTUALS & UPDATED COMPOSITE TAX RATE																	
	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CUMULATIVE CURRENT MONTH DEFERRAL (Col O) (L - N)	DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
									INTEREST (Col I)	EQUITY (Col J)							
Beg Balance July 31, 2015	\$ 58,523																
2015	\$ 57,353	5.000%	\$ 2,908	\$ 1,737	\$ 611	\$ 611	\$ 1,170	\$ 57,632	\$ 516	\$ 1,298	\$ 704	\$ 3,688		\$ 2,650	\$ 1,038	\$ 1,056	
2016	\$ 54,573	9.500%	\$ 5,554	\$ 2,774	\$ 960	\$ 1,570	\$ 2,780	\$ 54,872	\$ 1,179	\$ 2,966	\$ 1,569	\$ 8,494		\$ 6,204	\$ 2,290	\$ 3,503	
2017	\$ 51,759	8.550%	\$ 5,060	\$ 2,245	\$ 17	\$ 1,588	\$ 2,814	\$ 51,246	\$ 1,101	\$ 2,770	\$ 1,428	\$ 8,113		\$ 6,185	\$ 1,928	\$ 5,743	
2018	\$ 48,707	7.700%	\$ 4,571	\$ 1,519	\$ 357	\$ 1,945	\$ 3,052	\$ 48,466	\$ 963	\$ 2,522	\$ 775	\$ 7,312		\$ 6,002	\$ 1,310	\$ 7,485	\$ 7,032
2019 January	\$ 48,452	6.930%	\$ 343	\$ 88	\$ 21	\$ 1,965	\$ 254	\$ 46,625	\$ 76	\$ 200	\$ 60	\$ 590					
February	\$ 48,198	6.930%	\$ 343	\$ 88	\$ 21	\$ 1,986	\$ 254	\$ 46,350	\$ 75	\$ 199	\$ 60	\$ 588					
March	\$ 47,944	6.930%	\$ 343	\$ 88	\$ 21	\$ 2,006	\$ 254	\$ 46,075	\$ 75	\$ 198	\$ 60	\$ 586					
April	\$ 47,690	6.930%	\$ 343	\$ 88	\$ 21	\$ 2,027	\$ 254	\$ 45,800	\$ 74	\$ 196	\$ 59	\$ 584					
May	\$ 47,435	6.930%	\$ 343	\$ 88	\$ 21	\$ 2,047	\$ 254	\$ 45,525	\$ 74	\$ 195	\$ 59	\$ 582					
June	\$ 47,181	6.930%	\$ 343	\$ 88	\$ 21	\$ 2,068	\$ 254	\$ 45,250	\$ 73	\$ 194	\$ 59	\$ 580					
July	\$ 46,927	6.930%	\$ 343	\$ 88	\$ 21	\$ 2,088	\$ 254	\$ 44,976	\$ 73	\$ 193	\$ 58	\$ 578					
August	\$ 46,672	6.930%	\$ 343	\$ 88	\$ 21	\$ 2,109	\$ 254	\$ 44,701	\$ 72	\$ 192	\$ 58	\$ 576					
September	\$ 46,418	6.930%	\$ 343	\$ 88	\$ 21	\$ 2,129	\$ 254	\$ 44,426	\$ 72	\$ 191	\$ 57	\$ 574					
October	\$ 46,164	6.930%	\$ 343	\$ 88	\$ 21	\$ 2,150	\$ 254	\$ 44,151	\$ 72	\$ 189	\$ 57	\$ 572					
November	\$ 45,909	6.930%	\$ 343	\$ 88	\$ 21	\$ 2,170	\$ 254	\$ 43,876	\$ 71	\$ 188	\$ 57	\$ 570					
December	\$ 45,655	6.930%	\$ 343	\$ 88	\$ 21	\$ 2,191	\$ 254	\$ 43,601	\$ 71	\$ 187	\$ 56	\$ 568	\$ 6,531				
2020	\$ 42,603	6.230%	\$ 3,698	\$ 646	\$ 150	\$ 2,341	\$ 3,052	\$ 41,863	\$ 814	\$ 2,155	\$ 650	\$ 6,671	\$ 5,887				
2021	\$ 39,551	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,445	\$ 3,052	\$ 38,684	\$ 792	\$ 1,991	\$ 601	\$ 6,396	\$ 5,303				
2022	\$ 36,499	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,549	\$ 3,052	\$ 35,528	\$ 691	\$ 1,829	\$ 552	\$ 6,123	\$ 4,769				
2023	\$ 33,447	5.910%	\$ 3,508	\$ 456	\$ 106	\$ 2,655	\$ 3,052	\$ 32,371	\$ 629	\$ 1,666	\$ 503	\$ 5,850	\$ 4,280				
2024	\$ 30,396	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,759	\$ 3,052	\$ 29,214	\$ 568	\$ 1,504	\$ 454	\$ 5,577	\$ 3,834				
2025	\$ 27,344	5.910%	\$ 3,508	\$ 456	\$ 106	\$ 2,865	\$ 3,052	\$ 26,057	\$ 507	\$ 1,341	\$ 405	\$ 5,304	\$ 3,425				
2026	\$ 24,292	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,969	\$ 3,052	\$ 22,900	\$ 445	\$ 1,179	\$ 356	\$ 5,031	\$ 3,052				
2027	\$ 21,240	5.910%	\$ 3,508	\$ 456	\$ 106	\$ 3,075	\$ 3,052	\$ 19,744	\$ 384	\$ 1,016	\$ 307	\$ 4,759	\$ 2,712				
2028	\$ 18,188	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 3,179	\$ 3,052	\$ 16,587	\$ 322	\$ 854	\$ 258	\$ 4,486	\$ 2,401				
2029	\$ 15,136	5.910%	\$ 3,508	\$ 456	\$ 106	\$ 3,285	\$ 3,052	\$ 13,430	\$ 261	\$ 691	\$ 209	\$ 4,213	\$ 2,119				
2030	\$ 12,084	2.950%	\$ 1,751	\$ (1,301)	\$ (301)	\$ 2,984	\$ 3,052	\$ 10,476	\$ 204	\$ 539	\$ 163	\$ 3,957	\$ 1,870				
2031	\$ 9,032	0.000%	\$ -	\$ (3,052)	\$ (707)	\$ 2,277	\$ 3,052	\$ 7,928	\$ 154	\$ 408	\$ 123	\$ 3,737	\$ 1,659				
2032	\$ 5,980	0.000%	\$ -	\$ (3,052)	\$ (707)	\$ 1,570	\$ 3,052	\$ 5,583	\$ 109	\$ 287	\$ 87	\$ 3,534	\$ 1,474				
2033	\$ 2,929	0.000%	\$ -	\$ (3,052)	\$ (707)	\$ 862	\$ 3,052	\$ 3,239	\$ 63	\$ 167	\$ 50	\$ 3,332	\$ 1,305				
2034 TWELVE MONTHS	\$ (98)	0.000%	\$ -	\$ (3,027)	\$ (701)	\$ 161	\$ 3,027	\$ 903	\$ 18	\$ 46	\$ 14	\$ 3,105	\$ 1,143				
TOTAL		100.000%	\$ 59,198	\$ 577	\$ 161		\$ 58,621		\$ 10,555	\$ 27,555	\$ 9,903	\$ 106,635	\$ 51,763				

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (d) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.

	2018 Ending	Future Revenue Streams	
	Deferral	2019 Forward	Total
Net present value	\$ 7,032	\$ 51,763	\$ 58,795
Annual payment	\$ 717	\$ 5,281	\$ 5,998
Monthly payment	\$ 60	\$ 440	\$ 500

EXHIBIT C-3 ACTUAL -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE BRUNSWICK UNIT 2 NUCLEAR PLANT - ACTUAL
NO RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	2018	2019
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 218,790 (a)		
LAND COST AT July 31, 2015	\$ 615 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 122,314 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$97,091		
RETIREMENT DATE	12/27/2034 (a)		
LEVELIZATION PERIOD IN MONTHS	233 (a)	203.90	
TAX LIFE	15 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (b)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.4416% (c)	6.4476% (e)
DEPRECIATION RATE	2.0153% (a)	2.9365%	
FIRST YEAR BOOK DEPRECIATION RATE	0.8397%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	1.9440% (c)	1.9440% (c)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (c)	5.1480% (c)
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	60.75069% (d)	60.75069% (f)

REVISIONS BASED ON 2019 TEST YEAR ACTUALS																																		
		NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)														
										INTEREST (Col I)	EQUITY (Col J)																							
Beg Balance July 31, 2015		\$	58,523																															
2015				\$	2,908	\$	1,737	\$	611	\$	611	\$	1,170	\$	57,634	\$	516	\$	1,298	\$	704	\$	3,688				\$	2,650	\$	1,038	\$	1,056		
2016				\$	5,554	\$	2,774	\$	960	\$	1,570	\$	2,780	\$	54,871	\$	1,179	\$	2,966	\$	1,569	\$	8,493			\$	6,204	\$	2,290	\$	3,503			
2017				\$	5,060	\$	2,245	\$	17	\$	1,588	\$	2,814	\$	51,246	\$	1,101	\$	2,770	\$	1,428	\$	8,113			\$	6,185	\$	1,928	\$	5,743			
2018				\$	4,513	\$	1,461	\$	343	\$	1,931	\$	3,052	\$	48,473	\$	963	\$	2,522	\$	775	\$	7,312			\$	6,002	\$	1,310	\$	7,486			
2019 January		\$	48,452	6.930%	\$	338	\$	84	\$	20	\$	1,951	\$	254	\$	46,639	\$	76	\$	200	\$	60	\$	590	\$	590	\$	0	\$	500	\$	90	\$	7,617
February		\$	48,198	6.930%	\$	338	\$	84	\$	20	\$	1,970	\$	254	\$	46,365	\$	75	\$	199	\$	60	\$	588	\$	588	\$	0	\$	500	\$	88	\$	7,747
March		\$	47,944	6.930%	\$	338	\$	84	\$	20	\$	1,990	\$	254	\$	46,091	\$	75	\$	198	\$	60	\$	586	\$	586	\$	0	\$	500	\$	87	\$	7,875
April		\$	47,690	6.930%	\$	338	\$	84	\$	20	\$	2,009	\$	254	\$	45,817	\$	74	\$	197	\$	59	\$	584	\$	584	\$	0	\$	500	\$	85	\$	8,003
May		\$	47,435	6.930%	\$	338	\$	84	\$	20	\$	2,029	\$	254	\$	45,543	\$	74	\$	195	\$	59	\$	582	\$	582	\$	0	\$	500	\$	83	\$	8,129
June		\$	47,181	6.930%	\$	338	\$	84	\$	20	\$	2,048	\$	254	\$	45,270	\$	73	\$	194	\$	59	\$	580	\$	580	\$	0	\$	500	\$	81	\$	8,253
July		\$	46,927	6.930%	\$	338	\$	84	\$	20	\$	2,068	\$	254	\$	44,996	\$	73	\$	193	\$	58	\$	578	\$	578	\$	0	\$	500	\$	79	\$	8,377
August		\$	46,672	6.930%	\$	338	\$	84	\$	20	\$	2,087	\$	254	\$	44,722	\$	72	\$	192	\$	58	\$	576	\$	576	\$	0	\$	500	\$	77	\$	8,499
September		\$	46,418	6.930%	\$	338	\$	84	\$	20	\$	2,107	\$	254	\$	44,448	\$	72	\$	191	\$	58	\$	575	\$	574	\$	0	\$	500	\$	75	\$	8,620
October		\$	46,164	6.930%	\$	338	\$	84	\$	20	\$	2,126	\$	254	\$	44,174	\$	72	\$	190	\$	57	\$	573	\$	572	\$	0	\$	500	\$	73	\$	8,739
November		\$	45,909	6.930%	\$	338	\$	84	\$	20	\$	2,146	\$	254	\$	43,900	\$	71	\$	188	\$	57	\$	571	\$	570	\$	0	\$	500	\$	71	\$	8,857
December		\$	45,655	6.930%	\$	338	\$	84	\$	20	\$	2,165	\$	254	\$	43,627	\$	71	\$	187	\$	56	\$	569	\$	568	\$	0	\$	500	\$	69	\$	8,974

Latest Levelized Payment Calculations

	2017	Future	
	Ending	Revenue Streams	
	Deferral	2018 Forward	Total
Net present value	\$ 7,032	\$ 51,763	\$ 58,795
Annual payment	\$ 717	\$ 5,281	\$ 5,998
Monthly payment	\$ 60	\$ 440	\$ 500

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (c) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.
- (f) From Exhibit I-TU: Demand Allocator to NC Retail from 2019 Cost of Service study

EXHIBIT C-4-ESTIMATE-TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE MAYO COAL STATION - ESTIMATE
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	REVISIONS FOR 2017	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:				
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 178,639 (a)			
LAND COST AT JULY 31, 2015	\$ 3,300 (a)			
ACCUMULATED DEPRECIATION AT JULY 31, 20	\$ 100,546 (a)			
NET PLANT EXCLUDING ACQUISITION COSTS	\$81,392			
RETIREMENT DATE	6/20/2035 (a)			
LEVELIZATION PERIOD IN MONTHS	239 (a)		209.67	
TAX LIFE	20 (a)			
COMPOSITE TAX RATE	35.16% (a)		23.50% (c)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (a)		6.4416% (d)	6.4476% (e)
DEPRECIATION RATE	3.0024% (a)		(d)	
FIRST YEAR BOOK DEPRECIATION RATE	1.2510%			
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		1.9440% (d)	1.9440% (d)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		5.1480% (d)	5.1480% (d)
NC RETAIL ALLOCATION FACTOR	61.52780% (b)			

