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June 11, 2019

**VIA ELECTRONIC FILING AND
HAND DELIVERY**

Ms. M. Lynn Jarvis, 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 1207**

Dear Ms. Jarvis:

Pursuant to N.C. Gen. Stat. § 62-133.14 and Commission Rule R8-70, I enclose the Application of Duke Energy Progress, LLC ("DEP") 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. As with other rider proceedings, fifteen paper copies will be delivered to the Clerk's Office on the following business day.

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

Sincerely,

Lawrence B. Somers

Enclosures

cc: Parties of Record
Dwight Allen, Esquire

OFFICIAL COPY

JUN 11 2019

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 1207, 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 Drooz
Heather Fennell
Public Staff
North Carolina Utilities Commission
4326 Mail Service Center
Raleigh, NC 27699-4300
david.drooz@psncuc.nc.gov
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This the 11th day of June, 2019.



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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1207

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, 2020. 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
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1514 Glenwood Avenue, Suite 200
Raleigh, North Carolina 27608
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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 November 8, 2018, the Commission issued its *Order Approving Joint Agency Asset Rider Adjustment*, which established the JAAR to recover the costs expected to be incurred by DEP from December 1, 2018 through November 30, 2019, 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, 2017.

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, 2018 through December 31, 2018. The rate period to be used in this Application for these proceedings is December 1, 2019 through November 30, 2020.

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, 2018 of \$50 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, 2019:

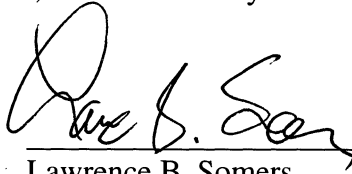
Rate Class	Applicable Schedule(s)	Incremental Rate*
Non-Demand Rate Class (dollars per kilowatt-hour)		
Residential	RES, R-TOUD, R-TOUE, R-TOU	0.00390
Small General Service	SGS, SGS-TOUE	0.00343
Medium General Service	CH-TOUE, CSE, CSG	0.00253
Seasonal and Intermittent Service	SI	(0.00172)
Traffic Signal Service	TSS, TFS	0.00171
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	0.88
Large General Service	LGS, LGS-TOU	1.37

* 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, 2020.

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 11th day of June 2019.



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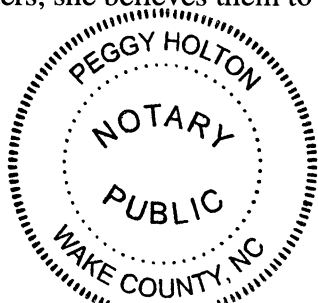
ATTORNEYS FOR DUKE ENERGY PROGRESS, LLC

VERIFICATION

STATE OF NORTH CAROLINA)
) DOCKET NO. E-2, SUB 1207
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
LaWanda M. Jiggetts

Sworn to and subscribed before
me this 6th day of June, 2019.

Peggy Holton
Notary Public

My Commission expires: 12/22/2021

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1207

In the Matter of)	
Application of Duke Energy Progress, LLC)	
For Approval of Joint Agency Asset Rider to)	DIRECT TESTIMONY OF
Recover Costs Related to Facilities Purchased)	LAWANDA M. JIGGETTS
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”), primarily
8 for the Joint Agency Asset Rider (“JAAR”) and the development of cost of
9 service studies and quarterly financial reports.

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

12 A. I graduated from the University of Virginia with a Bachelor of Science
13 degree in Commerce with a concentration in Accounting. I received my
14 Masters in Business Administration from Meredith College in Raleigh,
15 North Carolina. From September 1997 – November 2002, I worked as an
16 auditor with PricewaterhouseCoopers in Raleigh. I joined Duke Energy
17 (formerly Progress Energy) in November 2002. I have had various roles in
18 the Accounting Department during my tenure with the Company including
19 roles in SEC Reporting and Analysis, Financial Reporting and
20 Consolidations, Wholesale Contracts and Inventory Accounting, and Fuel
21 Accounting from November 2002 – September 2015. I joined the Rates and
22 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 in
4 Docket No. E-2, Sub 1143 in 2017 and Docket No. E-2, Sub 1176 in 2018.

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

6 A. The purpose of my testimony is to provide support for proposed rate
7 updates to the JAAR approved by the Commission in Docket No. E-2, Sub
8 1176. The proposed rate updates will address the over recovery of costs that
9 has occurred through the end of the calendar year test year ending
10 December 31, 2018, as well as estimated costs for the rate period December
11 2019 through November 2020.

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

15 A. Commission Rule R8-70 provides for the establishment of a Joint Agency
16 Asset rider that will remain in effect, subject to annual updates, and
17 continue until the end of the useful life of the acquired generating plants.
18 The annual updates, subsequent to the initial rider, are handled much like
19 other riders through an annual proceeding during which the Company
20 makes a filing and the Commission conducts a hearing prior to rendering an
21 order regarding the Company's request. The timing of the Joint Agency
22 Asset annual proceeding is aligned with the timing of DEP's fuel cost
23 recovery proceeding as established in Rule R8-55. Therefore, the annual

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

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

22 **A.** Yes. Accompanying my testimony are a rate summary exhibit and two sets
23 of supporting exhibits that are similar in nature. The set of exhibits labeled

1 A through K “E” addresses “estimated” costs expected to be incurred during
2 the future rate period December 2019 through November 2020. These
3 estimated costs will be adjusted to actual in subsequent annual rider
4 proceedings through the Joint Agency Asset RRF. The set of exhibits
5 labeled A through K “TU” addresses the “true-up” of costs incurred versus
6 revenues realized during the calendar year 2018 test period, and supports
7 the over collection experienced during the test period. The over collection
8 associated with the test period corresponds to the Joint Agency Asset RRF
9 provided for in Rule R8-70(b)(1)(vi). Finally, Exhibit L shows the total test
10 period fuel savings by customer class as required under Rule R8-
11 70(e)(1)(vi.).

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

14 A. Yes.

15 **Q. PLEASE PROVIDE A SUMMARY DESCRIPTION OF THESE**
16 **EXHIBITS.**

17 A. The following is a high level summary of the purpose of the exhibits;
18 several of the exhibits are discussed in greater detail later in my testimony:

19 SUMMARY RATE – Summarizes the rates for which the Company is
20 requesting approval.

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

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

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

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

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

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

19 Exhibit G series – Computes the reduction in retail revenue requirements
20 resulting from a change in jurisdictional allocation of costs of existing
21 generation facilities owned at the time of the asset acquisition in accordance
22 with N.C. Gen. Stat. §62-133.14. This reduction is no longer applicable in

1 the JAAR following the implementation of new base rates under DEP's
2 general rate case proceeding in Docket No. E-2, Sub 1142.

3 Exhibit H – Computes the monthly revenue requirement to cover the costs
4 incurred in the four-month period between the date of acquisition and the
5 implementation of the Initial Rider (August through November 2015) that
6 the Company was deferring. DEP was amortizing these deferred costs over
7 a three-year period beginning December 1, 2015. The amortization period
8 ended November 30, 2018. This exhibit will not be applicable to future test
9 or prospective periods.

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

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

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

17 A. The proposed rider incorporates the cost recovery elements identified in
18 N.C. Gen. Stat. §62-133.14(b), which consist of 1) acquisition costs
19 levelized over the useful life of the assets, 2) financing costs using the
20 weighted average cost of capital approved in DEP's most recent general rate
21 case, 3) estimated operating costs and projected capital investments, 4)
22 adjustments to reflect updated jurisdictional allocation factors and 5)
23 customer allocation methods approved in DEP's last general rate case.

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

3 A. The adjustments in item 4 must be included in the JAAR until retail and
4 wholesale cost allocations are adjusted in a North Carolina retail rate case to
5 reflect the change in jurisdictional allocation factors resulting from the
6 additional NCEMPA load that will be served by the Company's portfolio of
7 generating facilities. As a consequence of the joint agency asset purchase, a
8 greater portion of the cost of the Company's other generating facilities
9 reflected in DEP's existing base rates, should be allocated to its wholesale
10 jurisdiction, while a lesser portion should be allocated to its retail
11 jurisdictions. On Exhibits G-TU and G-1-TU the Company shows the
12 decrease in amounts that would be allocated to North Carolina retail
13 jurisdiction in DEP's general rate case in Docket No. E-2, Sub 1023 if
14 additional wholesale sales to NCEMPA had been reflected. The reallocation
15 between retail and wholesale jurisdictions is reflected in the base rates
16 approved as a part of DEP's base rate filing in Docket No. E-2, Sub 1142.
17 As such, the annual revenue reduction will not be included in the JAAR
18 revenue requirements beyond March 16, 2018 (the effective date for new
19 base rates under DEP's most recent rate case). In this filing, the annual
20 revenue reduction to North Carolina retail revenue requirements for the test
21 period January 2018 through December 2018 totals \$17 million. However,
22 for the prospective period December 2019 through November 2020, the
23 jurisdictional reallocation credit (revenue reduction) is not applicable.

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

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

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

1 fuel, operating and maintenance cost, nuclear decommissioning expense,
2 current and deferred income taxes, property taxes, and Commission
3 regulatory fees. This group of costs does not include any costs recoverable
4 under N.C. Gen. Stat. §62-133.2 (i.e., fuel and fuel-related cost).

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

8 **Q. WHAT DO YOU MEAN BY “LEVELIZED REVENUE**
9 **REQUIREMENT”?**

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

1 taxes related to accelerated tax depreciation, which represent cost-free funds
2 associated with the purchased assets that reduce the Company's financing
3 costs.

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

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

9 A. For the true-up calculations, the Company intends to file two versions of the
10 C Exhibits each year. One set of Exhibits will support the estimated
11 levelized revenue requirement for the test period. This version of the
12 Exhibits may be revised/restated at the beginning of the year to reflect
13 changes in certain key inputs (e.g., changes that impact the after-tax cost of
14 capital). For test year 2018, there were no revisions to the estimated
15 levelized calculations (as filed on Exhibits C-1-E through C-6-E under
16 Docket No. E-2, Sub 1176). A second set of C Exhibits is included in the
17 C-TU set of work papers to compute the true-up for the difference between
18 the estimated unlevelized revenue requirements for the test period compared
19 to the actual requirements for the test period.

20 For the prospective period December 2019 through November 2020,
21 the levelization schedules (C-1-E through C-6-E) have been recast to reflect
22 the new composite tax rate based on the change in the corporate tax rate in
23 North Carolina in 2019.