REVISIONS BASED ON 2018 TEST YEAR ACTUALS & UPDATED COMPOSITE TAX RATE

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O)	CUMULATIVE	
									INTEREST (Col I)	EQUITY (Col J)						DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Beg Balance July 31, 2015	\$ 49,060																
2015	\$ 47,696	3.750%	\$ 1,765	\$ 401	\$ 141	\$ 141	\$ 1,365	\$ 48,307	\$ 432	\$ 1,088	\$ 590	\$ 3,475		\$ 2,495	\$ 980	\$ 996	
2016	\$ 44,412	7.219%	\$ 3,416	\$ 133	\$ 46	\$ 188	\$ 3,283	\$ 45,890	\$ 986	\$ 2,481	\$ 1,312	\$ 8,062		\$ 5,755	\$ 2,306	\$ 3,457	
2017	\$ 41,104	6.677%	\$ 3,198	\$ (110)	\$ (87)	\$ 101	\$ 3,308	\$ 42,592	\$ 915	\$ 2,303	\$ 1,187	\$ 7,712		\$ 5,737	\$ 1,975	\$ 5,742	
2018	\$ 38,735	6.177%	\$ 2,968	\$ 599	\$ 141	\$ 241	\$ 2,369	\$ 39,749	\$ 790	\$ 2,068	\$ 635	\$ 5,863		\$ 4,891	\$ 972	\$ 7,135	\$ 6,702
2019 January	\$ 38,538	5.713%	\$ 229	\$ 31	\$ 7	\$ 249	\$ 197	\$ 38,393	\$ 62	\$ 165	\$ 50	\$ 474					
February	\$ 38,340	5.713%	\$ 229	\$ 31	\$ 7	\$ 256	\$ 197	\$ 38,187	\$ 62	\$ 164	\$ 49	\$ 472					
March	\$ 38,143	5.713%	\$ 229	\$ 31	\$ 7	\$ 263	\$ 197	\$ 37,982	\$ 62	\$ 163	\$ 49	\$ 471					
April	\$ 37,946	5.713%	\$ 229	\$ 31	\$ 7	\$ 270	\$ 197	\$ 37,778	\$ 61	\$ 162	\$ 49	\$ 470					
May	\$ 37,748	5.713%	\$ 229	\$ 31	\$ 7	\$ 278	\$ 197	\$ 37,573	\$ 61	\$ 161	\$ 49	\$ 468					
June	\$ 37,551	5.713%	\$ 229	\$ 31	\$ 7	\$ 285	\$ 197	\$ 37,368	\$ 61	\$ 160	\$ 48	\$ 467					
July	\$ 37,353	5.713%	\$ 229	\$ 31	\$ 7	\$ 292	\$ 197	\$ 37,163	\$ 60	\$ 159	\$ 48	\$ 465					
August	\$ 37,156	5.713%	\$ 229	\$ 31	\$ 7	\$ 299	\$ 197	\$ 36,959	\$ 60	\$ 159	\$ 48	\$ 464					
September	\$ 36,959	5.713%	\$ 229	\$ 31	\$ 7	\$ 307	\$ 197	\$ 36,754	\$ 60	\$ 158	\$ 48	\$ 462					
October	\$ 36,761	5.713%	\$ 229	\$ 31	\$ 7	\$ 314	\$ 197	\$ 36,549	\$ 59	\$ 157	\$ 47	\$ 461					
November	\$ 36,564	5.713%	\$ 229	\$ 31	\$ 7	\$ 321	\$ 197	\$ 36,345	\$ 59	\$ 156	\$ 47	\$ 459					
December	\$ 36,366	5.713%	\$ 229	\$ 31	\$ 7	\$ 329	\$ 197	\$ 36,140	\$ 59	\$ 155	\$ 47	\$ 458	\$ 5,252				
2020	\$ 33,997	5.285%	\$ 2,539	\$ 170	\$ 39	\$ 368	\$ 2,369	\$ 34,833	\$ 677	\$ 1,793	\$ 541	\$ 5,380	\$ 4,748				
2021	\$ 31,628	4.888%	\$ 2,349	\$ (20)	\$ (5)	\$ 363	\$ 2,369	\$ 32,447	\$ 631	\$ 1,670	\$ 504	\$ 5,174	\$ 4,290				
2022	\$ 29,259	4.522%	\$ 2,173	\$ (196)	\$ (45)	\$ 318	\$ 2,369	\$ 30,103	\$ 585	\$ 1,550	\$ 467	\$ 4,971	\$ 3,872				
2023	\$ 26,890	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ 266	\$ 2,369	\$ 27,783	\$ 540	\$ 1,430	\$ 431	\$ 4,771	\$ 3,491				
2024	\$ 24,521	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ 213	\$ 2,369	\$ 25,466	\$ 495	\$ 1,311	\$ 395	\$ 4,570	\$ 3,142				
2025	\$ 22,152	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ 161	\$ 2,369	\$ 23,149	\$ 450	\$ 1,192	\$ 359	\$ 4,370	\$ 2,822				
2026	\$ 19,783	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ 109	\$ 2,369	\$ 20,833	\$ 405	\$ 1,072	\$ 323	\$ 4,170	\$ 2,530				
2027	\$ 17,414	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ 57	\$ 2,369	\$ 18,516	\$ 360	\$ 953	\$ 287	\$ 3,970	\$ 2,262				
2028	\$ 15,045	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ 5	\$ 2,369	\$ 16,199	\$ 315	\$ 834	\$ 251	\$ 3,769	\$ 2,018				
2029	\$ 12,676	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ (48)	\$ 2,369	\$ 13,882	\$ 270	\$ 715	\$ 216	\$ 3,569	\$ 1,795				
2030	\$ 10,307	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ (100)	\$ 2,369	\$ 11,565	\$ 225	\$ 595	\$ 180	\$ 3,369	\$ 1,592				
2031	\$ 7,938	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ (152)	\$ 2,369	\$ 9,248	\$ 180	\$ 476	\$ 144	\$ 3,168	\$ 1,406				
2032	\$ 5,569	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ (204)	\$ 2,369	\$ 6,932	\$ 135	\$ 357	\$ 108	\$ 2,968	\$ 1,238				
2033	\$ 3,200	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ (256)	\$ 2,369	\$ 4,615	\$ 90	\$ 238	\$ 72	\$ 2,768	\$ 1,084				
2034	\$ 831	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ (309)	\$ 2,369	\$ 2,298	\$ 45	\$ 118	\$ 36	\$ 2,568	\$ 945				
2035 SIX MONTHS	\$ (288)	2.231%	\$ 1,072	\$ (47)	\$ (11)	\$ (319)	\$ 1,119	\$ 586	\$ 11	\$ 30	\$ 9	\$ 1,169	\$ 405				
TOTAL		100.000%	\$ 47,950	\$ (1,398)		\$ 49,348		\$ 9,260	\$ 24,193	\$ 8,626	\$ 91,427	\$ 42,890					

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E, Cost of Capital.
- (d) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E, Cost of Capital.

	2018 Ending Deferral	Future Revenue Streams		Total
		2019 Forward		
Net present value	\$ 6,702	\$ 42,890	\$	49,592
Annual payment	\$ 660	\$ 4,226	\$	4,887
Monthly payment	\$ 55	\$ 352	\$	407

**EXHIBIT C-4 ACTUAL -TU
DOCKET E-2, SUB 1253**

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE MAYO COAL STATION - ACTUAL
NO RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	2018	2019
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 178,639 (a)		
LAND COST AT JULY 31, 2015	\$ 3,300 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 100,546 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$81,392		
RETIREMENT DATE	6/20/2035 (a)		
LEVELIZATION PERIOD IN MONTHS	239 (a)	209.67	
TAX LIFE	20 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (b)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.4416% (c)	6.4476% (e)
DEPRECIATION RATE	3.0024% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	1.2510%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	1.9440% (c)	1.9440% (c)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (c)	5.1480% (c)
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	61.52780% (d)	60.75069% (f)

BASED ON 2019 TEST YEAR ACTUALS

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)	
									INTEREST (Col I)	EQUITY (Col J)										
Beg Balance July 31, 2015	\$ 49,060																			
2015			\$ 1,765	\$ 401	\$ 141	\$ 141	\$ 1,365	\$ 48,310	\$ 432	\$ 1,088	\$ 590	\$ 3,475				\$ 2,495	\$ 980	\$ 996		
2016			\$ 3,416	\$ 133	\$ 46	\$ 188	\$ 3,283	\$ 45,889	\$ 986	\$ 2,481	\$ 1,312	\$ 8,061				\$ 5,755	\$ 2,306	\$ 3,457		
2017			\$ 3,198	\$ (110)	\$ (88)	\$ 100	\$ 3,308	\$ 42,591	\$ 915	\$ 2,302	\$ 1,187	\$ 7,711.922				\$ 5,737	\$ 1,975	\$ 5,742		
2018			\$ 2,968	\$ 599	\$ 141	\$ 240	\$ 2,369	\$ 39,750	\$ 790	\$ 2,068	\$ 635	\$ 5,862.580				\$ 4,891	\$ 972	\$ 7,134		
2019	January	\$ 38,538	5.713%	\$ 226	\$ 28	\$ 7	\$ 247	\$ 197	\$ 38,393	\$ 62	\$ 165	\$ 50	\$ 474	\$ 474	\$ -	\$ 407	\$ 67	\$ 7,240		
	February	\$ 38,340	5.713%	\$ 226	\$ 28	\$ 7	\$ 254	\$ 197	\$ 38,189	\$ 62	\$ 164	\$ 49	\$ 473	\$ 472	\$ 0	\$ 407	\$ 65	\$ 7,344		
	March	\$ 38,143	5.713%	\$ 226	\$ 28	\$ 7	\$ 260	\$ 197	\$ 37,985	\$ 62	\$ 163	\$ 49	\$ 471	\$ 471	\$ 0	\$ 407	\$ 64	\$ 7,448		
	April	\$ 37,946	5.713%	\$ 226	\$ 28	\$ 7	\$ 267	\$ 197	\$ 37,781	\$ 61	\$ 162	\$ 49	\$ 470	\$ 470	\$ 0	\$ 407	\$ 62	\$ 7,551		
	May	\$ 37,748	5.713%	\$ 226	\$ 28	\$ 7	\$ 273	\$ 197	\$ 37,577	\$ 61	\$ 161	\$ 49	\$ 468	\$ 468	\$ 0	\$ 407	\$ 61	\$ 7,652		
	June	\$ 37,551	5.713%	\$ 226	\$ 28	\$ 7	\$ 280	\$ 197	\$ 37,373	\$ 61	\$ 160	\$ 48	\$ 467	\$ 467	\$ 0	\$ 407	\$ 59	\$ 7,753		
	July	\$ 37,353	5.713%	\$ 226	\$ 28	\$ 7	\$ 287	\$ 197	\$ 37,169	\$ 60	\$ 159	\$ 48	\$ 465	\$ 465	\$ 0	\$ 407	\$ 58	\$ 7,853		
	August	\$ 37,156	5.713%	\$ 226	\$ 28	\$ 7	\$ 293	\$ 197	\$ 36,965	\$ 60	\$ 159	\$ 48	\$ 464	\$ 464	\$ 0	\$ 407	\$ 56	\$ 7,952		
	September	\$ 36,959	5.713%	\$ 226	\$ 28	\$ 7	\$ 300	\$ 197	\$ 36,761	\$ 60	\$ 158	\$ 48	\$ 462	\$ 462	\$ 0	\$ 407	\$ 55	\$ 8,050		
	October	\$ 36,761	5.713%	\$ 226	\$ 28	\$ 7	\$ 306	\$ 197	\$ 36,557	\$ 59	\$ 157	\$ 47	\$ 461	\$ 461	\$ 0	\$ 407	\$ 54	\$ 8,147		
	November	\$ 36,564	5.713%	\$ 226	\$ 28	\$ 7	\$ 313	\$ 197	\$ 36,353	\$ 59	\$ 156	\$ 47	\$ 459	\$ 459	\$ 0	\$ 407	\$ 52	\$ 8,243		
	December	\$ 36,366	5.713%	\$ 226	\$ 28	\$ 7	\$ 319	\$ 197	\$ 36,149	\$ 59	\$ 155	\$ 47	\$ 458	\$ 458	\$ 0	\$ 407	\$ 51	\$ 8,339		

Latest Levelized Payment Calculations

	2018 Ending	Future Revenue Streams	
	Deferral	2019 Forward	Total
Net present value	\$ 6,702	\$ 42,890	\$ 49,592
Annual payment	\$ 660	\$ 4,226	\$ 4,887
Monthly payment	\$ 55	\$ 352	\$ 407

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (c) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.
- (f) From Exhibit I-TU: Demand Allocator to NC Retail from 2019 Cost of Service study

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE ROXBORO COAL STATION - ESTIMATE
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (d) Depreciation rates reflected the 2017 rate and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.

	2018		Future	
	Ending		Revenue Streams	
	Deferral		2019 Forward	Total
Net present value	\$ 566	\$	5,296	\$ 5,861
Annual payment	\$ 60	\$	561	\$ 621
Monthly payment	\$ 5	\$	47	\$ 52

**EXHIBIT C-5 ACTUAL -TU
DOCKET E-2, SUB 1253**

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE ROXBORO COAL STATION - ACTUAL
NC RETAIL ALLOCATION FACTORS APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	2018	2019
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 72,950 (a)		
LAND COST AT JULY 31, 2015	\$ 1 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 62,539 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$10,412		
RETIREMENT DATE	6/20/2035 (a)	6/20/2033	
LEVELIZATION PERIOD IN MONTHS	239 (a)	215	
TAX LIFE	20 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (b)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.4416% (c)	6.4476% (e)
DEPRECIATION RATE	1.8678% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	0.7783%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	1.9440% (c)	1.9440% (c)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (c)	5.1480% (c)
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	61.52780% (d)	60.75069% (f)

BASED ON 2019 TEST YEAR ACTUALS

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
Beg Balance July 31, 2015	\$ 6,276																		
2015			\$ 235	\$ 38	\$ 13	\$ 13	\$ 197	\$ 6,171	\$ 55	\$ 139	\$ 75	\$ 467				\$ 395	\$ 72	\$ 73	
2016			\$ 455	\$ (19)	\$ (7)	\$ 7	\$ 475	\$ 5,832	\$ 125	\$ 315	\$ 167	\$ 1,082				\$ 908	\$ 174	\$ 258	
2017			\$ 426	\$ (55)	\$ (15)	\$ (9)	\$ 482	\$ 5,366	\$ 115	\$ 290	\$ 149	\$ 1,036				\$ 899	\$ 137	\$ 418	
2018			\$ 396	\$ 59	\$ 14	\$ 5	\$ 336	\$ 4,956	\$ 99	\$ 258	\$ 79	\$ 772				\$ 622	\$ 150	\$ 602	
2019																			
January	\$ 4,758	5.713%	\$ 30	\$ 2	\$ 0	\$ 6	\$ 28	\$ 4,767	\$ 8	\$ 20	\$ 6	\$ 62	\$	62	\$ -	\$ 52	\$ 11	\$ 616	
February	\$ 4,730	5.713%	\$ 30	\$ 2	\$ 0	\$ 6	\$ 28	\$ 4,738	\$ 8	\$ 20	\$ 6	\$ 62	\$	62	\$ -	\$ 52	\$ 10	\$ 630	
March	\$ 4,702	5.713%	\$ 30	\$ 2	\$ 0	\$ 7	\$ 28	\$ 4,710	\$ 8	\$ 20	\$ 6	\$ 62	\$	62	\$ 0	\$ 52	\$ 10	\$ 643	
April	\$ 4,674	5.713%	\$ 30	\$ 2	\$ 0	\$ 7	\$ 28	\$ 4,681	\$ 8	\$ 20	\$ 6	\$ 62	\$	62	\$ -	\$ 52	\$ 10	\$ 657	
May	\$ 4,646	5.713%	\$ 30	\$ 2	\$ 0	\$ 8	\$ 28	\$ 4,653	\$ 8	\$ 20	\$ 6	\$ 62	\$	62	\$ -	\$ 52	\$ 10	\$ 670	
June	\$ 4,618	5.713%	\$ 30	\$ 2	\$ 0	\$ 8	\$ 28	\$ 4,624	\$ 7	\$ 20	\$ 6	\$ 61	\$	61	\$ -	\$ 52	\$ 10	\$ 683	
July	\$ 4,590	5.713%	\$ 30	\$ 2	\$ 0	\$ 9	\$ 28	\$ 4,596	\$ 7	\$ 20	\$ 6	\$ 61	\$	61	\$ 0	\$ 52	\$ 9	\$ 696	
August	\$ 4,562	5.713%	\$ 30	\$ 2	\$ 0	\$ 9	\$ 28	\$ 4,567	\$ 7	\$ 20	\$ 6	\$ 61	\$	61	\$ -	\$ 52	\$ 9	\$ 709	
September	\$ 4,534	5.713%	\$ 30	\$ 2	\$ 0	\$ 10	\$ 28	\$ 4,539	\$ 7	\$ 19	\$ 6	\$ 61	\$	61	\$ -	\$ 52	\$ 9	\$ 722	
October	\$ 4,506	5.713%	\$ 30	\$ 2	\$ 0	\$ 10	\$ 28	\$ 4,510	\$ 7	\$ 19	\$ 6	\$ 61	\$	60	\$ 0	\$ 52	\$ 9	\$ 735	
November	\$ 4,478	5.713%	\$ 30	\$ 2	\$ 0	\$ 11	\$ 28	\$ 4,482	\$ 7	\$ 19	\$ 6	\$ 60	\$	60	\$ 0	\$ 52	\$ 9	\$ 747	
December	\$ 4,450	5.713%	\$ 30	\$ 2	\$ 0	\$ 11	\$ 28	\$ 4,453	\$ 7	\$ 19	\$ 6	\$ 60	\$	60	\$ -	\$ 52	\$ 8	\$ 760	

Latest Levelized Payment Calculations

	2018 Ending Deferral	Future Revenue Streams 2019 Forward	Total
Net present value	\$ 566	\$ 5,296	\$ 5,861
Annual payment	\$ 60	\$ 561	\$ 621
Monthly payment	\$ 5	\$ 47	\$ 52

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (c) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.
- (f) From Exhibit I-TU: Demand Allocator to NC Retail from 2019 Cost of Service study

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE ACQUISITION ADJUSTMENT
TOTAL COMPANY AMOUNTS (NC RETAIL ALLOCATION FACTORS TO BE APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS)
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	2017	2018	2019
ASSUMPTIONS:				
ACQUISITION COSTS	\$ 349,802 (a)			
LAST MONTH OF AMORTIZATION	12/31/2042 (a)			
LEVELIZATION PERIOD IN MONTHS	329 (a)			
TAX LIFE	15 (a)			
COMPOSITE TAX RATE	35.16% (a)		23.50% (c)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.596% (a)		6.441% (d)	6.447% (e)
AMORTIZATION RATE	3.6474% (a)		(d)	
FIRST YEAR AMORTIZATION RATE	1.5198%			
WEIGHTED INTEREST RATE	2.1479% (a)		1.9440% (d)	1.9440% (e)
WEIGHTED NET OF TAX EQUITY RATE	6.4060% (a)		5.1480% (d)	5.1480% (e)
NC RETAIL ALLOCATION FACTOR	61.52780% (b)			

	END OF PERIOD	NC RETAIL		MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL			DEFERRED TAX BALANCE (Col F)	BOOK AMORTIZATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL PREV. REVENUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE		DEFERRAL PRESENT VALUE (Col Q)
		INVESTMENT BALANCE (Col A)	DEFERRED TAX DEFERRAL (Col E)				INTEREST (Col I)	EQUITY (Col J)	PLUS INTEREST (Col P)													
Beg Balance July 31, 2015		\$ 210,847																				
2015		\$ 207,643	5.000%	\$ 10,542	\$ 7,338	\$ 2,580	\$ 2,580	\$ 3,204	\$ 207,955	\$ 1,861	\$ 4,684	\$ 2,540	\$ 12,290		\$ 8,500	\$ 3,790	\$ 3,853					
2016		\$ 199,911	9.500%	\$ 20,138	\$ 12,406	\$ 4,291	\$ 6,871	\$ 7,732	\$ 199,051	\$ 4,275	\$ 10,761	\$ 5,690	\$ 28,458		\$ 19,824	\$ 8,634	\$ 13,072					
2017		\$ 192,085	8.550%	\$ 18,345	\$ 10,519	\$ 240	\$ 7,111.820	\$ 7,826	\$ 187,477	\$ 4,027	\$ 10,135	\$ 5,223	\$ 27,211		\$ 19,746	\$ 7,465	\$ 18,067					
2018		\$ 164,235	7.700%	\$ 16,572	\$ 8,722	\$ 2,050	\$ 9,162	\$ 7,850	\$ 180,023	\$ 3,578	\$ 9,366	\$ 2,877	\$ 23,671.68		\$ 18,219	\$ 5,452	\$ 24,929	\$ 23,419				
2019	January	\$ 183,581	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 9,298	\$ 654	\$ 174,678	\$ 283	\$ 749	\$ 226	\$ 1,913									
	February	\$ 182,926	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 9,434	\$ 654	\$ 173,887	\$ 282	\$ 746	\$ 225	\$ 1,907									
	March	\$ 182,272	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 9,571	\$ 654	\$ 173,097	\$ 280	\$ 743	\$ 224	\$ 1,901									
	April	\$ 181,618	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 9,707	\$ 654	\$ 172,306	\$ 279	\$ 739	\$ 223	\$ 1,895									
	May	\$ 180,964	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 9,844	\$ 654	\$ 171,516	\$ 278	\$ 736	\$ 222	\$ 1,890									
	June	\$ 180,310	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 9,980	\$ 654	\$ 170,725	\$ 277	\$ 732	\$ 221	\$ 1,884									
	July	\$ 179,655	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 10,116	\$ 654	\$ 169,934	\$ 275	\$ 729	\$ 220	\$ 1,878									
	August	\$ 179,001	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 10,253	\$ 654	\$ 169,144	\$ 274	\$ 726	\$ 219	\$ 1,873									
	September	\$ 178,347	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 10,389	\$ 654	\$ 168,353	\$ 273	\$ 722	\$ 218	\$ 1,867									
	October	\$ 177,693	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 10,526	\$ 654	\$ 167,563	\$ 271	\$ 719	\$ 217	\$ 1,861									
	November	\$ 177,039	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 10,662	\$ 654	\$ 166,772	\$ 270	\$ 715	\$ 216	\$ 1,856									
	December	\$ 176,385	6.930%	\$ 1,243	\$ 589	\$ 136	\$ 10,798	\$ 654	\$ 165,981	\$ 269	\$ 712	\$ 215	\$ 1,850	\$ 21,207								
2020		\$ 168,534	6.230%	\$ 13,409	\$ 5,558	\$ 1,288	\$ 12,086.33	\$ 7,850	\$ 161,017	\$ 3,130	\$ 8,289	\$ 2,500	\$ 21,769	\$ 19,212								
2021		\$ 160,684	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 13,210	\$ 7,850	\$ 151,961	\$ 2,954	\$ 7,823	\$ 2,359	\$ 20,986	\$ 17,399								
2022		\$ 152,834	5.910%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 14,333	\$ 7,850	\$ 142,988	\$ 2,780	\$ 7,361	\$ 2,220	\$ 20,211	\$ 15,741								
202																						

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (d) Depreciation rates the retirement date and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.

	2018 Ending Deferral	Future Revenue Streams 2019 Forward	Total
Net present value	\$ 23,419	\$ 195,861	\$ 219,281
Annual payment	\$ 1,944	\$ 16,257	\$ 18,201
Monthly payment	\$ 162	\$ 1,355	\$ 1,517

EXHIBIT C-6 ACTUAL -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE ACQUISITION ADJUSTMENT - ACTUAL
TOTAL COMPANY AMOUNTS (NC RETAIL ALLOCATION FACTORS TO BE APPLIED TO DETERMINE RIDER AMOUNT FOR NC RETAIL CUSTOMERS)
LEVELIZATION ASSUMES ANNUAL REVENUE COLLECTED EVENLY THROUGHOUT THE YEAR
(Thousands of Dollars)

	2015	2018	2019
ASSUMPTIONS:			
ACQUISITION COSTS	\$ 349,802 (a)		
LAST MONTH OF AMORTIZATION	12/31/2042 (a)		
LEVELIZATION PERIOD IN MONTHS	329 (a)		
TAX LIFE	15 (a)		
COMPOSITE TAX RATE	35.16% (a)	23.50% (b)	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.4416% (c)	6.4476% (e)
AMORTIZATION RATE	3.6474% (a)		
FIRST YEAR AMORTIZATION RATE	1.5198% (a)		
WEIGHTED INTEREST RATE	2.1479% (a)	1.9440% (c)	1.9440% (c)
WEIGHTED NET OF TAX EQUITY RATE	5.4060% (a)	5.1480% (c)	5.1480% (c)
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	61.52780% (d)	60.75069% (f)

		BASED ON 2019 TEST YEAR ACTUALS																						
		NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK AMORTIZATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)				
										INTEREST (Col I)	EQUITY (Col J)													
Beg Balance July 31, 2015		\$ 210,847																						
2015				\$ 10,542	\$ 7,338	\$ 2,580	\$ 2,580	\$ 3,204	\$ 207,955	\$ 1,861	\$ 4,684	\$ 2,540	\$ 12,290				\$ 8,500	\$ 3,790	\$ 3,853					
2016				\$ 20,138	\$ 12,406	\$ 4,291	\$ 6,871	\$ 7,732	\$ 199,051	\$ 4,275	\$ 10,761	\$ 5,690	\$ 28,458				\$ 19,824	\$ 8,634	\$ 13,072					
2017				\$ 18,345	\$ 10,519	\$ 240	\$ 7,112	\$ 7,826	\$ 187,477	\$ 4,027	\$ 10,135	\$ 5,223	\$ 27,211				\$ 19,746	\$ 7,465	\$ 18,067					
2018				\$ 16,572	\$ 8,722	\$ 2,050	\$ 9,161	\$ 7,850	\$ 180,024	\$ 3,578	\$ 9,366	\$ 2,877	\$ 23,672				\$ 18,219	\$ 5,452	\$ 24,929					
2019	January	\$ 183,581	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 9,294	\$ 654	\$ 174,680	\$ 283	\$ 749	\$ 226	\$ 1,913	\$ 1,913	\$ 0	\$ 1,517	\$ 396	\$ 25,461						
	February	\$ 182,926	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 9,427	\$ 654	\$ 173,893	\$ 282	\$ 746	\$ 225	\$ 1,907	\$ 1,907	\$ 0	\$ 1,517	\$ 390	\$ 25,890						
	March	\$ 182,272	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 9,560	\$ 654	\$ 173,106	\$ 280	\$ 743	\$ 224	\$ 1,901	\$ 1,901	\$ 0	\$ 1,517	\$ 384	\$ 26,516						
	April	\$ 181,618	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 9,693	\$ 654	\$ 172,319	\$ 279	\$ 739	\$ 223	\$ 1,896	\$ 1,896	\$ 0	\$ 1,517	\$ 379	\$ 27,040						
	May	\$ 180,964	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 9,825	\$ 654	\$ 171,532	\$ 278	\$ 736	\$ 222	\$ 1,890	\$ 1,890	\$ 0	\$ 1,517	\$ 373	\$ 27,560						
	June	\$ 180,310	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 9,958	\$ 654	\$ 170,745	\$ 277	\$ 733	\$ 221	\$ 1,884	\$ 1,884	\$ 0	\$ 1,517	\$ 367	\$ 28,077						
	July	\$ 179,655	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 10,091	\$ 654	\$ 169,958	\$ 275	\$ 729	\$ 220	\$ 1,879	\$ 1,878	\$ 0	\$ 1,517	\$ 362	\$ 28,592						
	August	\$ 179,001	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 10,224	\$ 654	\$ 169,171	\$ 274	\$ 726	\$ 219	\$ 1,873	\$ 1,873	\$ 0	\$ 1,517	\$ 356	\$ 29,104						
	September	\$ 178,347	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 10,357	\$ 654	\$ 168,384	\$ 273	\$ 722	\$ 218	\$ 1,867	\$ 1,867	\$ 0	\$ 1,517	\$ 350	\$ 29,612						
	October	\$ 177,693	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 10,489	\$ 654	\$ 167,597	\$ 272	\$ 719	\$ 217	\$ 1,862	\$ 1,861	\$ 0	\$ 1,517	\$ 345	\$ 30,118						
	November	\$ 177,039	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 10,622	\$ 654	\$ 166,810	\$ 270	\$ 716	\$ 216	\$ 1,856	\$ 1,856	\$ 0	\$ 1,517	\$ 339	\$ 30,621						
	December	\$ 176,385	6.930%	\$ 1,227	\$ 573	\$ 133	\$ 10,755	\$ 654	\$ 166,023	\$ 269	\$ 712	\$ 215	\$ 1,850	\$ 1,850	\$ 0	\$ 1,517	\$ 333	\$ 31,120						

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
- (c) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
- (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study
- (e) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.
- (f) From Exhibit I-TU: Demand Allocator to NC Retail from 2019 Cost of Service study

Latest Levelized Payment Calculations			
	2018 Ending Deferral	Future Revenue Streams 2019	Total
Net present value	\$ 23,419	\$ 195,861	\$ 219,281
Annual payment	\$ 1,944	\$ 16,257	\$ 18,201
Monthly payment	\$ 162	\$ 1,355	\$ 1,517

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
NET BOOK VALUE OF THE NCEMPA GENERATING ASSETS BY PLANT
(Thousands of Dollars)

Line No.	Plant	Calculation of Net Book Value as of: 7/31/2015 (Col A)
<u>Gross plant excluding Nuclear Fuel and land</u>		
1	Roxboro Unit 4 (including Roxboro Common)	\$ 72,950
2	Mayo Plant	\$ 178,639
3	Brunswick Unit 1	\$ 273,020
4	Brunswick Unit 2 (including Brunswick Common)	\$ 218,790
5	Harris Plant	\$ 895,848
6	Total NCEMPA gross book value of generation assets purchased	\$ 1,639,247
<u>Land recorded in plant in service</u>		
7	Roxboro Unit 4 (including Roxboro Common)	\$ 1
8	Mayo Plant	\$ 3,300
9	Brunswick Unit 1	\$ 1
10	Brunswick Unit 2 (including Brunswick Common)	\$ 615
11	Harris Plant	\$ 10,269
12	Total NCEMPA book value of land purchased	\$ 14,185
<u>Net Nuclear Fuel</u>		
13	Brunswick Unit 1	\$ 16,582
14	Brunswick Unit 2 (including Brunswick Common)	\$ 24,823
15	Harris Plant	\$ 8,642
16	Net Nuclear Fuel in the Reactor	\$ 50,047
17	Nuclear Fuel CWIP	\$ 33,378
18	Total NCEMPA net book value of Nuclear Fuel	\$ 83,425
<u>Accumulated Depreciation</u>		
19	Roxboro Unit 4 (including Roxboro Common)	\$ (62,539)
20	Mayo Plant	\$ (100,546)
21	Brunswick Unit 1	\$ (168,091)
22	Brunswick Unit 2 (including Brunswick Common)	\$ (122,314)
23	Harris Plant	\$ (500,188)
24	Total NCEMPA book value of accumulated depreciation on assets purchased	\$ (953,678)
<u>CWIP Balance including 2015 expenditures</u>		
25	Roxboro Unit 4 (including Roxboro Common)	\$ 3,018
26	Mayo Plant	\$ (598)
27	Brunswick Unit 1	\$ 18,789
28	Brunswick Unit 2 (including Brunswick Common)	\$ 13,784
29	Harris Plant	\$ 26,787
30	Total NCEMPA book value of CWIP assets acquired	\$ 61,780
<u>Net Book Value including net Nuclear Fuel and CWIP</u>		
31	Roxboro Unit 4 (including Roxboro Common)	\$ 13,430
32	Mayo Plant	\$ 80,795
33	Brunswick Unit 1	\$ 140,300
34	Brunswick Unit 2 (including Brunswick Common)	\$ 135,698
35	Harris Plant	\$ 441,358
36	Nuclear Fuel CWIP	\$ 33,378
37	Total NCEMPA book value of purchased assets	\$ 844,959
38	Materials and Supplies Inventory	\$ 55,815
39	Total NCEMPA book value of purchased assets	\$ 900,773
40	Purchase cost to be recorded as Acquisition Adjustment	\$ 349,802
41	Total Purchase Price of Assets Acquired (see Note)	\$ 1,250,575
Note:		
42	Total purchased price of assets acquired excluding 2015 construction expenditures	\$ 1,200,000
43	Total 2015 construction expenditures included in NCEMPA's book value at July 31, 2015	\$ 50,575
44	Total Purchase price of assets acquired	\$ 1,250,575
45	NCEMPA's nuclear decommissioning trust funds transferred to DEP's trust funds	\$ 261,077
46	NCEMPA's internal nuclear decommissioning funds transferred to DEP's trust funds	\$ 26,000
47	Total	\$ 287,077

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF REMAINING LIFE OF ASSETS PURCHASED FOR LEVELIZATION

Line No.	Plant	Retirement Date (Col A)	Calculation of Remaining Life (months) (Col B)	Revised based on Rate Case	
				Retirement Date (Col C)	Calculation of Remaining Life (months) (Col D)
1	Closing Date of Purchase		7/31/2015		7/31/2015
	<u>Generating Plant Description:</u>				
2	Roxboro Unit 4 (including Roxboro Common)	6/20/2035	238.67	6/20/2033 (a)	185.67
3	Mayo Plant	6/20/2035	238.67	6/20/2035	209.67
4	Brunswick Unit 1	9/8/2036	253.27	9/8/2036	224.27
5	Brunswick Unit 2	12/27/2034	232.90	12/27/2034	203.90
6	Harris Plant	10/24/2046	374.80	10/24/2046	345.80

(a) The retirement date for Roxboro was updated in DEP's general rate case proceeding under Docket E-2, Sub 1142.

EXHIBIT C-9 -TU
DOCKET E-2, SUB 1253

**DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
MACRS TAX DEPRECIATION RATES
FOR 20 YEAR, 15 YEAR AND 5 YEAR ASSETS**

Year from Asset Acquisition	MACRS Annual Rate - 20 Year	MACRS Annual Rate - 15 Year	MACRS Annual Rate - 5 Year
	Applicable to: Mayo and Roxboro	Applicable to: Brunswick Nuclear & Harris Nuclear	Applicable to: Nuclear Fuel
	(Col A)	(Col B)	(Col C)
1	3.750%	5.000%	20.000%
2	7.219%	9.500%	32.000%
3	6.677%	8.550%	19.200%
4	6.177%	7.700%	11.520%
5	5.713%	6.930%	11.520%
6	5.285%	6.230%	5.760%
7	4.888%	5.900%	
8	4.522%	5.900%	
9	4.462%	5.910%	
10	4.461%	5.900%	
11	4.462%	5.910%	
12	4.461%	5.900%	
13	4.462%	5.910%	
14	4.461%	5.900%	
15	4.462%	5.910%	
16	4.461%	2.950%	
17	4.462%		
18	4.461%		
19	4.462%		
20	4.461%		
21	2.231%		
Total	100.00%	100.00%	100.00%

EXHIBIT C-10 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS

NCEMPA GENERATION ASSET PURCHASE

COMPOSITE DEPRECIATION RATES FOR EACH NCEMPA GENERATION ASSET PURCHASED

Line No.		Estimated Annual Life Rate (a) (Col A)	Estimated Annual COR Rate (a) (Col B)	Estimated Annual Total Rate (a) (Col C)
1	Brunswick 1 (including Common)	2.9200%	0.0777%	2.9977%
2	Brunswick 2	2.8636%	0.0729%	2.9365%
3	Harris	1.9748%	0.0697%	2.0445%
4	Mayo	3.3470%	0.2632%	3.6102%
5	Roxboro 4 (excluding common)	1.6948%	0.1320%	1.8268%
6	Roxboro common	3.1628%	0.2330%	3.3958%
7	Roxboro 4 (including Common)	2.3847%	0.1800%	2.5647%

- (a) Depreciation rates were revised in connection with DEP's general rate case under Docket E-2, Sub 1142. Updated composite rates were determined based on the underlying rates as approved by the Commission.