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

3 A. Each year, in order to determine whether a true-up is needed related to the
4 test period being presented, the Company will compare the actual unlevel
5 revenue requirement for the test period year to the original unlevel revenue
6 requirement for the test period year. If there is a difference in the unlevel
7 amounts for the test period, then the Company will include the difference in
8 its determination of the test period true-up (or Joint Agency Asset RRF).
9 For example, in this proceeding the Company has compared the actual
10 unlevel revenue requirement for test period year 2018 to the estimated
11 unlevel revenue requirement for test period 2018 to determine the test
12 period true-up amount that is part of the proposed Joint Agency Asset RRF.
13 In its next annual proceeding in 2020, the Company will compare the actual
14 unlevel revenue requirements for test period 2019 to the original unlevel
15 revenue requirement for 2019 to compute a true-up for the 2019 test period.
16 In this manner, the Company will continue to use the original level revenue
17 requirements for initial billing purposes, accompanied by a subsequent true-
18 up based on the unlevel revenue requirement for each annual test period.

19 **Q. ARE THERE ACQUISITION COSTS NOT INCLUDED IN THE**
20 **LEVELIZED REVENUE REQUIREMENT?**

21 A. Yes. As mentioned previously in my testimony, there are a few cost items
22 included in the original purchase price that are not included in the levelized
23 revenue requirement computations noted above. These items include

1 inventory amounts that are part of the asset acquisition costs, including
2 nuclear fuel inventory, dry cask storage and materials and supplies
3 inventory. Because these assets are not depreciated, the financing costs for
4 these amounts are calculated on the basis of the investment balances for the
5 test period or rate period.

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

8 A. Costs are allocated to the North Carolina retail jurisdiction using the
9 production demand allocation factor from the Company's cost of service
10 studies filed annually with the Commission. This allocation method is
11 consistent with that used in DEP's last general rate case. In most cases the
12 peak demand allocation factor from the 2018 cost of service study has been
13 used to allocate costs to North Carolina retail in this rider filing. In the case
14 of the levelized acquisition costs, the C1 – C6 Estimate TU schedules use
15 the factor from the 2017 cost of service study. As of the beginning of the
16 2018 test period, the 2017 cost of service study was the latest one available.

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

19 A. The North Carolina retail revenue requirement is allocated among customer
20 classes, as shown on Exhibits A-E and A-TU, using the production demand
21 allocation factors from the Company's 2018 cost of service study. The
22 allocated revenue requirement for each North Carolina retail customer class

1 is then divided by estimated billing units, either kWh or kW, to produce a
2 billing factor per unit.

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

5 A. The information to compute the rider comes from three sources. The
6 acquisition costs for the generating assets purchased are based on the actual
7 amounts paid to NCEMPA to complete the purchase. For actuals associated
8 with nuclear fuel, dry cask storage, materials and supplies inventory, capital
9 additions and operations and maintenance expenses, the primary source of
10 data is DEP's internal accounting records, including records from the
11 general ledger as well as records from its asset accounting sub ledger. The
12 Company's books, records and reports are subject to review and audit by
13 regulatory agencies, as well as periodic audits by independent auditors to
14 provide assurances that, in all material respects, internal accounting controls
15 are operating effectively and the Company's financial statements are
16 accurate. The estimated costs for the December 2019 through November
17 2020 rate period are based on information from the Company's financial
18 budget. In most cases the data gathered is recorded and captured at a
19 generating unit level, and then multiplied by the unit ownership percentage
20 purchased by DEP to determine the incremental amounts that should be
21 recovered through this rider.

1 **Q. WHAT IS THE RESULT OF THE COMPANY'S CALCULATION**
2 **OF ACTUAL TEST PERIOD COSTS COMPARED TO REVENUES**
3 **REALIZED IN THE TEST PERIOD?**

4 A. During the test period, calendar year 2018, the Company collected more
5 revenue than its revenue requirement, resulting in an over collection. The
6 key drivers of the over collection were higher than expected jurisdictional
7 reallocation credit and a reduction in both the levelized revenue requirement
8 and the revenue requirement associated with acquisition costs not subject to
9 levelization.

10 Rates established for the JAAR assumed new base rates would be
11 effective January 1, 2018, and thus the jurisdictional reallocation credit
12 would not be applicable for the 2018 test year. New base rates which
13 incorporated the credit did not go into effect until March 16, 2018;
14 accordingly, credits totaling \$17M are included in the JAAR revenue
15 requirement for the test year. The levelized revenue requirement associated
16 with assets in service at the time of acquisition decreased due to changes in
17 the weighted average cost of capital because of new debt and equity returns
18 approved under DEP's most recent rate case and the decrease in the
19 corporate federal tax rate due to the Tax Cuts and Jobs Act of 2017.
20 Similarly, the revenue requirement for assets acquired not subject to
21 levelization decreased primarily due to the change in the debt and equity
22 return rates. The reductions discussed above were partially offset by higher
23 operating expenses driven by increased administrative and general

1 expenses. The increase in administrative and general expenses is due to the
2 expiration of a cap that was given to NCEMPA based on previous contract
3 terms through 2017.

4 The Company has computed the amount of over collection,
5 including an appropriate return, at both the North Carolina retail level and
6 the customer class level based on the peak demand of the classes. These
7 calculations are part of the Joint Agency Asset RRF, shown on Exhibit A-
8 TU.

9 **Q. HOW DO THE ESTIMATED COSTS FOR THE RATE PERIOD**
10 **DECEMBER 2019 THROUGH NOVEMBER 2020 COMPARE TO**
11 **THE LEVEL OF ESTIMATED COSTS IN CURRENT RATES?**

12 A. The estimated costs in this filing for the rate period December 2019 through
13 November 2020 are higher than the costs that were estimated for the prior
14 rate period December 2018 through November 2019 which are reflected in
15 current rates. The increase in the estimated revenue requirement is due
16 primarily to increases for capital additions and operating and maintenance
17 costs. The estimated operating expenses (depreciation) and return on
18 capital additions increased due to more assets going into service.
19 Operation and maintenance expenses increased due to higher administrative
20 and general costs. As previously stated, a cap that was given to NCEMPA
21 based on previous contract terms expired at the end of 2017.

1 **Q. HOW ARE FUEL-RELATED BENEFITS ASSOCIATED WITH THE**
2 **ACQUISITION OF THE JOINT AGENCY ASSETS REFLECTED IN**
3 **CUSTOMER RATES?**

4 A. The fuel-related benefits arise from the reduction in system average fuel
5 costs per kilowatt-hour which results from the addition of lower cost
6 generation to DEP's generation portfolio. The actual fuel savings continue
7 to be reflected in DEP's fuel costs and in its subsequently proposed fuel
8 rates. In compliance with Rule R8-70(e)(1)(vi), the Company has included
9 as Exhibit L a report of the actual fuel savings experienced during the test
10 period from January 2018 – December 2018. The exhibit shows a total of
11 \$50 million in savings for the test period.

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

14 A. The requested rate decrease represents a 0.4% and 0.9% decrease in rates
15 for the average residential and commercial customer, respectively. There is
16 no impact to the average industrial customer. The impact of the rate change
17 for a residential customer consuming 1,000 kWh per month is a decrease of
18 \$0.51.

19 **Q. WHAT SPECIFIC REQUEST IS BEING MADE OF THE**
20 **COMMISSION?**

21 A. The Company requests that the Commission approve the following Joint
22 Agency Asset Rider rates, to become effective December 1, 2019. The

- 1 estimated costs recovered in these rates will be subject to true-up in
 2 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	0.00390
Small General Service	SGS, SGS-TOUE	0.00343
Medium General Service	CH-TOUE, CSE, CSG	0.00253
Seasonal and Intermittent Service	SI	(0.00172)
Traffic Signal Service	TSS, TFS	0.00171
Outdoor Lighting Service	ALS, SLS, SLR, SFLS	
Demand Rate Classes (dollars per kilowatt)		
Medium General Service	MGS, GS-TES, AP-TES, SGS-TOU	0.88
Large General Service	LGS, LGS-TOU	1.37

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

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

5 A. Yes, it does.

**SUMMARY OF EXHIBITS
DOCKET E-2, SUB 1207**

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

SUMMARY RATE	CALCULATION OF JOINT AGENCY ASSET RIDER - SUMMARY RATE
EXHIBIT A-E	CALCULATION OF JOINT AGENCY ASSET RIDER FOR DECEMBER 2019 - NOVEMBER 2020
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
EXHIBIT C-6-E	LEVELIZED COST FOR THE ACQUISITION ADJUSTMENT
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
EXHIBIT D-E	CALCULATION OF REVENUE REQUIREMENT FOR ACQUISITION COSTS EXCLUDED FROM THE LEVELIZATION
EXHIBIT D-1A-E	ESTIMATED NET NUCLEAR FUEL BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
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

**SUMMARY OF EXHIBITS
DOCKET E-2, SUB 1207**

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, 2018
EXHIBIT E-3-E	ACTUAL DEPRECIATION EXPENSE on CAPITAL ADDITIONS by GENERATING UNIT by month FROM DATE of PURCHASE through DECEMBER 31, 2018
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
EXHIBIT F-1-E	CALCULATION OF INCREMENTAL NUCLEAR DECOMMISSIONING EXPENSE
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, 2020
EXHIBIT A - TU	CALCULATION OF JOINT AGENCY ASSET RIDER
EXHIBIT A-1 -TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
EXHIBIT A-2 - TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - RESIDENTIAL

**SUMMARY OF EXHIBITS
DOCKET E-2, SUB 1207**

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 SERVICE
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
EXHIBIT B - TU	CALCULATION OF NC RETAIL NCEMPA RIDER REVENUE for TEST YEAR ENDING DECEMBER 31, 2018
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, 2018
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

SUMMARY OF EXHIBITS
DOCKET E-2, SUB 1207

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 2018
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 2018
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 2018
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
EXHIBIT E-2 - TU	ACTUAL DEPRECIATION EXPENSE ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE
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 2018 ADDITIONS
EXHIBIT E-5 - TU	DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE VINTAGE YEAR 2017 ADDITIONS
EXHIBIT E-6 - TU	DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE VINTAGE YEAR 2016 ADDITIONS
EXHIBIT E-7 - 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
EXHIBIT G - TU	CALCULATION OF REVENUE DECREMENT FOR CHANGE IN NC RETAIL ALLOCATION FACTORS

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

SUMMARY OF EXHIBITS
DOCKET E-2, SUB 1207

EXHIBIT G-1 - TU	CALCULATION OF RATE BASE AND OPERATING EXPENSE DECREMENT FOR CHANGE IN NC RETAIL ALLOCATION FACTORS
EXHIBIT H - TU	CALCULATION OF THE MONTHLY AMORTIZATION OF NC RETAIL DEFERRED COST BALANCE
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, 2020
EXHIBIT L	FUEL SAVINGS BY CUSTOMER CLASS RELATED TO FACILITIES ACQUIRED FROM NCEMPA