EXHIBIT C-11-TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
BOOK DEPRECIATION EXPENSE FOR EACH NCEMPA GENERATION ASSET PURCHASED
STARTING IN 2018

Line No.		Gross Depreciable Plant at Acquisition (Col A) (a)	Cost of Removal Percentage (Col B) (b)	Gross Estimated Cost of Removal Cost (Col C) = A x B	NC Retail Share of Cost of Removal (Col D) =C x Line 1	NC Retail End of Period Investment Balance at 12/31/ 2017 (Col E) (c)	Total Costs Subject to Recovery (Col F) = D + E	Remaining Asset Life (months) (Col G) (d)	Book Depreciation Expense (Col H) = F / G * 12 months
1	NC Retail Allocation Factor		61.33723% (e)						
2	Brunswick 1 (including common)	\$ 273,020	0.0777%	\$ 212	\$ 130	\$ 53,077	\$ 53,207	224.27	\$ 2,847
3	Brunswick 2	\$ 218,790	0.0729%	\$ 159	\$ 98	\$ 51,759	\$ 51,857	203.90	\$ 3,052
4	Harris	\$ 895,848	0.0697%	\$ 624	\$ 383	\$ 223,777	\$ 224,160	345.80	\$ 7,779
5	Mayo	\$ 178,639	0.2632%	\$ 470	\$ 288	\$ 41,104	\$ 41,393	209.67	\$ 2,369
6	Roxboro combined (including common)	\$ 72,950	0.1800%	\$ 131	\$ 81	\$ 5,122	\$ 5,203	185.67	\$ 336

Notes:

- (a) From Exhibit C-7-E: Plant Costs, Line 1 - 5.
- (b) From Exhibit C-10-E: Composite Depreciation Rates, Column B
- (c) From Exhibit C-1-E to C-6-E, Column A, NC Retail Investment balance as of 2017.
- (d) From Exhibit C-8-E: Calculation of Remaining Life, Column C.
- (e) From Exhibit I-E: Demand Allocator to NC Retail from 2017 cost of service study as adjusted for NCEMPA Purchase

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF REVENUE REQUIREMENT FOR ACQUISITION COSTS EXCLUDED FROM THE LEVELIZATION
EXCLUDING CWIP
(Thousands of Dollars)

Line No.		For the Year to Date												Year to Date
		January Amount	February Amount	March Amount	April Amount	May Amount	June Amount	July Amount	August Amount	September Amount	October Amount	November Amount	December Amount	Total Amount
		(Col A)	(Col B)	(Col C)	(Col D)	(Col E)	(Col F)	(Col G)	(Col H)	(Col I)	(Col J)	(Col K)	(Col L)	(Col M)
1	Net Nuclear Fuel Inventory excluding CWIP	\$ 43,302	\$ 45,722	\$ 46,540	\$ 46,738	\$ 46,480	\$ 45,978	\$ 45,308	\$ 44,526	\$ 44,336	\$ 44,544	\$ 44,560	\$ 44,401	\$ 44,401 (a)
2	Deferred Tax Asset (Liability) on Net Nuclear Fuel Inventory	\$ 53	\$ 67	\$ 40	\$ (7)	\$ (31)	\$ (45)	\$ (49)	\$ (47)	\$ (47)	\$ (55)	\$ (66)	\$ (73)	\$ (73) (b)
3	Materials and Supplies Inventory	\$ 60,133	\$ 60,340	\$ 60,257	\$ 60,245	\$ 60,137	\$ 60,021	\$ 59,951	\$ 59,885	\$ 59,823	\$ 59,721	\$ 59,664	\$ 59,564	\$ 59,564 (c)
4	Dry Cask Storage	\$ 3,515	\$ 3,505	\$ 3,499	\$ 3,495	\$ 3,491	\$ 3,489	\$ 3,486	\$ 3,484	\$ 3,482	\$ 3,480	\$ 3,478	\$ 3,481	\$ 3,481 (d)
5	Total average system investment for the rate period	(Line 1 + Line 2 + Line 3 + Line 4)	\$ 107,004	\$ 109,633	\$ 110,335	\$ 110,471	\$ 110,078	\$ 109,443	\$ 108,696	\$ 107,848	\$ 107,594	\$ 107,690	\$ 107,636	\$ 107,373
6	Allocated to NC retail	(Line 5 x 60.75069%)	\$ 65,006	\$ 66,603	\$ 67,030	\$ 67,112	\$ 66,873	\$ 66,487	\$ 66,034	\$ 65,519	\$ 65,364	\$ 65,422	\$ 65,389	\$ 65,230 (e)
7	Rate base pre-tax cost of capital - discounted year to date rate		0.6933%	1.3914%	2.0943%	2.8021%	3.5148%	4.2324%	4.9551%	5.6827%	6.4154%	7.1531%	7.8960%	8.6440% (f)
8	Total Year to Date NC retail revenues required for financing costs on above investments	(Line 6 x Line 7)	\$ 451	\$ 927	\$ 1,404	\$ 1,881	\$ 2,350	\$ 2,814	\$ 3,272	\$ 3,723	\$ 4,193	\$ 4,680	\$ 5,163	\$ 5,638
9	Year to Date NC retail pre-tax return on deferred tax assets related to NCEMPA's nuclear decommissioning funds		\$ 92	\$ 186	\$ 281	\$ 378	\$ 477	\$ 577	\$ 679	\$ 783	\$ 888	\$ 995	\$ 1,104	\$ 1,215 (g)
10	Total Year to Date NC retail revenues required for financing costs	(Line 8 + Line 9)	\$ 543	\$ 1,112	\$ 1,685	\$ 2,259	\$ 2,827	\$ 3,391	\$ 3,951	\$ 4,506	\$ 5,082	\$ 5,675	\$ 6,267	\$ 6,853
11	Current Month NC retail revenues required for financing costs		\$ 543	\$ 570	\$ 572	\$ 574	\$ 569	\$ 564	\$ 560	\$ 555	\$ 576	\$ 594	\$ 592	\$ 586

Notes:
(a) From Exhibit D1-A-TU: Actual Net Nuclear Fuel year to date average balances, Column E, Line 2 - Line 13
(b) From Exhibit D1-B-TU: Accumulated Deferred Taxes on Nuclear Fuel year to date average balances, Column I, Line 2 - Line 13
(c) From Exhibit D-2-TU: Actual Material and Supplies year to date average balances, Column F, Line 2 - Line 13
(d) From Exhibit D-4-TU: Actual Dry Cask Storage year to date average balances, Column C, Line 2 - Line 13
(e) From Exhibit I-TU: Demand Allocator to NC Retail from 2019 cost of service study of: 60.75069%
(f) From Exhibit J-TU: Cost of Capital, discounted before tax rate, 8.6440%
(g) From Exhibit D-3: Deferred tax asset, Column L

EXHIBIT D-1A -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS

NCEMPA GENERATION ASSET PURCHASE

ACTUAL NET NUCLEAR FUEL BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2019

(EXCLUDES NUCLEAR FUEL CWIP BALANCES)

(Thousands of Dollars)

Line No.			Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col C)	Total (Col D)	Year to Date Average (Col E)
Current Test Year: Calendar 2019							
1	2018	December	\$ 19,268	\$ 11,048	\$ 10,614	\$ 40,930	(a)
2	2019	January	\$ 18,464	\$ 17,382	\$ 9,829	\$ 45,675	\$ 43,302
3	2019	February	\$ 17,745	\$ 23,695	\$ 9,121	\$ 50,561	\$ 45,722
4	2019	March	\$ 17,017	\$ 23,639	\$ 8,337	\$ 48,993	\$ 46,540
5	2019	April	\$ 16,650	\$ 23,306	\$ 7,577	\$ 47,533	\$ 46,738
6	2019	May	\$ 15,847	\$ 22,551	\$ 6,792	\$ 45,189	\$ 46,480
7	2019	June	\$ 15,110	\$ 21,823	\$ 6,031	\$ 42,964	\$ 45,978
8	2019	July	\$ 14,307	\$ 21,064	\$ 5,246	\$ 40,617	\$ 45,308
9	2019	August	\$ 13,504	\$ 20,307	\$ 4,460	\$ 38,271	\$ 44,526
10	2019	September	\$ 12,854	\$ 19,652	\$ 10,120	\$ 42,625	\$ 44,336
11	2019	October	\$ 12,054	\$ 18,896	\$ 15,672	\$ 46,623	\$ 44,544
12	2019	November	\$ 11,291	\$ 18,160	\$ 15,282	\$ 44,734	\$ 44,560
13	2019	December	\$ 10,490	\$ 17,409	\$ 14,600	\$ 42,499	\$ 44,401
14		Balance as of December 31, 2019	\$ 10,490	\$ 17,409	\$ 14,600	\$ 42,499	

Notes:

(a) Based on ending balances as of December 31, 2018 as filed with the Commission on Exhibit D-1A-TU under Docket E-2, Sub 1207.

EXHIBIT D-1B -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
ACCUMULATED DEFERRED INCOME TAXES ASSOCIATED WITH NUCLEAR FUEL SINCE THE DATE OF PURCHASE
(Thousands of Dollars)

Line No.	ADIT Expense (Income) Associated with Nuclear Fuel			
	Brunswick 1 (Col A) (a)	Brunswick 2 (Col B) (b)	Harris (Col C) (c)	Total (Col D) (d)
Current Test Year: Calendar 2019				
1				
2	2019 January	\$ (35)	\$ (39)	\$ 19 \$ (55)
3	2019 February	\$ (16)	\$ (33)	\$ 37 \$ (12)
4	2019 March	\$ (17)	\$ 130	\$ 19 \$ 132
5	2019 April	\$ 66	\$ 66	\$ 25 \$ 157
6	2019 May	\$ (35)	\$ (31)	\$ 19 \$ (48)
7	2019 June	\$ (20)	\$ (25)	\$ 24 \$ (20)
8	2019 July	\$ (35)	\$ (32)	\$ 19 \$ (49)
9	2019 August	\$ (35)	\$ (32)	\$ 19 \$ (48)
10	2019 September	\$ 1	\$ (8)	\$ 27 \$ 19
11	2019 October	\$ (34)	\$ (32)	\$ 143 \$ 78
12	2019 November	\$ (26)	\$ (27)	\$ 110 \$ 58
13	2019 December	\$ (35)	\$ (31)	\$ 43 \$ (23)
14	Total deferred tax expense	\$ (219)	\$ (94)	\$ 502 \$ 189

ADIT Asset (Liability) Balance Associated with Nuclear Fuel					Year to Date Average (Col I)
Brunswick 1 (Col E)	Brunswick 2 (Col F)	Harris (Col G)	Total (Col H)		
Beginning Balance, January 1, 2019					(f)
\$ (200)	\$ (625)	\$ 851	\$ 26		
\$ (165)	\$ (587)	\$ 833	\$ 81	\$ 53	
\$ (149)	\$ (554)	\$ 796	\$ 93	\$ 67	
\$ (132)	\$ (684)	\$ 777	\$ (39)	\$ 40	
\$ (198)	\$ (751)	\$ 752	\$ (196)	\$ (7)	
\$ (163)	\$ (719)	\$ 734	\$ (148)	\$ (31)	
\$ (144)	\$ (694)	\$ 709	\$ (128)	\$ (45)	
\$ (109)	\$ (661)	\$ 691	\$ (80)	\$ (49)	
\$ (74)	\$ (629)	\$ 672	\$ (31)	\$ (47)	
\$ (75)	\$ (621)	\$ 645	\$ (50)	\$ (47)	
\$ (41)	\$ (589)	\$ 502	\$ (128)	\$ (55)	
\$ (15)	\$ (562)	\$ 392	\$ (185)	\$ (66)	
\$ 20	\$ (532)	\$ 349	\$ (163)	\$ (73)	
Accumulated Deferred Tax Asset (Liability) as of December 31, 2019					
\$ 20	\$ (532)	\$ 349	\$ (163)		

Notes:

- (a) Calculated as Column A from Exhibit D-1C-TU times the composite tax rate (e)
- (b) Calculated as Column B from Exhibit D-1C-TU times the composite tax rate (e)
- (c) Calculated as Column C from Exhibit D-1C-TU times the composite tax rate (e)
- (d) Calculated as Column D from Exhibit D-1C-TU times the composite tax rate (e)
- (e) Composite tax rate from Exhibit J-TU, Column I, Line 11 23.17%
- (f) Based on ending balances as of December 31, 2018 as filed with the Commission on Exhibit D-1B-TU under Docket E-2, Sub 1207.

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
TAX VERSUS BOOK DEPRECIATION ASSOCIATED WITH NUCLEAR FUEL ADDITIONS SINCE THE DATE OF PURCHASE
(Thousands of Dollars)

Line No.	TAX DEPRECIATION EXPENSE MINUS BOOK AMORTIZATION				TAX BASIS AMORTIZATION EXPENSE ON NUCLEAR FUEL				BOOK AMORTIZATION EXPENSE ON NUCLEAR FUEL				
	Brunswick 1	Brunswick 2	Harris	Total	Brunswick 1	Brunswick 2	Harris	Total	Brunswick 1	Brunswick 2	Harris	Total	
	(Col A)	(Col B)	(Col C)	(Col D)	(Col E)	(Col F)	(Col G)	(Col H)	(Col I)	(Col J)	(Col K)	(Col L)	
Current Test Year: Calendar 2019													
1	2019 January	\$ (151)	\$ (168)	\$ 80	\$ (239)	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 803	\$ 787	\$ 786	\$ 2,376
2	2019 February	\$ (67)	\$ (141)	\$ 158	\$ (50)	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 720	\$ 760	\$ 708	\$ 2,188
3	2019 March	\$ (75)	\$ 563	\$ 82	\$ 569	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 728	\$ 56	\$ 784	\$ 1,568
4	2019 April	\$ 286	\$ 285	\$ 106	\$ 678	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 366	\$ 334	\$ 760	\$ 1,460
5	2019 May	\$ (151)	\$ (136)	\$ 81	\$ (206)	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 803	\$ 755	\$ 785	\$ 2,343
6	2019 June	\$ (84)	\$ (109)	\$ 105	\$ (88)	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 737	\$ 728	\$ 760	\$ 2,226
7	2019 July	\$ (150)	\$ (139)	\$ 80	\$ (209)	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 803	\$ 758	\$ 785	\$ 2,347
8	2019 August	\$ (151)	\$ (138)	\$ 80	\$ (209)	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 803	\$ 757	\$ 786	\$ 2,346
9	2019 September	\$ 3	\$ (36)	\$ 115	\$ 82	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 650	\$ 655	\$ 750	\$ 2,055
10	2019 October	\$ (147)	\$ (137)	\$ 619	\$ 335	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 800	\$ 756	\$ 247	\$ 1,802
11	2019 November	\$ (110)	\$ (117)	\$ 476	\$ 249	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 763	\$ 736	\$ 390	\$ 1,889
12	2019 December	\$ (149)	\$ (132)	\$ 184	\$ (97)	\$ 653	\$ 619	\$ 866	\$ 2,137	\$ 802	\$ 751	\$ 682	\$ 2,235
13	Total for the Test Period	\$ (947)	\$ (405)	\$ 2,166	\$ 815	\$ 7,831	\$ 7,428	\$ 10,390	\$ 25,649	\$ 8,778	\$ 7,833	\$ 8,223	\$ 24,834

EXHIBIT D-2 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
ACTUAL MATERIALS AND SUPPLIES BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2019
(Thousands of Dollars)

Line No.		Brunswick Common (Col A) (a)	Harris (Col B)	Mayo (Col C)	Roxboro Common (Col D) (b)	Total (Col E)	Year to Date Average (Col F)
Current Test Year: Calendar 2019							
1	2018 December	\$ 35,817	\$ 20,429	\$ 2,402	\$ 1,528	\$ 60,175	(c)
2	2019 January	\$ 36,229	\$ 19,910	\$ 2,420	\$ 1,532	\$ 60,091	\$ 60,133
3	2019 February	\$ 36,275	\$ 20,520	\$ 2,421	\$ 1,538	\$ 60,754	\$ 60,340
4	2019 March	\$ 35,526	\$ 20,533	\$ 2,419	\$ 1,529	\$ 60,007	\$ 60,257
5	2019 April	\$ 35,567	\$ 20,717	\$ 2,394	\$ 1,521	\$ 60,199	\$ 60,245
6	2019 May	\$ 35,384	\$ 20,304	\$ 2,389	\$ 1,521	\$ 59,597	\$ 60,137
7	2019 June	\$ 35,162	\$ 20,216	\$ 2,414	\$ 1,533	\$ 59,324	\$ 60,021
8	2019 July	\$ 35,361	\$ 20,158	\$ 2,399	\$ 1,545	\$ 59,462	\$ 59,951
9	2019 August	\$ 35,380	\$ 20,026	\$ 2,393	\$ 1,561	\$ 59,359	\$ 59,885
10	2019 September	\$ 35,330	\$ 19,933	\$ 2,431	\$ 1,572	\$ 59,265	\$ 59,823
11	2019 October	\$ 35,430	\$ 19,267	\$ 2,430	\$ 1,569	\$ 58,696	\$ 59,721
12	2019 November	\$ 35,704	\$ 19,355	\$ 2,408	\$ 1,569	\$ 59,036	\$ 59,664
13	2019 December	\$ 35,049	\$ 19,362	\$ 2,406	\$ 1,551	\$ 58,369	\$ 59,564
14	Balance as of December 31, 2019	\$ 35,049	\$ 19,362	\$ 2,406	\$ 1,551	\$ 58,369	

Notes:

- (a) Material and supplies inventory is not assigned or at the generating unit level. All inventory is assigned to Brunswick Common. Approximately 18.33% of the inventory assigned to Brunswick Common has been captured under this rider.
- (b) Material and supplies inventory is not assigned or at the generating unit level. All inventory that could be used at the four generating units at Roxboro is assigned to the Roxboro Common. Approximately 3.77% of the inventory assigned to Roxboro Common has been captured under this rider.
- (c) Based on ending balances as of December 31, 2018 as filed with the Commission on Exhibit D-2-TU under Docket E-2, Sub 1207.

EXHIBIT D-3 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
DEFERRED TAX ASSET RELATED TO NCEMPA'S NUCLEAR DECOMMISSIONING FUNDS TRANSFERRED TO DEP
(Thousands of Dollars)

	2015	2018	2019
ASSUMPTIONS:			
DECOMMISSIONING FUNDS TRANSFERRED	\$ 287,077 (a)		
TAX LIFE USED FOR ACQUIRED NCEMPA ASSET	15 (b)		
COMPOSITE TAX RATE	35.16% (c)	23.50% €	23.17% (e)
AFTER TAX COST OF CAPITAL	6.5956% (c)	6.4416% (d)	6.4476% (f)
WEIGHTED ANNUAL INTEREST RATE	2.1479% (c)	1.9440% (d)	1.9440% (g)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (c)	5.1480% (d)	5.1480% (g)
NC RETAIL ALLOCATION FACTOR	60.27603% (c)	61.52780% (d)	60.75069% (h)

REVISIONS BASED ON TEST YEAR

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (b) (Col B)	ANNUAL REDUCTION IN TAX DEPRECIATION (Col C)	TAX DEPR. NOT ALLOWED CURRENTLY (Col D)	ANNUAL DEF. TAXES FOR NON DEDUCTIBLE (Col E)	DEFERRED TAX ASSET BALANCE (Col F)	AVERAGE INVESTMENT FOR THE YEAR (Col G)	COST OF CAPITAL INTEREST (Col H)	EQUITY (Col I)	INCOME TAXES (Col J)	NC RETAIL REVENUE (Col K)	YEAR TO DATE NC RETAIL REVENUE (Col L)
Beg Balance July 31, 2015	\$ 173,039											
2015		5.000%	\$ 8,652	\$ 8,652	\$ 3,042	\$ 3,042	\$ 634	\$ 14	\$ 34	\$ 19	\$ 66	
2016		9.500%	\$ 16,527	\$ 16,527	\$ 5,717	\$ 8,759	\$ 5,900	\$ 127	\$ 319	\$ 169	\$ 614	
2017		8.550%	\$ 15,055	\$ 15,055	\$ 696	\$ 9,455	\$ 10,979	\$ 239	\$ 602	\$ 310	\$ 1,151	
2018		7.700%	\$ 13,601	\$ 13,601	\$ 3,196	\$ 12,651	\$ 10,942	\$ 219	\$ 574	\$ 176	\$ 970	
2019 January	\$ -	6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 12,885	\$ 12,768	\$ 21	\$ 55	\$ 17	\$ 92	\$ 92
February		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 13,118	\$ 13,001	\$ 21	\$ 56	\$ 17	\$ 94	\$ 186
March		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 13,351	\$ 13,235	\$ 21	\$ 57	\$ 17	\$ 95	\$ 281
April		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 13,585	\$ 13,468	\$ 22	\$ 58	\$ 17	\$ 97	\$ 378
May		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 13,818	\$ 13,701	\$ 22	\$ 59	\$ 18	\$ 99	\$ 477
June		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 14,051	\$ 13,935	\$ 23	\$ 60	\$ 18	\$ 100	\$ 577
July		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 14,285	\$ 14,168	\$ 23	\$ 61	\$ 18	\$ 102	\$ 679
August		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 14,518	\$ 14,401	\$ 23	\$ 62	\$ 19	\$ 104	\$ 783
September		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 14,752	\$ 14,635	\$ 24	\$ 63	\$ 19	\$ 105	\$ 888
October		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 14,985	\$ 14,868	\$ 24	\$ 64	\$ 19	\$ 107	\$ 995
November		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 15,218	\$ 15,102	\$ 24	\$ 65	\$ 20	\$ 109	\$ 1,104
December		6.930%	\$ 1,007	\$ 1,007	\$ 233	\$ 15,452	\$ 15,335	\$ 25	\$ 66	\$ 20	\$ 110	\$ 1,215

Note: The Company will receive a future tax deduction at the time nuclear decommissioning costs are incurred. This schedule shows the annual revenue required for the Company to recover the pre-tax financing costs of the deferred tax asset recorded as an offset to the tax depreciation assumed in the levelization schedules.

Notes: (a) From Exhibit C-7-TU
(b) From Exhibit C-9-TU
(c) From Exhibit D-3-TU as filed with the Commission under Docket E-2, Sub 1110
(d) From Exhibit D-3-TU as filed with the Commission under Docket E-2, Sub 1176
(e) From Exhibit J-TU, Column L and Column Q, Line 11.
(f) From Exhibit J-TU, Column P, Line 4
(g) From Exhibit J-TU, Column O, Line 1 and Line 2
(h) From Exhibit I-TU

EXHIBIT D-4 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS

NCEMPA GENERATION ASSET PURCHASE

ACTUAL DRY CASK STORAGE BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2019

(Thousands of Dollars)

Line No.		Brunswick Common (Col A) (a)	Total (Col B)	Year to Date Average (Col C)
	Current Test Year: Calendar 2019			
1	2018 December	\$ 3,543	\$ 3,543	
2	2019 January	\$ 3,487	\$ 3,487	\$ 3,515
3	2019 February	\$ 3,484	\$ 3,484	\$ 3,505
4	2019 March	\$ 3,481	\$ 3,481	\$ 3,499
5	2019 April	\$ 3,478	\$ 3,478	\$ 3,495
6	2019 May	\$ 3,475	\$ 3,475	\$ 3,491
7	2019 June	\$ 3,472	\$ 3,472	\$ 3,489
8	2019 July	\$ 3,469	\$ 3,469	\$ 3,486
9	2019 August	\$ 3,466	\$ 3,466	\$ 3,484
10	2019 September	\$ 3,463	\$ 3,463	\$ 3,482
11	2019 October	\$ 3,460	\$ 3,460	\$ 3,480
12	2019 November	\$ 3,457	\$ 3,457	\$ 3,478
13	2019 December	\$ 3,512	\$ 3,512	\$ 3,481
14	Balance as of December 31, 2019	<u>\$ 3,512</u>	<u>\$ 3,512</u>	

Notes:

- (a) Dry cask storage is not assigned or at the generating unit level. All inventory is assigned to Brunswick Common. Approximately 18.33% of the inventory assigned to Brunswick Common has been captured under this rider.

EXHIBIT E-TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF REVENUE REQUIREMENT RELATED TO CAPITAL ADDITIONS TO PLANT IN SERVICE SINCE THE PURCHASE DATE
RELATED TO PURCHASE FROM NCEMPA
(Thousands of Dollars)

Line No.		For the Month												Year to Date
		January Amount (Col A)	February Amount (Col B)	March Amount (Col C)	April Amount (Col D)	May Amount (Col E)	June Amount (Col F)	July Amount (Col G)	August Amount (Col H)	September Amount (Col I)	October Amount (Col J)	November Amount (Col K)	December Amount (Col L)	Total Amount (Col M)
1	Actual capital additions to plant in service since the purchase date allocated to purchase from NCEMPA	\$ 206,151	\$ 206,759	\$ 209,650	\$ 215,993	\$ 222,002	\$ 227,432	\$ 231,889	\$ 235,441	\$ 238,406	\$ 241,048	\$ 244,566	\$ 249,037	\$ 249,037 (a)
2	Actual accumulated depreciation on actual capital additions to plant in service since the purchase date allocated to purchase from NCEMPA	\$ (7,420)	\$ (7,650)	\$ (7,881)	\$ (8,116)	\$ (8,362)	\$ (8,617)	\$ (8,886)	\$ (9,165)	\$ (9,452)	\$ (9,744)	\$ (10,041)	\$ (10,345)	\$ (10,345) (b)
3	Accumulated deferred income tax asset / (liability) related to capital additions to plant in service	\$ (27,984)	\$ (28,175)	\$ (28,271)	\$ (28,458)	\$ (28,812)	\$ (29,162)	\$ (29,490)	\$ (29,773)	\$ (30,005)	\$ (30,203)	\$ (30,384)	\$ (30,644)	\$ (30,644) (c)
4	Total average net plant in service on capital additions for the test period (Line 1 + Line 2 + Line 3)	\$ 170,747	\$ 170,934	\$ 173,498	\$ 179,419	\$ 184,829	\$ 189,653	\$ 193,513	\$ 196,503	\$ 198,949	\$ 201,101	\$ 204,141	\$ 208,048	\$ 208,048
5	Allocation to NC retail (Line 4 x Line 11)	\$ 103,730	\$ 103,844	\$ 105,401	\$ 108,999	\$ 112,285	\$ 115,216	\$ 117,560	\$ 119,377	\$ 120,863	\$ 122,170	\$ 124,017	\$ 126,391	\$ 126,391
6	Rate base pre-tax cost of capital - discounted year to date rate	0.6933%	1.3914%	2.0943%	2.8021%	3.5148%	4.2324%	4.9551%	5.6827%	6.4154%	7.1531%	7.8960%	8.6440%	8.6440% (d)
7	Total year to date NC retail revenues required for cost of capital on above investments (Line 5 x Line 6)	\$ 719	\$ 1,445	\$ 2,207	\$ 3,054	\$ 3,947	\$ 4,876	\$ 5,825	\$ 6,784	\$ 7,754	\$ 8,739	\$ 9,792	\$ 10,925	\$ 10,925
	Incremental operating expenses related to capital additions:													
8	Depreciation expense on actual capital additions for the test year - year to date	\$ 455	\$ 918	\$ 1,382	\$ 1,862	\$ 2,399	\$ 2,955	\$ 3,577	\$ 4,206	\$ 4,837	\$ 5,474	\$ 6,116	\$ 6,798	\$ 6,798 (e)
9	Other operating expenses related to capital additions for the test year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Total year to date operating expenses related to capital additions for the test period (Line 8 + Line 9)	\$ 455	\$ 918	\$ 1,382	\$ 1,862	\$ 2,399	\$ 2,955	\$ 3,577	\$ 4,206	\$ 4,837	\$ 5,474	\$ 6,116	\$ 6,798	\$ 6,798
11	NC Retail allocation factor	60.75069%	60.75069%	60.75069%	60.75069%	60.75069%	60.75069%	60.75069%	60.75069%	60.75069%	60.75069%	60.75069%	60.75069%	60.75069% (f)
12	Total year to date operating expenses related to capital additions for the next rate period allocated to NC retail (Line 10 x Line 11)	\$ 277	\$ 558	\$ 839	\$ 1,131	\$ 1,458	\$ 1,795	\$ 2,173	\$ 2,555	\$ 2,939	\$ 3,326	\$ 3,716	\$ 4,130	\$ 4,130
13	Total year to date NC retail revenues required for financial and operating expenses related to capital additions since the acquisition date (Line 7 + Line 12)	\$ 996	\$ 2,003	\$ 3,047	\$ 4,185	\$ 5,404	\$ 6,672	\$ 7,998	\$ 9,339	\$ 10,692	\$ 12,065	\$ 13,508	\$ 15,055	\$ 15,055
14	Current Month NC retail revenues required for financial and operating expenses related to capital additions since the acquisition date	\$ 996	\$ 1,007	\$ 1,044	\$ 1,139	\$ 1,219	\$ 1,268	\$ 1,327	\$ 1,340	\$ 1,354	\$ 1,372	\$ 1,443	\$ 1,547	

Notes:

- (a) From Exhibit E-1-TU: Actual Capital year to date average balances, Column O, Line 2 - Line 13
(b) From Exhibit E-2-TU: Actual Depreciation Expense year to date average balances, Column P, Line 2 - Line 13
(c) From Exhibit E-3-TU: Deferred Taxes on Capital Additions year to date average balances, Column D, Line 2 - Line 13
(d) From Exhibit J-TU: Cost of Capital
(e) From Exhibit E-2-TU: Actual Depreciation Expense, Column H, Line 2 - Line 13
(f) From Exhibit I-TU: Demand Allocator to NC Retail from 2019 cost of service study

8.6440%

60.75069%

EXHIBIT E-1 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS

NCEMPA GENERATION ASSET PURCHASE

ACTUAL CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE

RELATED TO PURCHASE FROM NCEMPA

(Thousands of Dollars)

		ACTUAL CAPITAL ADDITIONS FOR THE MONTH						
Line No.		Brunswick 1 (Col A) (a)	Brunswick 2 (Col B)	Harris (Col C)	Mayo (Col D)	Roxboro 4 (Col E)	Roxboro Common (Col F)	Total (Col G)
Current Test Year: Calendar 2019								
1								
2	2019 January	\$ 1,369	\$ 322	\$ 195	\$ 116	\$ (8)	\$ 1,356	\$ 3,348
3	2019 February	\$ 101	\$ 36	\$ (92)	\$ 3	\$ 12	\$ 89	\$ 149
4	2019 March	\$ 1,226	\$ 1,921	\$ 449	\$ 6,266	\$ 15	\$ 473	\$ 10,350
5	2019 April	\$ 463	\$ 13,693	\$ 1,396	\$ 2,671	\$ (4)	\$ 4,820	\$ 23,038
6	2019 May	\$ 3,978	\$ 1,902	\$ 75	\$ 4,413	\$ 66	\$ 253	\$ 10,688
7	2019 June	\$ 2,785	\$ 4,228	\$ 670	\$ 110	\$ (8)	\$ 177	\$ 7,963
8	2019 July	\$ 372	\$ 339	\$ 2,082	\$ 164	\$ (4)	\$ 120	\$ 3,074
9	2019 August	\$ 233	\$ 142	\$ 64	\$ 169	\$ (10)	\$ 171	\$ 771
10	2019 September	\$ 133	\$ (6)	\$ 941	\$ 116	\$ (0)	\$ 44	\$ 1,228
11	2019 October	\$ 606	\$ 188	\$ 1,120	\$ 405	\$ (3)	\$ 72	\$ 2,389
12	2019 November	\$ 911	\$ (42)	\$ 14,553	\$ 252	\$ 60	\$ 57	\$ 15,791
13	2019 December	\$ 7,112	\$ 4,475	\$ 7,502	\$ 223	\$ 40	\$ 65	\$ 19,417
14	Total capital additions	\$ 19,288	\$ 27,199	\$ 28,956	\$ 14,909	\$ 157	\$ 7,696	\$ 98,204

Notes:

(a) Capital additions for Brunswick Common are included with Brunswick 1.