**SUMMARY RATE
DOCKET E-2, SUB 1207**

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

Line No.	Description	Prospective Rate (a) (Col. A)	Rolling Recovery Factor (b) (Col. B)	Combined Rate (Col. C) = A + B
Allocation of monthly revenue to customer groups:				
Customers billed based on KWH				
1	Residential	\$ 0.00474	\$ (0.00084)	\$ 0.00390 per KWH
2	Small General Service	\$ 0.00522	\$ (0.00179)	\$ 0.00343 per KWH
3	Medium General Service -KWH	\$ 0.00415	\$ (0.00162)	\$ 0.00253 per KWH
4	Seasonal Intermittent	\$ 0.00251	\$ (0.00423)	\$ (0.00172) per KWH
5	Lighting	\$ -	\$ -	\$ - per KWH
6	Traffic Signal	\$ 0.00236	\$ (0.00065)	\$ 0.00171 per KWH
Customers billed based on KW				
7	Medium General Service -KW	\$ 1.37	\$ (0.49000)	\$ 0.88 per KW
8	Large General Service	\$ 1.45	\$ (0.08000)	\$ 1.37 per KW

Notes:

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

EXHIBIT A - E
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF JOINT AGENCY ASSET RIDER
FOR DECEMBER 2019 - NOVEMBER 2020

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		\$ 152,923 (a)			
	Allocation of monthly revenue to customer classes:					
	Customers billed based on KWH					
2	Residential	49.5990%	\$ 75,848		16,009,594,458	\$ 0.00474 per KWH
3	Small General Service	6.1557%	\$ 9,413		1,802,494,710	\$ 0.00522 per KWH
4	Medium General Service -KWH	0.0241%	\$ 37		8,900,213	\$ 0.00415 per KWH
5	Seasonal Intermittent	0.0709%	\$ 108		43,257,472	\$ 0.00251 per KWH
6	Lighting	0.0000%	\$ -			
7	Traffic Signal	0.0073%	\$ 11		4,723,299	\$ 0.00236 per KWH
		55.8570%	\$ 85,418			
	Customers billed based on KW					
8	Medium General Service -KW	28.1566%	\$ 43,058	31,382,336		\$ 1.37 per KW
9	Large General Service	15.9864%	\$ 24,447	16,842,986		\$ 1.45 per KW
		44.1430%	\$ 67,505			
10		100.0000%	\$ 152,923			

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, 2019

EXHIBIT B - E
DOCKET E-2, SUB 1207

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 2019 - NOVEMBER 2020
(Thousands of Dollars)

<u>Line No.</u>	<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	\$ 8,472 (b)
3	Incremental pretax cost for financing and operating costs related to capital additions since the purchase date	\$ 15,945 (c)
4	Incremental pretax cost for operating costs on acquired assets	<u>\$ 72,026 (d)</u>
5	Total annual pre-tax deferred cost for joint agency asset rider (Line 1 + Line 2 + Line 3 + Line 4)	\$ 152,709
6	Regulatory fee (Line 8 / (1 - 0.140%) x 0.140%)	<u>\$ 214 (e)</u>
7	Total annual revenue for calculation of joint agency asset rider (Line 7 + Line 8)	<u><u>\$ 152,923</u></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 0.140%
- (f) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study of 61.52780%

EXHIBIT C - E
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
SUMMARY OF ANNUAL LEVELIZATION REVENUE TO BE INCLUDED IN THE JOINT AGENCY PURCHASE RIDER
FOR DECEMBER 2019 - NOVEMBER 2020
(Thousands of Dollars)

Line No.	<u>Description</u>	<u>Annual NC Retail Revenue Amount (Col A)</u>
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

EXHIBIT C-1-E
DOCKET E-2, SUB 1207

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)

	ESTIMATE	REVISIONS FOR 2017	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)	34.01% (b)	23.50% (d)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)	6.4476% (f)
DEPRECIATION RATE	1.5349% (a)		(e)	
FIRST YEAR BOOK DEPRECIATION RATE	0.6395%			
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		1.9440% (e)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		5.1480% (e)	
NC RETAIL ALLOCATION FACTOR	61.52780% (c)			

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECATON 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	\$ 223,776	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	\$ 12,803	\$ 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	5.900%	\$ 14,363	\$ 6,584	\$ 1,526	\$ 17,566	\$ 7,779	\$ 171,968	\$ 3,343	\$ 8,853	\$ 2,670	\$ 22,645	\$ 17,637				
2023	\$ 177,103	5.910%	\$ 14,387	\$ 6,609	\$ 1,531	\$ 19,097	\$ 7,779	\$ 162,661	\$ 3,162	\$ 8,374	\$ 2,525	\$ 21,840	\$ 15,980				
2024	\$ 169,324	5.900%	\$ 14,363	\$ 6,584	\$ 1,526	\$ 20,622	\$ 7,779	\$ 153,354	\$ 2,981	\$ 7,895	\$ 2,381	\$ 21,035	\$ 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	\$ 138,209	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%	\$ 14,387	\$ 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)	\$ 10,105	\$ 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) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.

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

(d) 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.

(e) 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.

(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	\$ 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 1207

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 2017	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)	34.01% (b)	23.50% (d)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)	6.4476% (f)
DEPRECIATION RATE	2.5035% (a)		(e)	
FIRST YEAR BOOK DEPRECIATION RATE	1.0431%			
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		1.9440% (e)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		5.1480% (e)	
NC RETAIL ALLOCATION FACTOR	61.52780% (c)			

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

	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	\$ 63,248																
2015	\$ 61,489	5.000%	\$ 3,162	\$ 1,404	\$ 494	\$ 494	\$ 1,759	\$ 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	\$ 4,208	\$ 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	\$ 4,204	\$ 53,849	\$ 1,157	\$ 2,911	\$ 1,500	\$ 9,772		\$ 7,026	\$ 2,746	\$ 8,131	\$ 7,639
2018	\$ 50,230	7.700%	\$ 4,971	\$ 2,124	\$ 499	\$ 1,565	\$ 2,847	\$ 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	\$ 2,847	\$ 47,053	\$ 915	\$ 2,422	\$ 731	\$ 6,914	\$ 6,496				
2020	\$ 44,536	6.230%	\$ 4,022	\$ 1,175	\$ 272	\$ 2,214	\$ 2,847	\$ 43,882	\$ 853	\$ 2,259	\$ 681	\$ 6,640	\$ 5,860				
2021	\$ 41,689	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 2,437	\$ 2,847	\$ 40,787	\$ 793	\$ 2,100	\$ 633	\$ 6,373	\$ 5,284				
2022	\$ 38,842	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 2,660	\$ 2,847	\$ 37,717	\$ 733	\$ 1,942	\$ 586	\$ 6,107	\$ 4,757				
2023	\$ 35,995	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 2,885	\$ 2,847	\$ 34,647	\$ 674	\$ 1,784	\$ 538	\$ 5,842	\$ 4,274				
2024	\$ 33,148	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 3,107	\$ 2,847	\$ 31,576	\$ 614	\$ 1,626	\$ 490	\$ 5,577	\$ 3,833				
2025	\$ 30,302	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 3,332	\$ 2,847	\$ 28,505	\$ 554	\$ 1,467	\$ 443	\$ 5,311	\$ 3,430				
2026	\$ 27,455	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 3,555	\$ 2,847	\$ 25,435	\$ 494	\$ 1,309	\$ 395	\$ 5,046	\$ 3,061				
2027	\$ 24,608	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 3,779	\$ 2,847	\$ 22,364	\$ 435	\$ 1,151	\$ 347	\$ 4,780	\$ 2,724				
2028	\$ 21,761	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 4,002	\$ 2,847	\$ 19,293	\$ 375	\$ 993	\$ 300	\$ 4,515	\$ 2,417				
2029	\$ 18,914	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 4,227	\$ 2,847	\$ 16,223	\$ 315	\$ 835	\$ 252	\$ 4,249	\$ 2,137				
2030	\$ 16,067	2.950%	\$ 1,905	\$ (942)	\$ (218)	\$ 4,008	\$ 2,847	\$ 13,373	\$ 260	\$ 688	\$ 208	\$ 4,003	\$ 1,891				
2031	\$ 13,220	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 3,349	\$ 2,847	\$ 10,965	\$ 213	\$ 564	\$ 170	\$ 3,795	\$ 1,684				
2032	\$ 10,373	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 2,689	\$ 2,847	\$ 8,778	\$ 171	\$ 452	\$ 136	\$ 3,606	\$ 1,503				
2033	\$ 7,526	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 2,029	\$ 2,847	\$ 6,590	\$ 128	\$ 339	\$ 102	\$ 3,417	\$ 1,338				
2034	\$ 4,679	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 1,370	\$ 2,847	\$ 4,403	\$ 86	\$ 227	\$ 68	\$ 3,228	\$ 1,188				
2035	\$ 1,832	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 710	\$ 2,847	\$ 2,216	\$ 43	\$ 114	\$ 34	\$ 3,039	\$ 1,050				
2036 NINE MONTHS	\$ (130)	0.000%	\$ -	\$ (1,962)	\$ (455)	\$ 255	\$ 1,962	\$ 368	\$ 7	\$ 19	\$ 6	\$ 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) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
- (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
- (d) 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.
- (e) 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.
- (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	\$ 9,374	\$ 53,575	\$ 62,950
Annual payment	\$ 895	\$ 5,116	\$ 6,011
Monthly payment	\$ 75	\$ 426	\$ 501

EXHIBIT C-3-E
DOCKET E-2, SUB 1207

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 2017	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)	34.01% (b)	23.50% (d)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)	6.4476% (f)
DEPRECIATION RATE	2.0153% (a)		(e)	
FIRST YEAR BOOK DEPRECIATION RATE	0.8397%			
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		1.9440% (e)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		5.1480% (e)	
NC RETAIL ALLOCATION FACTOR	61.52780% (c)			

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

	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	\$ 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	\$ 5,395
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) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
- (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
- (d) 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.
- (e) 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.
- (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		Future	
	Ending	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-4-E
DOCKET E-2, SUB 1207

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 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, 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)	34.01% (b)	23.50% (d)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)	6.4476% (f)
DEPRECIATION RATE	3.0024% (a)			
FIRST YEAR BOOK DEPRECIATION RATE	1.2510%			
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		1.9440% (e)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		5.1480% (e)	
NC RETAIL ALLOCATION FACTOR	61.52780% (c)			

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																		
		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 - N)	CUMULATIVE 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	\$ 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	\$ 5,395
2018		\$ 38,735	6.177%	\$ 2,968	\$ 599	\$ 141	\$ 241	\$ 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)	\$ 213	\$ 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	\$ 20,833	\$ 405	\$ 1,072	\$ 323	\$ 4,170	\$ 2,530				
2027		\$ 17,414	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ 56	\$ 2,369	\$ 18,516	\$ 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)	\$ (48)	\$ 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	\$ 6,932	\$ 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)	\$ (309)	\$ 2,369	\$ 2,299	\$ 45	\$ 118	\$ 36	\$ 2,568	\$ 945				
2035	SIX MONTHS	\$ (289)	2.231%	\$ 1,072	\$ (48)	\$ (11)	\$ (320)	\$ 1,120	\$ 586	\$ 11	\$ 30	\$ 9	\$ 1,170	\$ 405				
TOTAL			100.000%	\$ 47,950	\$ (1,399)		\$	49,349	\$ 492,273	\$ 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) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
- (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
- (d) 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.
- (e) 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.
- (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	\$ 6,702	\$ 42,890	\$ 49,592
Annual payment	\$ 660	\$ 4,226	\$ 4,887
Monthly payment	\$ 55	\$ 352	\$ 407.24

EXHIBIT C-5-E
DOCKET E-2, SUB 1207

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 2017	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 (f)	
LEVELIZATION PERIOD IN MONTHS	239 (a)		215 (f)	
TAX LIFE	20 (a)			
COMPOSITE TAX RATE	35.16% (a)	34.01% (b)	23.50% (d)	23.17% (g)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)	6.4476% (g)
DEPRECIATION RATE	1.8678% (a)			
FIRST YEAR BOOK DEPRECIATION RATE	0.7783%			
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		1.9440% (e)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		5.1480% (e)	
NC RETAIL ALLOCATION FACTOR	61.52780% (c)			

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 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	\$ 393
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) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
- (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study.
- (d) 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.
- (e) 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.
- (f) From Exhibit C-8-E, Line 2
- (g) 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

EXHIBIT C-6-E
DOCKET E-2, SUB 1207

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 2017	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)	34.01% (b)	23.50% (d)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)	6.4476% (f)
AMORTIZATION RATE	3.6474% (a)		(e)	
FIRST YEAR AMORTIZATION RATE	1.5198%			
WEIGHTED INTEREST RATE	2.1479% (a)		1.9440% (e)	
WEIGHTED NET OF TAX EQUITY RATE	5.4060% (a)		5.1480% (e)	
NC RETAIL ALLOCATION FACTOR	61.52780% (c)			

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

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL AMORTIZATION (Col C)	TAX DEPR. MINUS BOOK AMORT. (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)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
									INTEREST (Col I)	EQUITY (Col J)							
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	\$ 16,973
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) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
- (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
- (d) 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.
- (e) 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.
- (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	\$ 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 1207

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 1207

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 1207

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF REVENUE REQUIREMENT FOR ACQUISITION COSTS EXCLUDED FROM THE LEVELIZATION
EXCLUDING CWIP
FOR DECEMBER 2019 - NOVEMBER 2020
(Thousands of Dollars)

Line No.	Amount (Col A)
1 Average Net Nuclear Fuel Inventory excluding CWIP	\$ 64,903 (a)
2 Average Deferred Tax Asset (Liability) Associated with Nuclear Fuel	\$ 2,076 (b)
3 Average Materials and Supplies Inventory	\$ 61,100 (c)
4 Average Dry Cask Storage	\$ 3,911 (d)
5 Total average system investment for the rate period (Line 1 + Line 2 + Line 3 + Line 4)	<u>\$ 131,989</u>
6 Allocated to NC retail (Line 5 x 61.52780%)	<u>\$ 81,210 (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>\$ 7,020</u>
9 NC retail pre-tax return on deferred tax assets related to NCEMPA's nuclear decommissioning funds	\$ 1,453 (g)
10 Total annual NC retail revenues required for financing costs (Line 8 + Line 9)	<u><u>\$ 8,472</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 2018 cost of service study of: 61.52780%
- (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 1207

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 2019 - November 2020					
1	November	\$ 12,029	\$ 33,766	\$ 20,072	\$ 65,867
2	December	\$ 11,245	\$ 33,011	\$ 19,148	\$ 63,404
3	January	\$ 10,477	\$ 32,248	\$ 18,225	\$ 60,950
4	February	\$ 26,134	\$ 31,574	\$ 17,367	\$ 75,075
5	March	\$ 26,034	\$ 30,849	\$ 16,473	\$ 73,356
6	April	\$ 25,333	\$ 30,124	\$ 15,635	\$ 71,093
7	May	\$ 24,619	\$ 29,400	\$ 14,763	\$ 68,782
8	June	\$ 23,928	\$ 28,703	\$ 13,936	\$ 66,567
9	July	\$ 23,241	\$ 27,979	\$ 13,064	\$ 64,284
10	August	\$ 22,534	\$ 27,258	\$ 12,220	\$ 62,012
11	September	\$ 21,831	\$ 26,552	\$ 11,385	\$ 59,768
12	October	\$ 21,107	\$ 25,820	\$ 10,521	\$ 57,448
13	November	\$ 20,407	\$ 25,093	\$ 9,634	\$ 55,133
14	Average Balance for Next Rate Period	\$ 20,686	\$ 29,414	\$ 14,803	\$ 64,903

EXHIBIT D-1B-E
DOCKET E-2, SUB 1207

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 2019 - November 2019				
1	2019 January	\$ (73)	\$ (69)	\$ (44) \$ (185)
2	2019 February	\$ (56)	\$ (40)	\$ (23) \$ (120)
3	2019 March	\$ (79)	\$ 119	\$ (39) \$ 1
4	2019 April	\$ (63)	\$ (50)	\$ (26) \$ (139)
5	2019 May	\$ (72)	\$ (61)	\$ (31) \$ (163)
6	2019 June	\$ (57)	\$ (49)	\$ (22) \$ (128)
7	2019 July	\$ (66)	\$ (54)	\$ (32) \$ (151)
8	2019 August	\$ (74)	\$ (55)	\$ (27) \$ (156)
9	2019 September	\$ (65)	\$ (48)	\$ (26) \$ (139)
10	2019 October	\$ (70)	\$ (58)	\$ 89 \$ (40)
11	2019 November	\$ (67)	\$ (54)	\$ 23 \$ (99)
Next Rate Period: December 2019 - November 2020				
12	2019 December	\$ (58)	\$ (33)	\$ (38) \$ (128)
13	2020 January	\$ (36)	\$ (65)	\$ (73) \$ (173)
14	2020 February	\$ (20)	\$ (44)	\$ (59) \$ (124)
15	2020 March	\$ 119	\$ (56)	\$ (67) \$ (4)
16	2020 April	\$ (20)	\$ (56)	\$ (55) \$ (131)
17	2020 May	\$ (24)	\$ (56)	\$ (62) \$ (141)
18	2020 June	\$ (19)	\$ (49)	\$ (53) \$ (121)
19	2020 July	\$ (17)	\$ (56)	\$ (62) \$ (135)
20	2020 August	\$ (22)	\$ (55)	\$ (56) \$ (133)
21	2020 September	\$ (21)	\$ (52)	\$ (54) \$ (127)
22	2020 October	\$ (26)	\$ (57)	\$ (60) \$ (144)
23	2020 November	\$ (20)	\$ (56)	\$ (65) \$ (142)

24

25

	ADIT Asset (Liability) Balance Associated with Nuclear Fuel			
	Brunswick 1 (Col E)	Brunswick 2 (Col F)	Harris (Col G)	Total (Col H)
Beginning Balance	\$ (200)	\$ (625)	\$ 851	\$ 26
	\$ (127)	\$ (557)	\$ 895	\$ 211
	\$ (71)	\$ (517)	\$ 918	\$ 331
	\$ 8	\$ (636)	\$ 957	\$ 329
	\$ 71	\$ (586)	\$ 983	\$ 468
	\$ 143	\$ (525)	\$ 1,013	\$ 631
	\$ 200	\$ (477)	\$ 1,036	\$ 759
	\$ 266	\$ (423)	\$ 1,067	\$ 911
	\$ 340	\$ (368)	\$ 1,095	\$ 1,067
	\$ 405	\$ (320)	\$ 1,120	\$ 1,206
	\$ 476	\$ (262)	\$ 1,032	\$ 1,246
	\$ 543	\$ (207)	\$ 1,009	\$ 1,345
<hr/>				
Estimated Accumulated Deferred Tax Asset / (Liability) as of November 30, 2020	\$ 708	\$ 428	\$ 1,713	\$ 2,848
<hr/>				
Average balance for the Next Rate Period	\$ 618	\$ 101	\$ 1,356	\$ 2,076

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%

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)

EXHIBIT D-1C-E
DOCKET E-2, SUB 1207

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) = E - I	(Col B) = F - J	(Col C) = G -K	(Col D) = H - L	(Col E)	(Col F)	(Col G)	(Col H)	(Col I)	(Col J)	(Col K)	(Col L)		
Current Rate Period: January 2019 - November 2019														
1	2019	January	\$ (314)	\$ (296)	\$ (189)	\$ (799)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 863	\$ 908	\$ 841	\$ 2,613
3	2019	February	\$ (244)	\$ (171)	\$ (101)	\$ (516)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 793	\$ 783	\$ 754	\$ 2,330
4	2019	March	\$ (339)	\$ 512	\$ (168)	\$ 4	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 888	\$ 100	\$ 821	\$ 1,809
5	2019	April	\$ (274)	\$ (215)	\$ (110)	\$ (599)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 823	\$ 827	\$ 763	\$ 2,413
6	2019	May	\$ (309)	\$ (262)	\$ (132)	\$ (702)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 858	\$ 874	\$ 785	\$ 2,516
7	2019	June	\$ (248)	\$ (210)	\$ (96)	\$ (554)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 797	\$ 822	\$ 749	\$ 2,368
8	2019	July	\$ (284)	\$ (232)	\$ (137)	\$ (654)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 833	\$ 844	\$ 790	\$ 2,467
9	2019	August	\$ (320)	\$ (236)	\$ (117)	\$ (673)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 869	\$ 848	\$ 770	\$ 2,487
10	2019	September	\$ (280)	\$ (207)	\$ (111)	\$ (598)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 829	\$ 819	\$ 764	\$ 2,412
11	2019	October	\$ (303)	\$ (252)	\$ 382	\$ (173)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 852	\$ 864	\$ 271	\$ 1,987
12	2019	November	\$ (291)	\$ (235)	\$ 98	\$ (428)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 840	\$ 847	\$ 555	\$ 2,241
Next Rate Period: December 2019 - November 2020														
13	2019	December	\$ (249)	\$ (143)	\$ (162)	\$ (554)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 799	\$ 755	\$ 815	\$ 2,368
14	2020	January	\$ (156)	\$ (279)	\$ (313)	\$ (748)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 794	\$ 763	\$ 815	\$ 2,372
15	2020	February	\$ (88)	\$ (190)	\$ (255)	\$ (533)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 726	\$ 674	\$ 757	\$ 2,157
16	2020	March	\$ 512	\$ (241)	\$ (287)	\$ (17)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 126	\$ 725	\$ 789	\$ 1,640
17	2020	April	\$ (88)	\$ (241)	\$ (237)	\$ (567)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 727	\$ 725	\$ 739	\$ 2,190
18	2020	May	\$ (102)	\$ (241)	\$ (268)	\$ (611)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 740	\$ 725	\$ 769	\$ 2,234
19	2020	June	\$ (80)	\$ (213)	\$ (228)	\$ (520)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 718	\$ 697	\$ 729	\$ 2,144
20	2020	July	\$ (75)	\$ (241)	\$ (268)	\$ (583)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 713	\$ 725	\$ 769	\$ 2,207
21	2020	August	\$ (95)	\$ (237)	\$ (243)	\$ (575)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 734	\$ 721	\$ 745	\$ 2,199
22	2020	September	\$ (91)	\$ (223)	\$ (235)	\$ (548)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 730	\$ 706	\$ 736	\$ 2,172
23	2020	October	\$ (112)	\$ (248)	\$ (261)	\$ (621)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 750	\$ 732	\$ 762	\$ 2,244
24	2020	November	\$ (88)	\$ (244)	\$ (281)	\$ (613)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 726	\$ 727	\$ 783	\$ 2,237
25	Total		\$ (713)	\$ (2,740)	\$ (3,038)	\$ (6,490)	\$ 7,569	\$ 5,934	\$ 6,171	\$ 19,674	\$ 8,282	\$ 8,673	\$ 9,208	\$ 26,164