(b) Based on ending balances as of December 31, 2018 as filed with the Commission on Exhibit E-2-TU under Docket E-2, Sub 1207.

	CUMULATIVE CAPITAL ADDITIONS							Year to Date Average (Col O)
	Brunswick 1 (Col H) (a)	Brunswick 2 (Col I)	Harris (Col J)	Mayo (Col K)	Roxboro 4 (Col L)	Roxboro Common (Col M)	Total (Col N)	
Beginning Balance as of January 1, 2019	\$ 76,722	\$ 34,157	\$ 66,385	\$ 4,161	\$ 14,144	\$ 8,909	\$ 204,477	(b)
	\$ 78,091	\$ 34,479	\$ 66,579	\$ 4,276	\$ 14,135	\$ 10,265	\$ 207,825	\$ 206,151
	\$ 78,192	\$ 34,514	\$ 66,488	\$ 4,279	\$ 14,147	\$ 10,354	\$ 207,975	\$ 206,759
	\$ 79,418	\$ 36,435	\$ 66,937	\$ 10,546	\$ 14,163	\$ 10,827	\$ 218,325	\$ 209,650
	\$ 79,880	\$ 50,128	\$ 68,332	\$ 13,217	\$ 14,159	\$ 15,647	\$ 241,362	\$ 215,993
	\$ 83,858	\$ 52,030	\$ 68,407	\$ 17,630	\$ 14,225	\$ 15,900	\$ 252,050	\$ 222,002
	\$ 86,643	\$ 56,258	\$ 69,078	\$ 17,740	\$ 14,217	\$ 16,076	\$ 260,013	\$ 227,432
	\$ 87,015	\$ 56,598	\$ 71,160	\$ 17,905	\$ 14,213	\$ 16,196	\$ 263,087	\$ 231,889
	\$ 87,248	\$ 56,740	\$ 71,225	\$ 18,074	\$ 14,204	\$ 16,367	\$ 263,857	\$ 235,441
	\$ 87,382	\$ 56,734	\$ 72,165	\$ 18,190	\$ 14,203	\$ 16,411	\$ 265,085	\$ 238,406
	\$ 87,987	\$ 56,922	\$ 73,285	\$ 18,595	\$ 14,200	\$ 16,483	\$ 267,474	\$ 241,048
	\$ 88,898	\$ 56,880	\$ 87,838	\$ 18,847	\$ 14,260	\$ 16,541	\$ 283,264	\$ 244,566
	\$ 96,010	\$ 61,356	\$ 95,340	\$ 19,069	\$ 14,300	\$ 16,605	\$ 302,681	\$ 249,037
Capital Additions as of December 31, 2019	\$ 96,010	\$ 61,356	\$ 95,340	\$ 19,069	\$ 14,300	\$ 16,605	\$ 302,681	

EXHIBIT E-2 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS

NCEMPA GENERATION ASSET PURCHASE

ACTUAL DEPRECIATION EXPENSE ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE
RELATED TO PURCHASE FROM NCEMPA

(Thousands of Dollars)

DEPRECIATION EXPENSE ON ACTUAL CAPITAL ADDITIONS BY MONTH													Year to Date				
Line No.				Brunswick 1 (Col A) (a)	Brunswick 2 (Col B)	Harris (Col C)	Mayo (Col D)	Roxboro 4 (Col E)		Roxboro Common (Col F)	Total (Col G)	Total (Col H)					
Current Test Year: Calendar 2019																	
1																	
2	2019	January	\$	195	\$	77	\$	133	\$	12	\$	20	\$	18	\$	455	\$ 455
3	2019	February	\$	200	\$	76	\$	133	\$	12	\$	20	\$	22	\$	463	\$ 918
4	2019	March	\$	200	\$	76	\$	133	\$	12	\$	20	\$	22	\$	463	\$ 1,382
5	2019	April	\$	204	\$	80	\$	134	\$	19	\$	20	\$	24	\$	480	\$ 1,862
6	2019	May	\$	206	\$	117	\$	138	\$	26	\$	20	\$	31	\$	537	\$ 2,399
7	2019	June	\$	215	\$	122	\$	138	\$	30	\$	20	\$	32	\$	556	\$ 2,955
8	2019	July	\$	267	\$	134	\$	139	\$	30	\$	20	\$	32	\$	622	\$ 3,577
9	2019	August	\$	268	\$	135	\$	143	\$	30	\$	20	\$	32	\$	628	\$ 4,206
10	2019	September	\$	270	\$	136	\$	142	\$	30	\$	20	\$	33	\$	631	\$ 4,837
11	2019	October	\$	270	\$	136	\$	148	\$	31	\$	20	\$	33	\$	637	\$ 5,474
12	2019	November	\$	272	\$	135	\$	150	\$	31	\$	20	\$	33	\$	642	\$ 6,116
13	2019	December	\$	274	\$	135	\$	187	\$	32	\$	20	\$	33	\$	682	\$ 6,798
14	Total Depreciation Expense			\$	2,841	\$	1,360	\$	1,717	\$	295	\$	241	\$	345	\$	6,798

ACCUMULATED DEPRECIATION								Year to Date
Brunswick 1 (Col I) (a)	Brunswick 2 (Col J)	Harris (Col K)	Mayo (Col L)	Roxboro 4 (Col M)	Roxboro Common (Col N)	Total (Col O)	Average (Col P)	
<hr/>								
Beginning Balance as of January 1, 2019	\$ (3,114)	\$ (1,520)	\$ (1,873)	\$ (237)	\$ (165)	\$ (283)	\$ (7,192)	
	\$ (3,310)	\$ (1,596)	\$ (2,006)	\$ (249)	\$ (185)	\$ (302)	\$ (7,648)	
	\$ (3,509)	\$ (1,672)	\$ (2,139)	\$ (261)	\$ (205)	\$ (323)	\$ (8,111)	
	\$ (3,709)	\$ (1,749)	\$ (2,272)	\$ (274)	\$ (225)	\$ (345)	\$ (8,574)	
	\$ (3,913)	\$ (1,828)	\$ (2,406)	\$ (292)	\$ (246)	\$ (369)	\$ (9,054)	
	\$ (4,119)	\$ (1,945)	\$ (2,544)	\$ (318)	\$ (266)	\$ (400)	\$ (9,592)	
	\$ (4,334)	\$ (2,068)	\$ (2,681)	\$ (347)	\$ (286)	\$ (432)	\$ (10,148)	
	\$ (4,601)	\$ (2,202)	\$ (2,820)	\$ (377)	\$ (306)	\$ (464)	\$ (10,770)	
	\$ (4,868)	\$ (2,337)	\$ (2,962)	\$ (407)	\$ (326)	\$ (496)	\$ (11,398)	
	\$ (5,139)	\$ (2,473)	\$ (3,105)	\$ (438)	\$ (346)	\$ (529)	\$ (12,029)	
	\$ (5,409)	\$ (2,609)	\$ (3,253)	\$ (468)	\$ (367)	\$ (562)	\$ (12,667)	
	\$ (5,681)	\$ (2,744)	\$ (3,402)	\$ (500)	\$ (387)	\$ (595)	\$ (13,309)	
	\$ (5,956)	\$ (2,879)	\$ (3,589)	\$ (532)	\$ (407)	\$ (628)	\$ (13,991)	
<hr/>								
Accumulated Depreciation as of December 31, 2019	\$ (5,956)	\$ (2,879)	\$ (3,589)	\$ (532)	\$ (407)	\$ (628)	\$ (13,991)	

Notes:

(a) Capital additions for Brunswick Common are included with Brunswick 1.

(b) Based on ending balances as of December 31, 2018 as filed with the Commission on Exhibit E-2-TU under Docket E-2, Sub 1207.

EXHIBIT E-3 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE
RELATED TO PURCHASE FROM NCEMPA
(Thousands of Dollars)

Line No.		Vintage Year					Total (Col D)	Year to Date Average (Col E)
		2019 (a) (Col A)	2018 (b) (Col A)	2017 (c) (Col A)	2016 (d) (Col B)	2015 (e) (Col C)		
	Deferred Tax Asset / (Liability) Balance							
1	Deferred Taxes December 31, 2018	\$ -	\$ (6,926)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,621)	
2	Deferred Taxes - January 2019	\$ -	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (28,348)	\$ (27,984)
3	Deferred Taxes - February	\$ (207)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (28,555)	\$ (28,175)
4	Deferred Taxes - March	\$ (213)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (28,561)	\$ (28,271)
5	Deferred Taxes - April	\$ (855)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (29,203)	\$ (28,458)
6	Deferred Taxes - May	\$ (2,236)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (30,584)	\$ (28,812)
7	Deferred Taxes - June	\$ (2,916)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (31,264)	\$ (29,162)
8	Deferred Taxes - July	\$ (3,440)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (31,788)	\$ (29,490)
9	Deferred Taxes - August	\$ (3,689)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (32,037)	\$ (29,773)
10	Deferred Taxes - September	\$ (3,738)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (32,086)	\$ (30,005)
11	Deferred Taxes - October	\$ (3,841)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (32,189)	\$ (30,203)
12	Deferred Taxes - November	\$ (4,023)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (32,371)	\$ (30,384)
13	Deferred Taxes - December 2019	\$ (5,415)	\$ (7,653)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (33,763)	\$ (30,644)

Notes:

- (a) From Exhibit E-4-TU, Deferred Taxes Vintage Year 2019 Additions
- (b) From Exhibit E-5-TU, Deferred Taxes Vintage Year 2018 Additions
- (c) From Exhibit E-6-TU, Deferred Taxes Vintage Year 2017 Additions
- (d) From Exhibit E-7-TU, Deferred Taxes Vintage Year 2016 Additions
- (e) From Exhibit E-8-TU, Deferred Taxes Vintage Year 2015 Additions

EXHIBIT E-4 - TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE
VINTAGE YEAR 2019 ADDITIONS
RELATED TO PURCHASE FROM NCEMPA
(Thousands of Dollars)

		DEFERRED TAX BALANCES							
Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2019 - with 21% Federal tax rate (a)	7%	6%		9%	6%	5%	5%	
	Capital Additions								
2	Gross Capital Additions as of January	\$ 1,369	\$ 322	\$ -	\$ 195	\$ 116	\$ (8)	\$ 1,356	\$ 3,348 (b)
3	Gross Capital Additions as of February (cumulative)	\$ 1,470	\$ 357	\$ -	\$ 103	\$ 119	\$ 4	\$ 1,445	\$ 3,497 (b)
4	Gross Capital Additions as of March (cumulative)	\$ 2,695	\$ 2,278	\$ -	\$ 552	\$ 6,385	\$ 19	\$ 1,918	\$ 13,847 (b)
5	Gross Capital Additions as of April (cumulative)	\$ 3,158	\$ 15,971	\$ -	\$ 1,948	\$ 9,056	\$ 15	\$ 6,738	\$ 36,885 (b)
6	Gross Capital Additions as of May (cumulative)	\$ 7,136	\$ 17,873	\$ -	\$ 2,023	\$ 13,469	\$ 82	\$ 6,991	\$ 47,573 (b)
7	Gross Capital Additions as of June (cumulative)	\$ 9,921	\$ 22,101	\$ -	\$ 2,693	\$ 13,579	\$ 74	\$ 7,167	\$ 55,535 (b)
8	Gross Capital Additions as of July (cumulative)	\$ 10,293	\$ 22,441	\$ -	\$ 4,775	\$ 13,744	\$ 70	\$ 7,287	\$ 58,609 (b)
9	Gross Capital Additions as of August (cumulative)	\$ 10,526	\$ 22,583	\$ -	\$ 4,840	\$ 13,913	\$ 60	\$ 7,458	\$ 59,380 (b)
10	Gross Capital Additions as of September (cumulative)	\$ 10,659	\$ 22,577	\$ -	\$ 5,781	\$ 14,029	\$ 60	\$ 7,502	\$ 60,608 (b)
11	Gross Capital Additions as of October (cumulative)	\$ 11,265	\$ 22,765	\$ -	\$ 6,901	\$ 14,435	\$ 57	\$ 7,574	\$ 62,996 (b)
12	Gross Capital Additions as of November (cumulative)	\$ 12,176	\$ 22,723	\$ -	\$ 21,454	\$ 14,686	\$ 117	\$ 7,632	\$ 78,787 (b)
13	Gross Capital Additions as of December (cumulative)	\$ 19,288	\$ 27,199	\$ -	\$ 28,956	\$ 14,909	\$ 157	\$ 7,696	\$ 98,204 (b)
14	Balance at December 31, 2019	\$ 19,288	\$ 27,199	\$ -	\$ 28,956	\$ 14,909	\$ 157	\$ 7,696	\$ 98,204
	Deferred Tax Asset / (Liability) Balance								
15	Deferred Taxes as of December 31, 2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Deferred Taxes as of January 2019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - (c)
17	Deferred Taxes as of February (Line 1 x Line 2)	\$ (96)	\$ (19)	\$ -	\$ (18)	\$ (7)	\$ 0	\$ (68)	\$ (207) (c)
18	Deferred Taxes as of March (Line 1 x Line 3)	\$ (103)	\$ (21)	\$ -	\$ (9)	\$ (7)	\$ (0)	\$ (72)	\$ (213) (c)
19	Deferred Taxes as of April (Line 1 x Line 4)	\$ (189)	\$ (137)	\$ -	\$ (50)	\$ (383)	\$ (1)	\$ (96)	\$ (855) (c)
20	Deferred Taxes as of May (Line 1 x Line 5)	\$ (221)	\$ (958)	\$ -	\$ (175)	\$ (543)	\$ (1)	\$ (337)	\$ (2,236) (c)
21	Deferred Taxes as of June (Line 1 x Line 6)	\$ (499)	\$ (1,072)	\$ -	\$ (182)	\$ (808)	\$ (4)	\$ (350)	\$ (2,916) (c)
22	Deferred Taxes as of July (Line 1 x Line 7)	\$ (694)	\$ (1,326)	\$ -	\$ (242)	\$ (815)	\$ (4)	\$ (358)	\$ (3,440) (c)
23	Deferred Taxes as of August (Line 1 x Line 8)	\$ (720)	\$ (1,346)	\$ -	\$ (430)	\$ (825)	\$ (3)	\$ (364)	\$ (3,689) (c)
24	Deferred Taxes as of September (Line 1 x Line 9)	\$ (737)	\$ (1,355)	\$ -	\$ (436)	\$ (835)	\$ (3)	\$ (373)	\$ (3,738) (c)
25	Deferred Taxes as of October (Line 1 x Line 10)	\$ (746)	\$ (1,355)	\$ -	\$ (520)	\$ (842)	\$ (3)	\$ (375)	\$ (3,841) (c)
26	Deferred Taxes as of November (Line 1 x Line 11)	\$ (789)	\$ (1,366)	\$ -	\$ (621)	\$ (866)	\$ (3)	\$ (379)	\$ (4,023) (c)
27	Deferred Taxes as of December 2019 (Line 1 x Line 12)	\$ (852)	\$ (1,363)	\$ -	\$ (1,931)	\$ (881)	\$ (6)	\$ (382)	\$ (5,415) (c)
28	Deferred Tax Balance at December 31, 2019	\$ (852)	\$ (1,363)	\$ -	\$ (1,931)	\$ (881)	\$ (6)	\$ (382)	\$ (5,415)

Notes:

- (a) Amounts represent deferred taxes as a percentage of gross capital additions.
(b) From Exhibit E-1-TU - Cumulative Capital Additions.
(c) Depreciation commences in the month subsequent to the asset being placed in service. Deferred taxes associated with book versus tax timing difference differences will also commence in the month subsequent to the asset being placed in service.