EXHIBIT D-2-E
DOCKET E-2, SUB 1207

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 2019 - November 2020						
1	2019 November	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
2	2020 December	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
3	2020 January	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
4	2020 February	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
5	2020 March	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
6	2020 April	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
7	2020 May	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
8	2020 June	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
9	2020 July	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
10	2020 August	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
11	2020 September	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
12	2020 October	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
13	2020 November	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
14	Average Balance for Next Rate Period	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100

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 1207

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	2017 Actual	2018 Actual	2019 Estimate	
ASSUMPTIONS:					
DECOMMISSIONING FUNDS TRANSFERRED	\$ 287,077				(a)
TAX LIFE USED FOR ACQUIRED NCEMPA ASSETS	15				(b)
COMPOSITE TAX RATE	35.16%	34.01%	23.50%	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%	61.33723%	61.52780%	61.52780%	(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%	\$ 12,241	\$ 12,241	\$ 2,877	\$ 15,528	\$ 14,090	\$ 274	\$ 725	\$ 223	\$ 1,222
2020	\$ -	6.230%	\$ 11,004	\$ 11,004	\$ 2,550	\$ 18,077	\$ 16,803	\$ 327	\$ 865	\$ 261	\$ 1,453

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 1207

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 2019 - November 2020			
1	2019 November	\$ 3,911	\$ 3,911
2	2019 December	\$ 3,911	\$ 3,911
3	2020 January	\$ 3,911	\$ 3,911
4	2020 February	\$ 3,911	\$ 3,911
5	2020 March	\$ 3,911	\$ 3,911
6	2020 April	\$ 3,911	\$ 3,911
7	2020 May	\$ 3,911	\$ 3,911
8	2020 June	\$ 3,911	\$ 3,911
9	2020 July	\$ 3,911	\$ 3,911
10	2020 August	\$ 3,911	\$ 3,911
11	2020 September	\$ 3,911	\$ 3,911
12	2020 October	\$ 3,911	\$ 3,911
13	2020 November	\$ 3,911	\$ 3,911
14	Average Balance for Next Rate Period	<u>\$ 3,911</u>	<u>\$ 3,911</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 1207

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)

<u>Line No.</u>		<u>NC retail Amount (Col A)</u>
1	Average incremental rate base for actual capital additions to plant in service through the end of the next rate period allocated to NCEMPA	\$ 161,416 (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	\$ 55,708 (b)
3	Total average net plant in service on capital additions for the next rate period (Line 1 + Line 2)	<u>\$ 217,124</u>
4	Allocation to NC retail (Line 3 x Line 11)	<u>\$ 133,592</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>\$ 11,548</u>
Incremental operating expenses related to capital additions:		
7	Annual depreciation expense on actual capital additions for the next rate period	\$ 5,465 (d)
8	Annual depreciation expense on estimated capital additions for the next rate period	\$ 1,683 (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>\$ 7,148</u>
11	NC retail allocation factor	61.52780% (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>\$ 4,398</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>\$ 15,945</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 2018 cost of service study as adjusted for NCEMPA Purchase

EXHIBIT E-1-E
DOCKET E-2, SUB 1207

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	\$ 76,722	\$ (3,114)	\$ (3,224)	\$ (11,548)	\$ 58,837
2	Brunswick 2	\$ 34,157	\$ (1,520)	\$ (1,265)	\$ (4,146)	\$ 27,226
3	Brunswick Common	\$ -	\$ -	\$ -	\$ -	\$ -
4	Harris	\$ 66,385	\$ (1,873)	\$ (2,193)	\$ (9,738)	\$ 52,581
5	Mayo	\$ 4,161	\$ (237)	\$ (196)	\$ (519)	\$ 3,208
6	Roxboro 4	\$ 14,144	\$ (165)	\$ (331)	\$ (1,406)	\$ 12,241
7	Roxboro Common	\$ 8,909	\$ (283)	\$ (304)	\$ (998)	\$ 7,324
8	Total	<u>\$ 204,477</u>	<u>\$ (7,192)</u>	<u>\$ (7,514)</u>	<u>\$ (28,355)</u>	<u>\$ 161,416</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

EXHIBIT E-2-E
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
ACTUAL CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH FROM DATE OF PURCHASE THROUGH DECEMBER 31, 2018
(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 2017 - November 2018																		
1	2018	Beginning Balance	\$	45,092	\$	30,680	\$	-	\$	44,939	\$	3,335	\$	4,118	\$	4,415	\$	132,579
2	2018	January	\$	1,408	\$	295			\$	915	\$	35	\$	(9)	\$	16	\$	2,660
3	2018	February	\$	1,774	\$	133			\$	340	\$	0	\$	5	\$	5	\$	2,256
4	2018	March	\$	3,222	\$	(267)			\$	(29)	\$	0	\$	(0)	\$	3	\$	2,930
5	2018	April	\$	12,781	\$	(93)			\$	770	\$	41	\$	2	\$	25	\$	13,525
6	2018	May	\$	908	\$	2,628			\$	15,921	\$	0	\$	8,023	\$	(3)	\$	27,477
7	2018	June	\$	5,655	\$	22			\$	1,045	\$	307	\$	1,154	\$	4	\$	8,186
8	2018	July	\$	1,109	\$	334			\$	733	\$	8	\$	(22)	\$	12	\$	2,175
9	2018	August	\$	1,227	\$	91			\$	470	\$	3	\$	29	\$	(2)	\$	1,818
10	2018	September	\$	(299)	\$	63	\$	-	\$	396	\$	0	\$	(27)	\$	2	\$	135
11	2018	October	\$	155	\$	63	\$	-	\$	204	\$	-	\$	65	\$	40	\$	528
12	2018	November	\$	1,714	\$	162	\$	-	\$	359	\$	234	\$	20	\$	25	\$	2,514
13		Total	\$	74,748	\$	34,110	\$	-	\$	66,063	\$	3,963	\$	13,358	\$	4,540	\$	196,782
Current Rate Period: December 2018 - November 2019																		
14	2018	December	\$	1,975	\$	47	\$	-	\$	322	\$	197	\$	786	\$	4,369	\$	7,696
15		Total	\$	1,975	\$	47	\$	-	\$	322	\$	197	\$	786	\$	4,369	\$	7,696
16		Total to date	\$	76,722	\$	34,157	\$	-	\$	66,385	\$	4,161	\$	14,144	\$	8,909	\$	204,477

EXHIBIT E-3-E
DOCKET E-2, SUB 1207

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, 2018
(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 2017 - November 2018										
1	2018	Beginning Balance	\$ 1,236	\$ 709	\$ -	\$ 649	\$ 118	\$ 16	\$ 151	\$ 2,879
2	2018	January	\$ 94	\$ 45	\$	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
3	2018	February	\$ 97	\$ 46	\$	\$ 52	\$ 9	\$ 2	\$ 10	\$ 215
4	2018	March	\$ 113	\$ 57	\$	\$ 64	\$ 9	\$ 4	\$ 11	\$ 256
5	2018	April	\$ 132	\$ 67	\$	\$ 75	\$ 9	\$ 5	\$ 11	\$ 300
6	2018	May	\$ 165	\$ 67	\$	\$ 76	\$ 10	\$ 5	\$ 11	\$ 333
7	2018	June	\$ 166	\$ 75	\$	\$ 126	\$ 10	\$ 16	\$ 11	\$ 404
8	2018	July	\$ 181	\$ 75	\$	\$ 128	\$ 11	\$ 19	\$ 11	\$ 425
9	2018	August	\$ 183	\$ 76	\$	\$ 129	\$ 11	\$ 19	\$ 11	\$ 429
10	2018	September	\$ 186	\$ 76	\$	\$ 130	\$ 11	\$ 19	\$ 11	\$ 433
11	2018	October	\$ 185	\$ 76	\$	\$ 130	\$ 11	\$ 19	\$ 11	\$ 433
12	2018	November	\$ 186	\$ 76	\$	\$ 131	\$ 11	\$ 19	\$ 11	\$ 434
13		Total	\$ 2,925	\$ 1,443	\$ -	\$ 1,741	\$ 226	\$ 146	\$ 272	\$ 6,753
Current Rate Period: December 2018 - November 2019										
14	2018	December	\$ 190	\$ 77	\$	\$ 132	\$ 11	\$ 19	\$ 11	\$ 439
15		Total	\$ 190	\$ 77	\$ -	\$ 132	\$ 11	\$ 19	\$ 11	\$ 439
16		Total depreciation expense to date	\$ 3,114	\$ 1,520	\$ -	\$ 1,873	\$ 237	\$ 165	\$ 283	\$ 7,192

EXHIBIT E-4-E
DOCKET E-2, SUB 1207

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 2018 - November 2019													
1	2018	December											(a)
2	2019	January	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
3	2019	February	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
4	2019	March	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
5	2019	April	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
6	2019	May	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
7	2019	June	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
8	2019	July	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
9	2019	August	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
10	2019	September	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
11	2019	October	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
12	2019	November	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
13	Total		\$ 2,149	\$ 844	\$ -	\$ 1,462	\$ 131	\$ 221	\$ 203	\$ 5,009			
Next Rate Period: December 2019 - November 2020													
14	2019	December	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
15	2020	January	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
16	2020	February	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
17	2020	March	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
18	2020	April	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
19	2020	May	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
20	2020	June	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
21	2020	July	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
22	2020	August	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
23	2020	September	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
24	2020	October	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
25	2020	November	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455			
26	Total Estimated Additional Depreciation Expense		\$ 2,345	\$ 920	\$ -	\$ 1,595	\$ 143	\$ 241	\$ 221	\$ 5,465			
Average Balance of Accumulated Depreciation on actual capital additions in the next rate period (b)													
27			\$ (3,224)	\$ (1,265)	\$ -	\$ (2,193)	\$ (196)	\$ (331)	\$ (304)	\$ (7,514)			

Notes:

(a) Estimated depreciation expense for December 2018 is not needed for this schedule. Actual depreciation expense for 2018 is captured on E-3-E for rider purposes.