EXHIBIT E-5 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE
VINTAGE YEAR 2018 ADDITIONS
RELATED TO PURCHASE FROM NCEMPA
(Thousands of Dollars)

		DEFERRED TAX BALANCES							
Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2019 - with 21% Federal tax rate (a)	10%	9%		13%	10%	9%	9%	
	Capital Additions								
2	Gross Capital Additions as of January	\$ 1,408	\$ 295	\$ -	\$ 915	\$ 35	\$ (9)	\$ 16	\$ 2,660 (b)
3	Gross Capital Additions as of February (cumulative)	\$ 3,182	\$ 427	\$ -	\$ 1,254	\$ 35	\$ (4)	\$ 21	\$ 4,916 (b)
4	Gross Capital Additions as of March (cumulative)	\$ 6,404	\$ 160	\$ -	\$ 1,226	\$ 35	\$ (4)	\$ 24	\$ 7,846 (b)
5	Gross Capital Additions as of April (cumulative)	\$ 19,185	\$ 67	\$ -	\$ 1,996	\$ 76	\$ (2)	\$ 49	\$ 21,371 (b)
6	Gross Capital Additions as of May (cumulative)	\$ 20,093	\$ 2,694	\$ -	\$ 17,917	\$ 76	\$ 8,020	\$ 46	\$ 48,847 (b)
7	Gross Capital Additions as of June (cumulative)	\$ 25,748	\$ 2,716	\$ -	\$ 18,962	\$ 383	\$ 9,174	\$ 50	\$ 57,033 (b)
8	Gross Capital Additions as of July (cumulative)	\$ 26,858	\$ 3,050	\$ -	\$ 19,695	\$ 392	\$ 9,152	\$ 61	\$ 59,208 (b)
9	Gross Capital Additions as of August (cumulative)	\$ 28,085	\$ 3,142	\$ -	\$ 20,165	\$ 395	\$ 9,181	\$ 59	\$ 61,026 (b)
10	Gross Capital Additions as of September (cumulative)	\$ 27,786	\$ 3,205	\$ -	\$ 20,561	\$ 395	\$ 9,154	\$ 61	\$ 61,161 (b)
11	Gross Capital Additions as of October (cumulative)	\$ 27,941	\$ 3,268	\$ -	\$ 20,765	\$ 395	\$ 9,220	\$ 100	\$ 61,689 (b)
12	Gross Capital Additions as of November (cumulative)	\$ 29,655	\$ 3,430	\$ -	\$ 21,124	\$ 628	\$ 9,240	\$ 125	\$ 64,203 (b)
13	Gross Capital Additions as of December (cumulative)	\$ 31,630	\$ 3,477	\$ -	\$ 21,446	\$ 826	\$ 10,026	\$ 4,494	\$ 71,899 (b)
14	Balance at December 31, 2018	\$ 31,630	\$ 3,477	\$ -	\$ 21,446	\$ 826	\$ 10,026	\$ 4,494	\$ 71,899
	Deferred Tax Asset / (Liability) Balance								
15	Deferred Taxes as of December 31, 2018 (Line 1 x Line 12)	\$ (2,966)	\$ (309)	\$ -	\$ (2,746)	\$ (63)	\$ (832)	\$ (11)	\$ (6,926)
16	Deferred Taxes as of January 2019 (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
17	Deferred Taxes as of February (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
18	Deferred Taxes as of March (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
19	Deferred Taxes as of April (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
20	Deferred Taxes as of May (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
21	Deferred Taxes as of June (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
22	Deferred Taxes as of July (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
23	Deferred Taxes as of August (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
24	Deferred Taxes as of September (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
25	Deferred Taxes as of October (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
26	Deferred Taxes as of November (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
27	Deferred Taxes as of December 2019 (Line 1 x Line 14)	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653) (c)
28	Deferred Tax Balance at December 31, 2019	\$ (3,163)	\$ (313)	\$ -	\$ (2,788)	\$ (83)	\$ (902)	\$ (404)	\$ (7,653)

Notes:

- (a) Amounts represent deferred taxes as a percentage of gross capital additions.
(b) From Exhibit E-1-TU - Cumulative Capital Additions as filed with the Commission under Docket E-2, Sub 1207
(c) Depreciation commences in the month subsequent to the asset being placed in service. Deferred taxes associated with book versus tax timing difference differences will also commence in the month subsequent to the asset being placed in service.

EXHIBIT E-6 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE
VINTAGE YEAR 2017 ADDITIONS
RELATED TO PURCHASE FROM NCEMPA
(Thousands of Dollars)

		DEFERRED TAX BALANCES							
Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2019 - with 21% Federal tax rate (a)	12%	12%		15%	12%	12%	12%	
	Capital Additions								
2	Gross Capital Additions as of January	\$ 1,750	\$ 2,288	\$ -	\$ 712	\$ 68	\$ 30	\$ (1)	\$ 4,846 (b)
3	Gross Capital Additions as of February (cumulative)	\$ 1,738	\$ 2,306	\$ -	\$ 1,196	\$ 225	\$ 72	\$ 27	\$ 5,562 (b)
4	Gross Capital Additions as of March (cumulative)	\$ 6,567	\$ 2,979	\$ -	\$ 1,530	\$ 256	\$ 71	\$ 34	\$ 11,438 (b)
5	Gross Capital Additions as of April (cumulative)	\$ 5,307	\$ 8,070	\$ -	\$ 1,757	\$ 246	\$ 92	\$ 36	\$ 15,508 (b)
6	Gross Capital Additions as of May (cumulative)	\$ 5,712	\$ 11,693	\$ -	\$ 2,159	\$ 707	\$ 431	\$ 34	\$ 20,737 (b)
7	Gross Capital Additions as of June (cumulative)	\$ 7,407	\$ 13,891	\$ -	\$ 2,269	\$ 898	\$ 548	\$ 60	\$ 25,073 (b)
8	Gross Capital Additions as of July (cumulative)	\$ 8,047	\$ 14,011	\$ -	\$ 6,809	\$ 932	\$ 2,796	\$ 198	\$ 32,793 (b)
9	Gross Capital Additions as of August (cumulative)	\$ 14,220	\$ 14,764	\$ -	\$ 12,619	\$ 1,057	\$ 2,903	\$ 470	\$ 46,033 (b)
10	Gross Capital Additions as of September (cumulative)	\$ 17,448	\$ 16,080	\$ -	\$ 12,886	\$ 1,119	\$ 2,968	\$ 445	\$ 50,946 (b)
11	Gross Capital Additions as of October (cumulative)	\$ 16,846	\$ 16,222	\$ -	\$ 13,186	\$ 1,126	\$ 2,965	\$ 544	\$ 50,890 (b)
12	Gross Capital Additions as of November (cumulative)	\$ 20,382	\$ 16,183	\$ -	\$ 14,360	\$ 1,220	\$ 3,079	\$ 579	\$ 55,803 (b)
13	Gross Capital Additions as of December (cumulative)	\$ 21,085	\$ 16,927	\$ -	\$ 15,466	\$ 1,353	\$ 3,258	\$ 1,055	\$ 59,144 (b)
14	Balance at December 31, 2017	\$ 21,085	\$ 16,927	\$ -	\$ 15,466	\$ 1,353	\$ 3,258	\$ 1,055	\$ 59,144
	Deferred Tax Asset / (Liability) Balance								
15	Deferred Taxes as of December 31, 2018 (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
16	Deferred Taxes as of January 2019 (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
17	Deferred Taxes as of February (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
18	Deferred Taxes as of March (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
19	Deferred Taxes as of April (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
20	Deferred Taxes as of May (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
21	Deferred Taxes as of June (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
22	Deferred Taxes as of July (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
23	Deferred Taxes as of August (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
24	Deferred Taxes as of September (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
25	Deferred Taxes as of October (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
26	Deferred Taxes as of November (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
27	Deferred Taxes as of December 2019 (Line 1 x Line 14)	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
28	Deferred Tax Balance at December 31, 2019	\$ (2,530)	\$ (2,031)	\$ -	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561)

Notes:

- (a) Amounts represent deferred taxes as a percentage of gross capital additions.
(b) From Exhibit E-1-TU - Cumulative Capital Additions as filed with the Commission under Docket E-2, Sub 1176
(c) Depreciation commences in the month subsequent to the asset being placed in service. Deferred taxes associated with book versus tax timing difference differences will also commence in the month subsequent to the asset being placed in service.

**EXHIBIT E-67-TU
DOCKET E-2, SUB 1253**

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE
VINTAGE YEAR 2016 ADDITIONS
RELATED TO PURCHASE FROM NCEMPA
(Thousands of Dollars)

Line No.		DEFERRED TAX BALANCES							
		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2019 - with 21% Federal tax rate (a)	24%	13%		16%	14%	14%	14%	
	Capital Additions								
2	Gross Capital Additions as of January	\$ 645	\$ 575	\$ -	\$ 616	\$ 142	\$ 26	\$ 72	\$ 2,075 (b)
3	Gross Capital Additions as of February (cumulative)	\$ 899	\$ 739	\$ -	\$ 495	\$ 151	\$ 27	\$ 81	\$ 2,391 (b)
4	Gross Capital Additions as of March (cumulative)	\$ 9,002	\$ 959	\$ -	\$ 1,628	\$ 180	\$ 31	\$ 213	\$ 12,012 (b)
5	Gross Capital Additions as of April (cumulative)	\$ 10,806	\$ 957	\$ -	\$ 2,315	\$ 501	\$ 133	\$ 287	\$ 14,999 (b)
6	Gross Capital Additions as of May (cumulative)	\$ 14,562	\$ 1,759	\$ -	\$ 2,563	\$ 569	\$ 135	\$ 1,545	\$ 21,132 (b)
7	Gross Capital Additions as of June (cumulative)	\$ 15,309	\$ 1,783	\$ -	\$ 3,768	\$ 586	\$ 132	\$ 1,528	\$ 23,104 (b)
8	Gross Capital Additions as of July (cumulative)	\$ 16,396	\$ 3,990	\$ -	\$ 3,875	\$ 681	\$ 131	\$ 1,530	\$ 26,603 (b)
9	Gross Capital Additions as of August (cumulative)	\$ 17,220	\$ 4,371	\$ -	\$ 4,114	\$ 748	\$ 189	\$ 1,571	\$ 28,213 (b)
10	Gross Capital Additions as of September (cumulative)	\$ 18,016	\$ 4,886	\$ -	\$ 5,603	\$ 893	\$ 232	\$ 1,590	\$ 31,220 (b)
11	Gross Capital Additions as of October (cumulative)	\$ 18,583	\$ 5,419	\$ -	\$ 7,705	\$ 1,176	\$ 233	\$ 1,631	\$ 34,746 (b)
12	Gross Capital Additions as of November (cumulative)	\$ 18,856	\$ 5,468	\$ -	\$ 18,057	\$ 1,323	\$ 275	\$ 1,819	\$ 45,798 (b)
13	Gross Capital Additions as of December (cumulative)	\$ 20,158	\$ 5,835	\$ -	\$ 23,516	\$ 1,657	\$ 789	\$ 3,070	\$ 55,025 (b)
14	Balance at December 31, 2016	\$ 20,158	\$ 5,835	\$ -	\$ 23,516	\$ 1,657	\$ 789	\$ 3,070	\$ 55,025
	Deferred Tax Asset / (Liability) Balance								
15	Deferred Taxes as of December 31, 2018 (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
16	Deferred Taxes as of January 2019 (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
17	Deferred Taxes as of February (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
18	Deferred Taxes as of March (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
19	Deferred Taxes as of April (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
20	Deferred Taxes as of May (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
21	Deferred Taxes as of June (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
22	Deferred Taxes as of July (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
23	Deferred Taxes as of August (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
24	Deferred Taxes as of September (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
25	Deferred Taxes as of October (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
26	Deferred Taxes as of November (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
27	Deferred Taxes as of December 2019 (Line 1 x Line 14)	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
28	Deferred Tax Balance at December 31, 2019	\$ (4,838)	\$ (759)	\$ -	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131)

Notes:

- (a) Amounts represent deferred taxes as a percentage of gross capital additions.
(b) From Exhibit E-1-TU - Cumulative Capital Additions as filed with the Commission under Docket E-2, Sub 1143
(c) Depreciation commences in the month subsequent to the asset being placed in service. Deferred taxes associated with book versus tax timing difference differences will also commence in the month subsequent to the asset being placed in service.

EXHIBIT E-8 -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE
VINTAGE YEAR 2015 ADDITIONS
RELATED TO PURCHASE FROM NCEMPA
(Thousands of Dollars)

Line No.		DEFERRED TAX BALANCES							
		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2019 - with 21% Federal tax rate (a)	24%	13%		16%	14%	14%	14%	
	Capital Additions								
2	Gross Capital Additions as of August 31, 2015	\$ (1,165)	\$ (194)	\$ -	\$ 171	\$ 29	\$ 6	\$ (1)	\$ (1,154) (b)
3	Gross Capital Additions as of September 30, 2015 (cumulative)	\$ (1,147)	\$ 253	\$ -	\$ 237	\$ 57	\$ 5	\$ (1)	\$ (598) (b)
4	Gross Capital Additions as of October 31, 2015 (cumulative)	\$ (902)	\$ 196	\$ -	\$ 361	\$ 45	\$ 13	\$ 28	\$ (258) (b)
5	Gross Capital Additions as of November 30, 2015 (cumulative)	\$ 2,658	\$ 7,905	\$ -	\$ 3,617	\$ 123	\$ 25	\$ 256	\$ 14,584 (b)
6	Gross Capital Additions as of December 31, 2015 (cumulative)	\$ 3,849	\$ 7,918	\$ -	\$ 5,956	\$ 325	\$ 71	\$ 290	\$ 18,409 (b)
7	Balance at December 31, 2015	\$ 3,849	\$ 7,918	\$ -	\$ 5,956	\$ 325	\$ 71	\$ 290	\$ 18,409
	Deferred Tax Asset / (Liability) Balance								
8	Deferred Taxes as of December 2018 (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
9	Deferred Taxes as of January 2019 (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
10	Deferred Taxes as of February (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
11	Deferred Taxes as of March (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
12	Deferred Taxes as of April (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
13	Deferred Taxes as of May (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
14	Deferred Taxes as of June (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
15	Deferred Taxes as of July (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
16	Deferred Taxes as of August (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
17	Deferred Taxes as of September (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
18	Deferred Taxes as of October (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
19	Deferred Taxes as of November (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
20	Deferred Taxes as of December 2019 (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
21	Deferred Tax Balance at December 31, 2019	\$ (924)	\$ (1,029)	\$ -	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002)

Notes:

- (a) Amounts represent deferred taxes as a percentage of gross capital additions.
 (b) From Exhibit E-1-TU - Cumulative Capital Additions as filed with the Commission under Docket E-2, Sub 1110
 (c) Depreciation commences in the month subsequent to the asset being placed in service. Deferred taxes associated with book versus tax timing difference differences will also commence in the month subsequent to the asset being placed in service.

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF INCREMENTAL OPERATING EXPENSES AND REDUCTION OF OTHER ELECTRIC REVENUE
RESULTING FROM ACQUIRING NCEMPA ASSETS for TEST YEAR ENDED DECEMBER 2019

Line No.	Description	FERC Account Number (Col A)	Actual System Incremental Amount (dollars)													Test Year to Date (Col N)
			January (Col B)	February (Col C)	March (Col D)	April (Col E)	May (Col F)	June (Col G)	July (Col H)	August (Col I)	September (Col J)	October (Col K)	November (Col L)	December (Col M)		
1	Roxboro 4 O&M	500-514	\$ 118,019	\$ 112,622	\$ 90,167	\$ 100,425	\$ 110,814	\$ 121,848	\$ 98,492	\$ 105,564	\$ 97,524	\$ 121,497	\$ 108,920	\$ 95,490	\$ 1,281,381 (c)	
2	Mayo 1 O&M	500-514	\$ 217,616	\$ 401,224	\$ 289,222	\$ 192,574	\$ 423,511	\$ 268,589	\$ 284,962	\$ 243,539	\$ 134,683	\$ 249,458	\$ 192,964	\$ 159,611	\$ 3,057,952 (c)	
3	Brunswick Plant O&M	517-532	\$ 2,771,627	\$ 2,888,507	\$ 7,466,569	\$ 3,049,571	\$ 2,544,035	\$ 2,603,941	\$ 2,348,816	\$ 2,900,662	\$ 2,590,125	\$ 2,301,216	\$ 2,415,774	\$ 4,523,935	\$ 38,404,777 (c)	
4	Harris 1 O&M	517-532	\$ 1,569,831	\$ 1,434,011	\$ 1,757,971	\$ 1,411,488	\$ 1,512,427	\$ 1,515,592	\$ 1,592,908	\$ 1,904,055	\$ 1,982,501	\$ 4,748,593	\$ 2,738,287	\$ 1,924,990	\$ 24,092,654 (c)	
5	A&G Expenses	929	\$ 2,562,638	\$ 2,618,823	\$ 2,351,785	\$ 2,523,233	\$ 2,502,175	\$ 2,610,453	\$ 2,480,783	\$ 2,520,605	\$ 2,167,829	\$ 2,403,116	\$ 3,012,600	\$ 404,382	\$ 28,158,423 (c)	
6	Payroll Taxes	408	\$ 317,255	\$ 113,817	\$ 364,610	\$ 320,408	\$ 278,324	\$ 271,376	\$ 262,439	\$ 309,380	\$ 223,866	\$ 216,056	\$ 318,554	\$ 298,820	\$ 3,294,905 (c)	
7	General Plant Return	454	\$ 218,226	\$ 218,226	\$ 218,226	\$ 218,226	\$ 218,226	\$ 230,688	\$ 220,303	\$ 220,303	\$ 220,303	\$ 220,303	\$ 220,303	\$ 220,303	\$ 2,643,636 (c)	
8	Dispatch Fee	456	\$ 3,264	\$ 2,948	\$ 3,160	\$ 3,174	\$ 3,205	\$ 3,103	\$ 3,113	\$ 3,221	\$ 2,067	\$ 3,042	\$ 2,825	\$ 2,850	\$ 35,971 (c)	
9	Auxiliary Power	447	\$ 24,445	\$ 34,689	\$ 66,910	\$ 78,106	\$ 29,178	\$ 17,515	\$ 23,938	\$ 27,471	\$ 20,490	\$ 176,891	\$ 79,694	\$ 24,618	\$ 603,944 (c)	
10	Site Representative	456	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 4,908 (c)	
11	Property taxes	408	\$ 507,239	\$ 507,239	\$ 507,239	\$ 952,888	\$ 618,651	\$ 618,651	\$ 618,651	\$ 618,651	\$ 618,651	\$ 618,651	\$ 618,651	\$ 618,651	\$ 7,423,817 (d)	
12	NCEMPA revenue included in cost of service for a return on coal inventory	454	\$ 8,203	\$ 719	\$ 11,328	\$ 7,686	\$ 14,767	\$ 19,410	\$ 22,473	\$ 19,378	\$ 25,099	\$ 10,359	\$ 1,764	\$ 14,042	\$ 155,229 (c)	
13	Incremental nuclear decommissioning costs	403	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 4,962,959 (b)	
14	Total		\$ 8,732,351	\$ 8,746,814	\$ 13,541,177	\$ 9,271,767	\$ 8,669,301	\$ 8,695,155	\$ 8,370,867	\$ 9,286,819	\$ 8,497,128	\$ 11,483,170	\$ 10,124,325	\$ 8,701,683	\$ 114,120,557	
15	Allocated to NC Retail (thousands of dollars) (a)		\$ 5,305	\$ 5,314	\$ 8,226	\$ 5,633	\$ 5,267	\$ 5,282	\$ 5,085	\$ 5,642	\$ 5,162	\$ 6,976	\$ 6,151	\$ 5,286	\$ 69,329	

Notes:
(a) From Exhibit I-TU: Demand Allocator to NC Retail from 2019 cost of service study of 60.75069%
(b) From Exhibit F-1-TU, Line 8
(c) System amounts on lines 1-10 are the amounts that would have been billed to NCEMPA from January - December 2019.
(d) Property taxes are derived based on incremental asset balance and DEP's property tax rate as agreed upon with the governing jurisdictions.

EXHIBIT F-1-TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF INCREMENTAL NUCLEAR DECOMMISSIONING EXPENSE
(Dollars)

Line
No.

	Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col C)	Robinson (Col D)	Total (Col E)
<u>Decommissioning recovered in existing base rates under Docket E-2, Sub 1142:</u>					
1 NC Retail Nuclear decommissioning expense included in base rates	\$ 8,276,237	\$ 2,497,488	\$ 6,386,945	\$ 2,429,615	\$ 19,590,285
2 NC retail allocation factor used in rate case - 2017 Cost of Service	60.6008%	60.6008%	60.6008%	60.6008%	
3 System Amount including NCEMPA's ownership (Line 7 / Line 8)	\$ 13,656,976	\$ 4,121,213	\$ 10,539,374	\$ 4,009,213	\$ 32,326,776
4 NCEMPA's ownership %	18.33%	18.33%	16.17%	0.00%	
5 Incremental decommissioning related to purchase from NCEMPA (Line 9 * Line 10)	\$ 2,503,324	\$ 755,418	\$ 1,704,217	\$ -	\$ 4,962,959
6 NC retail allocation factor - 2019 Cost of Service	60.7507%	60.7507%	60.7507%	60.7507%	
7 NC retail's incremental nuclear decommissioning expense (Line 11 x Line 12)	\$ 1,520,787	\$ 458,922	\$ 1,035,324	\$ -	\$ 3,015,032
8 Monthly system incremental nuclear decommissioning expense (line 11 divided by 12)	\$ 208,610	\$ 62,952	\$ 142,018	\$ -	\$ 413,580

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
PRODUCTION DEMAND ALLOCATION FACTORS INCLUDING ADJUSTMENT FOR NCEMPA ADDITIONAL SALES
Retail Per Books Cost of Service Study - 12 Months Ending December 31, 2019

Line No.	Rate Schedule	Summer CP Demand (KW) (Col A)	Ratio of Each Rate Schedule To Total (Col B)	Rate Class	NC Retail Allocation Factors	
					Percent of System (Col C)	Class Percent of Total NC Retail (Col D)
1	NC RES	3,527,429	0.283229	Residential Class	29.16417%	48.0063%
2	NC RES-TOU	104,780	0.008413	SGS Class	3.91791%	6.4492%
3	NC SGS	482,282	0.038724	MGS Class	17.72321%	29.1737% **
4	NC SGS-CLR	5,669	0.000455	SI Class	0.08524%	0.1403%
5	NC MGS-TOU	1,569,863	0.126049	LGS Class	9.85546%	16.2228%
6	NC MGS	637,449	0.051183	TSS Class	0.00470%	0.0077%
7	NC SI	10,617	0.000852	ALS Class	0.00000%	0.0000%
8	NC LGS	176,647	0.014184	SLS Class	0.00000%	0.0000%
9	NC LGS-TOU	236,639	0.019000	SFLS Class	0.00000%	0.0000%
10	NC LGS-RTP	814,148	0.065371	Total	60.75069%	100.0000%
11	NC TSS	586	0.000047			
12	NC ALS	-	0.000000			
13	NC SLS	-	0.000000			
14	NC SFLS	-	0.000000			
15	Total NCR	7,566,109	0.607507			
16	Total NCWHS incl. NCEMPA	3,643,704	0.292565	**Allocation of MGS Class between kW and kWh billed customers		
17	Total NC	11,209,813	0.900072	MGS Class - billed on kWh basis	0.08%	0.0242% Note 2
				MGS Class - billed on kW basis	99.92%	29.1495% Note 2
						29.1737%
18	SC RES	469,477	0.037696	NC Retail Allocation Factor After the Purchase Total NC Retail Summer CP Demand (Line 15) <u>7,566,109</u> 60.75069% Total System with NCEMPA retained capacity (Line 47) <u>12,454,358</u>		
19	SC RET	9,126	0.000733			
20	SC SGS	70,598	0.005669			
21	SC SGS-CLR	704	0.000057			
22	SC MGS-TOU	213,833	0.017169			
23	SC MGS	121,250	0.009736			
24	SC SI	3,573	0.000287			
25	SC LGS	99,186	0.007964			
26	SC LGS-TOU	37,176	0.002985			
27	SC LGS-CRTL-TOU	110,463	0.008869			
28	SC LGS-RTP	61,620	0.004948			
29	SC TSS	107	0.000009			
30	SC ALS	-	0.000000			
31	SC SLS	-	0.000000			
32	SC SFLS	-	0.000000			
33	Total SCR	1,197,112	0.096120			
34	SCWHS (Camden)	47,433	0.003809			
35	Total SC	1,244,545	0.099928			
36	Total System with NCEMPA retained capacity	12,454,358	1.000000			

Note 1: Excludes NCEMC Peaking Capacity

Note 2: Allocated between kW and kWh billed customers using billing determinants. See Notes on Exhibit K-TU.

EXHIBIT J -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
COST OF CAPITAL AND TAX RATES

	(Col A)	(Col B)	(Col C)	(Col G)	(Col H)	(Col I)	(Col J)	(Col K)	(Col L)	(Col M)	(Col N)	(Col O)	(Col P)	(Col Q)
COST OF CAPITAL APPROVED BY THE NCUC IN DUKE ENERGY PROGRESS' LAST RATE CASE IN DOCKET NO. E-2, SUB 1023 DATED MAY 30, 2013:							COST OF CAPITAL APPROVED BY THE NCUC IN DUKE ENERGY PROGRESS, LLC' LAST RATE CASE IN DOCKET NO. E-2, SUB 1142							

Line No.	ITEM	CAPITALIZATION RATIO	APPROVED COST RATE	Applicable for January 1 - March 15, 2018 2018 WEIGHTED COST OF CAPITAL			CAPITALIZATION RATIO	APPROVED COST RATE	Applicable for March 16th forward 2018 WEIGHTED COST OF CAPITAL			2019 WEIGHTED COST OF CAPITAL		
				RATE OF RETURN	AFTER TAX	BEFORE TAX			RATE OF RETURN	AFTER TAX	BEFORE TAX	RATE OF RETURN	AFTER TAX	BEFORE TAX
1	LONG TERM DEBT	47.00%	4.57%	2.1479%	1.6431%	2.1479%	48.00%	4.05%	1.9440%	1.4872%	1.9440%	1.9440%	1.4936%	1.9440%
2	COMMON STOCK EQUITY	53.00%	10.20%	5.4060%	5.4060%	7.0700%	52.00%	9.90%	5.1480%	5.1480%	6.7300%	5.1480%	5.1480%	6.7000%
3	TOTAL	100.00%		7.5539%	7.0491%	9.2179%	100.00%		7.0920%	6.6352%	8.6740%	7.0920%	6.6416%	8.6440%
4	Discounted annual rate to convert monthly to annual compounding				6.8311%	8.9300%				6.4416%	8.4200%		6.4476%	8.3900%
5	Discounted monthly rate to convert monthly to annual compounding				0.5693%	0.7375%				0.5368%	0.6956%		0.5373%	0.6933%

CALCULATION OF COMPOSITE INCOME TAX RATES:

		2018 Statutory Rate	State Apportionment Factor	2018 Weighted Tax Rate	2018 Statutory Rate	State Apportionment Factor	2018 Weighted Tax Rate	2019 Statutory Rate	State Apportionment Factor	2019 Weighted Tax Rate
6	FEDERAL INCOME TAX RATE	21.00%		21.00%	21.00%		21.00%	21.00%		21.00%
	STATE INCOME TAX RATE:									
7	NC	3.000%	84.6380%	2.5391%	3.000%	84.6380%	2.5391%	2.500%	84.6380%	2.1160%
8	SC	5.000%	12.6000%	0.6300%	5.000%	12.6000%	0.6300%	5.000%	12.6000%	0.6300%
9	Weighted state income tax rate			3.1691%			3.1691%			2.7460%
10	Federal production tax deduction percentage			0.0000%			0.0000%			0.0000%
11	Total composite federal and state income tax rate			23.50%			23.50%			23.17%
12	NCUC REGULATORY FEE RATE									
13		January - June		0.140%						
14		July - December		0.130%						

EXHIBIT K -TU
DOCKET E-2, SUB 1253

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
BILLING DETERMINANTS FOR THE TWELVE MONTH PERIOD ENDED NOVEMBER 30, 2021

	(Col A)	(Col B)	(Col C)	(Col D)	(Col E)
Line No.	Rate Class	Schedule	Billing Metric	Billing Determinants (kWh)	Billing Determinants (kW)
1	Residential Class	RES	kWh Energy Units	12,519,195,775	
2	Residential Class	RES (EC)	kWh Energy Units	3,199,667,411	
3	Residential Class	R-TOU	kWh Energy Units	37,605,733	
4	Residential Class	R-TOU (EC)	kWh Energy Units	17,240,606	
5	Residential Class	R-TOUD	kWh Energy Units	235,158,424	
6	Residential Class	R-TOUD (EC)	kWh Energy Units	162,422,413	
7	Residential Class	R-TOUE	kWh Energy Units	0	
8	Residential Class	R-TOUE (EC)	kWh Energy Units	0	
9	Total Residential			(a) <u>16,171,290,361</u>	
10	SGS Class	SGS	kWh Energy Units	1,740,034,450	
11	SGS Class	SGS-TOU-CLR	kWh Energy Units	41,392,405	
12	SGS Class	SGS-TOUE	kWh Energy Units	3,566,223	
13	Total SGS			(a) <u>1,784,993,077</u>	
14	MGS Class	APH-TES	kW Demand Units		2,536
15	MGS Class	CH-TOUE	kWh Energy Units	7,448,992	
16	MGS Class	CSE	kWh Energy Units	1,053,681	
17	MGS Class	CSG	kWh Energy Units	15,951	
18	MGS Class	SGS-TES	kW Demand Units		42,245
19	MGS Class	SGS-TOU	kW Demand Units		19,334,671
20	MGS Class	MGS	kW Demand Units		11,944,605
21	Total MGS			(a) <u>8,518,624</u>	<u>31,324,056</u>
22	LGS Class	LGS	kW Demand Units		2,430,721
23	LGS Class	LGS-RTP	kW Demand Units		40,111
24	LGS Class	LGS-RTP-TOU	kW Demand Units		11,004,503
25	LGS Class	LGS-TOU	kW Demand Units		3,207,196
26	Total LGs			(a) <u> </u>	<u>16,682,531</u>
27	SI Class	SI	kWh Energy Units	(b) 46,369,127	
28	TSS Class	TFS	kWh Energy Units	187,098	
29	TSS Class	TSS	kWh Energy Units	4,504,345	
30	Total TSS			(b) <u>4,691,443</u>	
31	Total All Rates			<u>18,015,862,633</u>	<u>48,006,587</u>

NOTES:

KWh sales for MGS-kWh billed	8,518,624	0.08%
KWh sales for MGS-kW billed	<u>10,279,230,282</u>	99.92%
Total MGS Class KWH Sales for the Year were:	<u><u>10,287,748,906</u></u>	

(a) Source: 2020 Spring Sales Forecast

(b) Source: Monthly CIM Query of Billing Determinants for the twelve month period ended March 31, 2020.

EXHIBIT L
DOCKET E-2, SUB 1253

Duke Energy Progress
Fuel Savings By Customer Class Related to Facilities Acquired from NCEMPA
Test Period: January 2019 - December 2019

		(Col. A) Without Acquisition	(Col. B) Change	(Col. C) With Acquisition
<u>Fuel Costs - Dollars:</u>				
	Coal	\$ 343,971,216	\$ 22,744,019	\$ 366,715,235
	Reagents/By-products	28,701,205	\$ 1,220,412	\$ 29,921,616
	Gas	652,475,916	\$ -	\$ 652,475,916
	Biogas	410,487	\$ -	\$ 410,487
	Nuclear	153,061,128	\$ 24,834,079	\$ 177,895,207
	Hydro	0	\$ -	\$ -
	Purchased Power	442,240,613	\$ -	\$ 442,240,613
	Recovered through off-system sales	(183,515,530)	\$ -	\$ (183,515,530)
1	Total Cost	\$ 1,437,345,035	\$ 48,798,509	\$ 1,486,143,545
2	Sales - kWh	58,060,088,277	4,417,977,723	62,478,066,000
3	Average System Fuel Costs - cents/kwh	Line 1 / Line 2	2.476	2.379
4	Reduction Average System Fuel Costs - cents / Line 3 Co. A	Line 3 Col. C -	(0.097)	
5	Total NC Retail Sales January - December - MWh		37,938,229	
6	NC Retail Share of Savings - Dollars	Line 4 * Line 5	\$ (36,781,832)	
<u>Allocation Among Customer Classes:</u>				
	Residential	43.57%	\$ (16,026,702)	
	Small General Service	5.39%	\$ (1,982,372)	
	Medium General Service	30.52%	\$ (11,227,329)	
	Large General Service	19.45%	\$ (7,152,484)	
	Lighting	1.07%	\$ (392,945)	
	Total NC Retail	100.00%	\$ (36,781,832)	