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

EXHIBIT E-5-E
DOCKET E-2, SUB 1207

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 2016 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	Total Deferred Taxes (Col J) = C + F + I
1	Brunswick 1	\$ 24,007	24%	\$ (5,762)	\$ 21,085	12%	\$ (2,530)	\$ 31,630	10%	\$ (3,256)	\$ (11,548)
2	Brunswick 2	\$ 13,753	13%	\$ (1,788)	\$ 16,927	12%	\$ (2,031)	\$ 3,477	9%	\$ (327)	\$ (4,146)
3	Brunswick Common	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -
4	Harris	\$ 29,472	16%	\$ (4,716)	\$ 15,466	15%	\$ (2,320)	\$ 21,446	13%	\$ (2,702)	\$ (9,738)
5	Mayo	\$ 1,982	14%	\$ (277)	\$ 1,353	12%	\$ (162)	\$ 826	10%	\$ (80)	\$ (519)
6	Roxboro 4	\$ 860	14%	\$ (120)	\$ 3,258	12%	\$ (391)	\$ 10,026	9%	\$ (895)	\$ (1,406)
7	Roxboro Common	\$ 3,360	14%	\$ (470)	\$ 1,055	12%	\$ (127)	\$ 4,494	9%	\$ (401)	\$ (998)
7		<u>\$ 73,435</u>		<u>\$ (13,133)</u>	<u>\$ 59,144</u>		<u>\$ (7,561)</u>	<u>\$ 71,899</u>		<u>\$ (7,660)</u>	<u>\$ (28,355)</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-2-E, Line 16 minus Line 1

EXHIBIT E-6-E
DOCKET E-2, SUB 1207

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	\$ 27,223	\$ (500)	\$ (2,605)	\$ 24,118
2	Brunswick 2	\$ 9,115	\$ (284)	\$ (855)	\$ 7,975
3	Brunswick Common	\$ -	\$ -	\$ -	\$ -
4	Harris	\$ 23,450	\$ (236)	\$ (2,711)	\$ 20,503
5	Mayo	\$ 2,834	\$ (69)	\$ (269)	\$ 2,496
6	Roxboro 4	\$ 330	\$ (2)	\$ (26)	\$ 302
7	Roxboro Common	\$ 349	\$ (6)	\$ (29)	\$ 314
8	Grand Total	<u>\$ 63,300</u>	<u>\$ (1,097)</u>	<u>\$ (6,496)</u>	<u>\$ 55,708</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 1207

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 2018 - November 2019									
1	2018 December								(a)
2	2019 January	\$ 0	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ 2
3	2019 February	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ 2
4	2019 March	\$ 5,076	\$ 7,689	\$ 1,099	\$ -	\$ -	\$ -	\$ -	\$ 13,864
5	2019 April	\$ -	\$ 164	\$ -	\$ -	\$ 8	\$ 22	\$ 194	\$ 194
6	2019 May	\$ -	\$ 164	\$ -	\$ 17	\$ 11	\$ 29	\$ 220	\$ 220
7	2019 June	\$ 5,368	\$ 164	\$ 1,044	\$ 53	\$ 2	\$ 5	\$ 6,635	\$ 6,635
8	2019 July	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ -	\$ 163	\$ 163
9	2019 August	\$ -	\$ 163	\$ -	\$ 2,290	\$ -	\$ -	\$ 2,452	\$ 2,452
10	2019 September	\$ 4,793	\$ 163	\$ 1,008	\$ 180	\$ 6	\$ 15	\$ 6,166	\$ 6,166
11	2019 October	\$ -	\$ 163	\$ -	\$ -	\$ 32	\$ 81	\$ 276	\$ 276
12	2019 November	\$ -	\$ 163	\$ 16,291	\$ 132	\$ 43	\$ 111	\$ 16,740	\$ 16,740
13	Total	\$ 15,237	\$ 8,995	\$ -	\$ 19,445	\$ 2,672	\$ 102	\$ 263	\$ 46,714
Next Rate Period: December 2019 - November 2020									
14	2019 December	\$ 4,236	\$ 131	\$ -	\$ 2,110	\$ 106	\$ 53	\$ 20	\$ 6,656
15	2020 January	\$ 1	\$ -	\$ -	\$ 20	\$ -	\$ -	\$ -	\$ 21
16	2020 February	\$ 1	\$ -	\$ -	\$ 16	\$ -	\$ -	\$ -	\$ 16
17	2020 March	\$ 4,516	\$ -	\$ -	\$ 1,732	\$ -	\$ 0	\$ 0	\$ 6,248
18	2020 April	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 30	\$ 11	\$ 44
19	2020 May	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 115	\$ 43	\$ 161
20	2020 June	\$ 10,890	\$ -	\$ -	\$ 1,553	\$ 130	\$ 234	\$ 88	\$ 12,895
21	2020 July	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 5	\$ 2	\$ 10
22	2020 August	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 2	\$ 1	\$ 5
23	2020 September	\$ 3,324	\$ -	\$ -	\$ 1,420	\$ 44	\$ 15	\$ 6	\$ 4,809
24	2020 October	\$ 0	\$ -	\$ -	\$ 2	\$ 42	\$ 21	\$ 8	\$ 73
25	2020 November	\$ 0	\$ -	\$ -	\$ 2	\$ 244	\$ 11	\$ 4	\$ 262
26	Total Estimated Capital Additions	\$ 38,204	\$ 9,126	\$ -	\$ 26,309	\$ 3,238	\$ 589	\$ 447	\$ 77,912
27	Average Balance of Estimated Capital additions in the next rate period (b)	\$ 27,223	\$ 9,115	\$ -	\$ 23,450	\$ 2,834	\$ 330	\$ 349	\$ 63,300

Notes:

- (a) Estimated capital additions for December 2018 are not needed for this schedule. Actual capital additions for December 2018 is captured on E-2-E for rider purposes.
(b) Amount reflects the weighted average ending balance based on monthly activity.

EXHIBIT E-8-E
DOCKET E-2, SUB 1207

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									DEPRECIATION EXPENSE									
	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)		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)		
Current Rate Period: December 2018 - November 2019																			
1	2018	December																	(a)
2	2019	January	\$ 0	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3	2019	February	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 2	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ 0	
4	2019	March	\$ 5,076	\$ 7,689	\$ 1,099	\$ -	\$ -	\$ -	\$ 13,864	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ 0	
5	2019	April	\$ -	\$ 164	\$ -	\$ -	\$ 8	\$ 22	\$ 194	\$ 13	\$ 19	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ 33	
6	2019	May	\$ -	\$ 164	\$ -	\$ 17	\$ 11	\$ 29	\$ 220	\$ 13	\$ 19	\$ -	\$ 2	\$ -	\$ 0	\$ 0	\$ 0	\$ 34	
7	2019	June	\$ 5,368	\$ 164	\$ 1,044	\$ 53	\$ 2	\$ 5	\$ 6,635	\$ 13	\$ 20	\$ -	\$ 2	\$ 0	\$ 0	\$ 0	\$ 0	\$ 34	
8	2019	July	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ -	\$ 163	\$ 26	\$ 20	\$ -	\$ 4	\$ 0	\$ 0	\$ 0	\$ 0	\$ 50	
9	2019	August	\$ -	\$ 163	\$ -	\$ 2,290	\$ -	\$ -	\$ 2,452	\$ 26	\$ 20	\$ -	\$ 4	\$ 0	\$ 0	\$ 0	\$ 0	\$ 51	
10	2019	September	\$ 4,793	\$ 163	\$ 1,008	\$ 180	\$ 6	\$ 15	\$ 6,166	\$ 26	\$ 21	\$ -	\$ 4	\$ 7	\$ 0	\$ 0	\$ 0	\$ 58	
11	2019	October	\$ -	\$ 163	\$ -	\$ -	\$ 32	\$ 81	\$ 276	\$ 38	\$ 21	\$ -	\$ 5	\$ 8	\$ 0	\$ 0	\$ 0	\$ 73	
12	2019	November	\$ -	\$ 163	\$ 16,291	\$ 132	\$ 43	\$ 111	\$ 16,740	\$ 38	\$ 22	\$ -	\$ 5	\$ 8	\$ 0	\$ 0	\$ 0	\$ 73	
13	Total		\$ 15,237	\$ 8,995	\$ -	\$ 19,445	\$ 2,672	\$ 102	\$ 263	\$ 192	\$ 162	\$ -	\$ 27	\$ 23	\$ 0	\$ 1	\$ 406		
Next Rate Period: December 2019 - November 2020																			
14	2018	December	\$ 4,236	\$ 131	\$ -	\$ 2,110	\$ 106	\$ 53	\$ 20	\$ 38	\$ 22	\$ -	\$ 33	\$ 8	\$ 0	\$ 1	\$ 102		
15	2019	January	\$ 1	\$ -	\$ -	\$ 20	\$ -	\$ -	\$ 21	\$ 49	\$ 22	\$ -	\$ 37	\$ 8	\$ 0	\$ 1	\$ 117		
16	2019	February	\$ 1	\$ -	\$ -	\$ 16	\$ -	\$ -	\$ 16	\$ 49	\$ 22	\$ -	\$ 37	\$ 8	\$ 0	\$ 1	\$ 117		
17	2019	March	\$ 4,516	\$ -	\$ -	\$ 1,732	\$ -	\$ 0	\$ 6,248	\$ 49	\$ 22	\$ -	\$ 37	\$ 8	\$ 0	\$ 1	\$ 117		
18	2019	April	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 30	\$ 44	\$ 60	\$ 22	\$ -	\$ 40	\$ 8	\$ 0	\$ 1	\$ 131		
19	2019	May	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 115	\$ 161	\$ 60	\$ 22	\$ -	\$ 40	\$ 8	\$ 0	\$ 1	\$ 131		
20	2019	June	\$ 10,890	\$ -	\$ -	\$ 1,553	\$ 130	\$ 234	\$ 12,895	\$ 60	\$ 22	\$ -	\$ 40	\$ 8	\$ 0	\$ 1	\$ 132		
21	2019	July	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 5	\$ 10	\$ 87	\$ 22	\$ -	\$ 42	\$ 9	\$ 1	\$ 1	\$ 163		
22	2019	August	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 2	\$ 5	\$ 87	\$ 22	\$ -	\$ 42	\$ 9	\$ 1	\$ 1	\$ 163		
23	2019	September	\$ 3,324	\$ -	\$ -	\$ 1,420	\$ 44	\$ 15	\$ 4,809	\$ 87	\$ 22	\$ -	\$ 42	\$ 9	\$ 1	\$ 1	\$ 163		
24	2019	October	\$ 0	\$ -	\$ -	\$ 2	\$ 42	\$ 21	\$ 73	\$ 95	\$ 22	\$ -	\$ 45	\$ 9	\$ 1	\$ 1	\$ 174		
25	2019	November	\$ 0	\$ -	\$ -	\$ 2	\$ 244	\$ 11	\$ 262	\$ 95	\$ 22	\$ -	\$ 45	\$ 9	\$ 1	\$ 1	\$ 174		
26	Total		\$ 38,204	\$ 9,126	\$ -	\$ 26,309	\$ 3,238	\$ 589	\$ 447	\$ 1,009	\$ 429	\$ -	\$ 507	\$ 125	\$ 6	\$ 13	\$ 2,089		
Average Balance of Estimated Accumulated depreciation in the next rate period (b)																			
27	\$ (500) \$ (284) \$ - \$ (236) \$ (69) \$ (2) \$ (6) \$ (1,097)																		
Depreciation Rate (c)																			
2.9977% 2.9365% 0.0000% 2.0445% 3.6102% 1.8268% 3.3958%																			
Depreciation expense on estimated capital additions in the next rate period (sum of Lines 14 through 25)																			
29	\$ 816 \$ 267 \$ - \$ 479 \$ 102 \$ 6 \$ 12 \$ 1,683																		

Notes:
(a) Estimated depreciation expense for December 2018 is not needed for this schedule. Actual depreciation expense for 2018 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

EXHIBIT E-9-E
DOCKET E-2, SUB 1207

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)

		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 - 2018 - 2019 (a)	10%	9%		13%	10%	9%	9%	
	Capital Additions								
	2019								
2	Gross Capital Additions in December	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	- (b)
3	Gross Capital Additions in January	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	2 (b)
4	Gross Capital Additions in February	\$ -	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	2 (b)
5	Gross Capital Additions in March	\$ 5,076	\$ 7,689	\$ -	\$ 1,099	\$ -	\$ -	\$ -	13,864 (b)
6	Gross Capital Additions in April	\$ -	\$ 164	\$ -	\$ -	\$ 8	\$ 22	\$ -	194 (b)
7	Gross Capital Additions in May	\$ -	\$ 164	\$ -	\$ -	\$ 17	\$ 11	\$ 29	220 (b)
8	Gross Capital Additions in June	\$ 5,368	\$ 164	\$ -	\$ 1,044	\$ 53	\$ 2	\$ 5	6,635 (b)
9	Gross Capital Additions in July	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ -	\$ -	163 (b)
10	Gross Capital Additions in August	\$ -	\$ 163	\$ -	\$ -	\$ 2,290	\$ -	\$ -	2,452 (b)
11	Gross Capital Additions in September	\$ 4,793	\$ 163	\$ -	\$ 1,008	\$ 180	\$ 6	\$ 15	6,166 (b)
12	Gross Capital Additions in October	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ 32	\$ 81	276 (b)
13	Gross Capital Additions in November	\$ -	\$ 163	\$ -	\$ 16,291	\$ 132	\$ 43	\$ 111	16,740 (b)
	2020								
14	Gross Capital Additions in December	\$ 4,236	\$ 131	\$ -	\$ 2,110	\$ 106	\$ 53	\$ 20	6,656 (b)
15	Gross Capital Additions in January	\$ 1	\$ -	\$ -	\$ 20	\$ -	\$ -	\$ -	21 (b)
16	Gross Capital Additions in February	\$ 1	\$ -	\$ -	\$ 16	\$ -	\$ -	\$ -	16 (b)
17	Gross Capital Additions in March	\$ 4,516	\$ -	\$ -	\$ 1,732	\$ -	\$ 0	\$ 0	6,248 (b)
18	Gross Capital Additions in April	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 30	\$ 11	44 (b)
19	Gross Capital Additions in May	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 115	\$ 43	161 (b)
20	Gross Capital Additions in June	\$ 10,890	\$ -	\$ -	\$ 1,553	\$ 130	\$ 234	\$ 88	12,895 (b)
21	Gross Capital Additions in July	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 5	\$ 2	10 (b)
22	Gross Capital Additions in August	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 2	\$ 1	5 (b)
23	Gross Capital Additions in September	\$ 3,324	\$ -	\$ -	\$ 1,420	\$ 44	\$ 15	\$ 6	4,809 (b)
24	Gross Capital Additions in October	\$ 0	\$ -	\$ -	\$ 2	\$ 42	\$ 21	\$ 8	73 (b)
25	Gross Capital Additions in November	\$ 0	\$ -	\$ -	\$ 2	\$ 244	\$ 11	\$ 4	262 (b)
26	Balance at November 30, 2020	\$ 38,204	\$ 9,126	\$ -	\$ 26,309	\$ 3,238	\$ 589	\$ 447	\$ 77,912
	Deferred Tax Expense / (Benefit) (c)								
	2019								
27	Deferred Taxes in December	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
28	Deferred Taxes in January	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
29	Deferred Taxes in February	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	0
30	Deferred Taxes in March	\$ -	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	0
31	Deferred Taxes in April	\$ 522	\$ 723	\$ -	\$ 138	\$ -	\$ -	\$ -	1,384
32	Deferred Taxes in May	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ 1	\$ 2	18
33	Deferred Taxes in June	\$ -	\$ 15	\$ -	\$ -	\$ 2	\$ 1	\$ 3	21
34	Deferred Taxes in July	\$ 552	\$ 15	\$ -	\$ 131	\$ 5	\$ 0	\$ 0	705
35	Deferred Taxes in August	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -	15
36	Deferred Taxes in September	\$ -	\$ 15	\$ -	\$ -	\$ 221	\$ -	\$ -	236
37	Deferred Taxes in October	\$ 493	\$ 15	\$ -	\$ 127	\$ 17	\$ 1	\$ 1	655
38	Deferred Taxes in November	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ 3	\$ 7	25
39	Total	\$ 1,568	\$ 831	\$ -	\$ 397	\$ 245	\$ 5	\$ 14	\$ 3,060
	2020								
40	Deferred Taxes in December	\$ -	\$ 15	\$ -	\$ 2,053	\$ 13	\$ 4	\$ 10	2,094
41	Deferred Taxes in January	\$ 436	\$ 12	\$ -	\$ 266	\$ 10	\$ 5	\$ 2	731
42	Deferred Taxes in February	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	3
43	Deferred Taxes in March	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	2
44	Deferred Taxes in April	\$ 465	\$ -	\$ -	\$ 218	\$ -	\$ 0	\$ 0	683
45	Deferred Taxes in May	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 3	\$ 1	4
46	Deferred Taxes in June	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 10	\$ 4	14
47	Deferred Taxes in July	\$ 1,121	\$ -	\$ -	\$ 196	\$ 13	\$ 21	\$ 8	1,358
48	Deferred Taxes in August	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 0	\$ 0	1
49	Deferred Taxes in September	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 0	\$ 0	1
50	Deferred Taxes in October	\$ 342	\$ -	\$ -	\$ 179	\$ 4	\$ 1	\$ 1	527
51	Deferred Taxes in November	\$ 0	\$ -	\$ -	\$ 0	\$ 4	\$ 2	\$ 1	7
52	Balance at November 30, 2020	\$ 3,932	\$ 858	\$ -	\$ 3,315	\$ 288	\$ 52	\$ 40	\$ 8,485
53	Average Balance of Accumulated Deferred Tax Asset (Liability) on actual capital additions in the next rate period (d)	\$ (2,605)	\$ (855)	\$ -	\$ (2,711)	\$ (269)	\$ (26)	\$ (29)	\$ (6,496)

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 1207

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	\$ 3,152,748	\$ 1,940
2	Mayo 1 O&M	500-514	\$ 3,783,348	\$ 2,328
3	Brunswick Plant O&M	517-532	\$ 41,396,201	\$ 25,470
4	Harris 1 O&M	517-532	\$ 20,056,551	\$ 12,340
5	A&G Expenses	929	\$ 30,999,217	\$ 19,073
6	Payroll Taxes	408	\$ 3,380,143	\$ 2,080
7	General Plant Return	454	\$ 2,618,712	\$ 1,611
8	Dispatch Fee	456	\$ 35,255	\$ 22
9	Auxiliary Power	447	\$ 501,885	\$ 309
10	Site Representative	456	\$ 4,908	\$ 3
11	NCEMPA Revenue Included in Cost of Service for a Return on Coal Inventory	454	\$ 83,972	\$ 52
12	Property Taxes	408	\$ 6,086,872	\$ 3,745
13	Incremental Nuclear Decommissioning Costs	403		\$ 3,054 (b)
14	Total			<u>\$ 72,026</u>

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 2018 cost of service study of from Exhibit I -E 61.52780%

EXHIBIT F-1-E
DOCKET E-2, SUB 1207

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

Line
No.

<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 - 2018 Cost of Service		61.5278%		61.5278%		61.5278%		61.5278%		
7	NC retail's incremental nuclear decommissioning expense (Line 11 x Line 12)	\$	1,540,240	\$	464,792	\$	1,048,567	\$	-	\$	3,053,599

EXHIBIT I-E
DOCKET E-2, SUB 1207

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, 2018

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	3,750,145	0.297189	Residential Class	30.51718%	49.5990%
2	NC RES-TOU	100,728	0.007982	SGS Class	3.78746%	6.1557%
3	NC SGS	474,027	0.037565	MGS Class	17.33896%	28.1807% **
4	NC SGS-CLR	3,901	0.000309	SI Class	0.04362%	0.0709%
5	NC MGS-TOU	1,534,242	0.121585	LGS Class	9.83610%	15.9864%
6	NC MGS	653,710	0.051805	TSS Class	0.00448%	0.0073%
7	NC SI	5,504	0.000436	ALS Class	0.00000%	0.0000%
8	NC LGS	183,991	0.014581	SLS Class	0.00000%	0.0000%
9	NC LGS-TOU	227,561	0.018034	SFLS Class	0.00000%	0.0000%
10	NC LGS-RTP	829,637	0.065747	Total	61.52780%	100.0000%
11	NC TSS	566	0.000045			
12	NC ALS	-	0.000000			
13	NC SLS	-	0.000000			
14	NC SFLS	-	0.000000			
15	Total NCR	7,764,011	0.615278			
16	NCEMC (Note 1)	1,780,265	0.141081	**Allocation of MGS Class between kW and kWh billed customers MGS Class - billed on kWh basis 0.09% 0.0241% Note 2 MGS Class - billed on kW basis 99.91% 28.1566% Note 2		
17	Fayetteville	424,976	0.033678			
18	FBEMC	69,623	0.005517			28.1807%
19	Piedmont EMC	21,284	0.001687			
20	Haywood EMC	10,206	0.000809			
21	Tri-Towns	-	0.000000			
22	Waynesville	-	0.000000			
23	Winterville	-	0.000000			
24	Total NCWHS	2,306,354	0.182773			
25	NCEMPA (Note 2)	1,310,938	0.103888			
26	Total NC	11,381,303	0.901939			
27	SC RES	490,690	0.038886			
28	SC RET	9,862	0.000782			
29	SC SGS	69,776	0.005530			
30	SC SGS-CLR	552	0.000044			
31	SC MGS-TOU	201,037	0.015932			
32	SC MGS	118,479	0.009389			
33	SC SI	3,033	0.000240			
34	SC LGS	104,339	0.008269			
35	SC LGS-TOU	36,802	0.002916			
36	SC LGS-CRTL-TOU	76,758	0.006083			
37	SC LGS-RTP	80,521	0.006381			
38	SC TSS	101	0.000008			
39	SC ALS	-	0.000000			
40	SC SLS	-	0.000000			
41	SC SFLS	-	0.000000			
42	Total SCR	1,191,950	0.094459			
43	SCWHS (Camden)	45,452	0.003602			
44	Total SC	1,237,402	0.098061			
45	Total System with NCEMPA retained capacity	12,618,705	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-E.

EXHIBIT J-E
DOCKET E-2, SUB 1207

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 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%	
CALCULATION OF COMPOSITE INCOME TAX RATES:											
6	FEDERAL INCOME TAX RATE			2018 Statutory Rate	State Apportionment Factor	2018 Weighted Tax Rate			2019 Statutory Rate	State Apportionment Factor	2019 Weighted Tax Rate
				21.00%		21.00%			21.00%		21.00%
STATE INCOME TAX RATE:											
7	NC			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%
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	0.140%					0.140%				

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
BILLING DETERMINANTS FOR THE TWELVE MONTH PERIOD ENDED NOVEMBER 30, 2020

	(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	12,302,290,710	
2	Residential Class	RES (EC)	kWh Energy Units	3,229,521,884	
3	Residential Class	R-TOU	kWh Energy Units	36,153,135	
4	Residential Class	R-TOU (EC)	kWh Energy Units	17,743,588	
5	Residential Class	R-TOUD	kWh Energy Units	250,580,153	
6	Residential Class	R-TOUD (EC)	kWh Energy Units	173,304,988	
7	Residential Class	R-TOUE	kWh Energy Units	0	
8	Residential Class	R-TOUE (EC)	kWh Energy Units	0	
9	Total Residential			(a) 16,009,594,458	
10	SGS Class	SGS	kWh Energy Units	1,769,718,882	
11	SGS Class	SGS-TOU-CLR	kWh Energy Units	29,703,239	
12	SGS Class	SGS-TOUE	kWh Energy Units	3,072,589	
13	Total SGS			(a) 1,802,494,710	
14	MGS Class	APH-TES	kW Demand Units		4,409
15	MGS Class	CH-TOUE	kWh Energy Units	7,715,061	
16	MGS Class	CSE	kWh Energy Units	1,166,342	
17	MGS Class	CSG	kWh Energy Units	18,810	
18	MGS Class	SGS-TES	kW Demand Units		41,046
19	MGS Class	SGS-TOU	kW Demand Units		19,331,165
20	MGS Class	MGS	kW Demand Units		12,005,716
21	Total MGS			(a) 8,900,213	31,382,336
22	LGS Class	LGS	kW Demand Units		2,512,663
23	LGS Class	LGS-RTP	kW Demand Units		43,897
24	LGS Class	LGS-RTP-TOU	kW Demand Units		11,212,643
25	LGS Class	LGS-TOU	kW Demand Units		3,073,783
26	Total LGs			(a)	16,842,986
27	SI Class	SI	kWh Energy Units	(b) 43,257,472	
28	TSS Class	TFS	kWh Energy Units	179,236	
29	TSS Class	TSS	kWh Energy Units	4,544,063	
30	Total TSS			(b) 4,723,299	
31	Total All Rates			17,868,970,152	48,225,322

NOTES:

KWh sales for MGS-kWh billed	8,900,213	0.09%
KWh sales for MGS-kW billed	10,381,905,523	99.91%
Total MGS Class KWH Sales for the Year were:	10,390,805,736	

Notes:

- (a) Source: 2019 Spring Sales Forecast
- (b) Source: Monthly CIM Query of Billing Determinants for the twelve month period ended March 31, 2019.

EXHIBIT A - TU
DOCKET E-2, SUB 1207

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 12/31/2017		\$ (9,196) (a)								
2	Revenue Requirement for Test Year Ended 12/31/2018			\$ 136,900 (b)							
3	Return on Rolling Recovery Factor for Test Year Ended 12/31/2018						\$ (1,734) (d)				
4	Total revenue for calculation of joint agency asset rider		<u>\$ (9,196)</u>	<u>\$ 136,900</u>	<u>\$ 159,588</u> (c)	<u>\$ (22,688)</u>	<u>\$ (1,734)</u>	<u>\$ (33,618)</u>			
Allocation of monthly revenue to customer groups:											
Customers billed based on KWH											
5	Residential	49.5990%	\$ (2,380)	\$ 67,901	\$ 78,175	\$ (10,274)	\$ (744)	\$ (13,398)		16,009,594,458	\$ (0.00084) per KWH
6	Small General Service	6.1557%	\$ (792)	\$ 8,427	\$ 10,710	\$ (2,283)	\$ (147)	\$ (3,222)		1,802,494,710	\$ (0.00179) per KWH
4	Medium General Service -KWH	0.0241%	\$ (3)	\$ 33	\$ 43	\$ (10)	\$ (1)	\$ (14)		8,900,213	\$ (0.00162) per KWH
5	Seasonal Intermittent	0.0709%	\$ 20	\$ 97	\$ 297	\$ (200)	\$ (2)	\$ (183)		43,257,472	\$ (0.00423) per KWH
6	Lighting	0.0000%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		0	\$ - per KWH
7	Traffic Signal	0.0073%	\$ (1)	\$ 10	\$ 12	\$ (2)	\$ (0)	\$ (3)		4,723,299	\$ (0.00065) per KWH
		<u>55.8570%</u>	<u>\$ (3,156)</u>	<u>\$ 76,468</u>	<u>\$ 89,238</u>	<u>\$ (12,770)</u>	<u>\$ (895)</u>	<u>\$ (16,821)</u>		<u>17,868,970,152</u>	
Customers billed based on KW											
8	Medium General Service -KW	28.1566%	\$ (5,743)	\$ 38,546	\$ 47,480	\$ (8,934)	\$ (758)	\$ (15,435)	31,382,336		\$ (0.49) per KW
9	Large General Service	15.9864%	\$ (297)	\$ 21,885	\$ 22,869	\$ (984)	\$ (81)	\$ (1,363)	16,842,986		\$ (0.08) per KW
		<u>44.1430%</u>	<u>\$ (6,040)</u>	<u>\$ 60,432</u>	<u>\$ 70,350</u>	<u>\$ (9,918)</u>	<u>\$ (840)</u>	<u>\$ (16,798)</u>	<u>48,225,322</u>		
10		<u>100.0000%</u>	<u>\$ (9,196)</u>	<u>\$ 136,900</u>	<u>\$ 159,588</u>	<u>\$ (22,688)</u>	<u>\$ (1,734)</u>	<u>\$ (33,618)</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, 2019

EXHIBIT A-1 -TU
DOCKET E-2, SUB 1207

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 :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16,2018 Forward			
		Composite Income <u>Tax Rate (e)</u>	Capitalization <u>Ratio (c)</u>	Cost <u>Rate (d)</u>	After Tax Weighted Rate <u>Rate of Return</u>	Capitalization <u>Ratio (h)</u>	Cost <u>Rate (i)</u>	After Tax Weighted Rate <u>Rate of Return</u>	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (j)	
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (j)	
3	After tax overall return				<u>7.0491% (f)</u>			<u>6.6352% (j)</u>	
4	Discounted monthly after tax overall return				<u>0.5693% (g)</u>			<u>0.5368% (k)</u>	

	<u>Revenue Requirement</u> (Col A) (a)	<u>Revenue Collected</u> (Col B) (b)	<u>Under (Over) Collection of Revenue</u> (Col C) = A - B	<u>Beginning Deferred Balance</u> (Col D)	<u>Net of Tax Deferral Balance For Return</u> (Col E)	<u>Net of Tax Return on Deferred Balance</u> (Col F)	<u>Gross Up of Return on Deferred Balance</u> (Col G)	<u>Ending Deferred Balance</u> (Col H) = C + D + G
29 December 2017	\$ 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	\$ 1,425	\$ (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	\$ (2,460)	\$ (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 2018	\$ 11,278	\$ 11,963	\$ (686)	\$ (32,757)	\$ (25,059)	\$ (135)	\$ (176)	\$ (33,618)
42 Total			<u>\$ (22,688)</u>				<u>\$ (1,734)</u>	

Notes:

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

EXHIBIT A-2 -TU
DOCKET E-2, SUB 1207

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 :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16,2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate Rate of Return	Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (j)	
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (j)	
3	After tax overall return				<u>7.0491% (f)</u>			<u>6.6352% (j)</u>	
4	Discounted monthly after tax overall return				<u>0.5693% (g)</u>			<u>0.5368% (k)</u>	
5	Demand allocation factor							<u>49.5990% (l)</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)	\$ (10,014)
8	February	\$ 3,110	\$ 7,168	\$ (4,059)	\$ (10,014)	\$ (7,661)	\$ (44)	\$ (14,130)
9	March	\$ 6,154	\$ 5,529	\$ 625	\$ (14,130)	\$ (10,809)	\$ (60)	\$ (13,582)
10	April	\$ 7,371	\$ 5,354	\$ 2,017	\$ (13,582)	\$ (10,390)	\$ (56)	\$ (11,638)
11	May	\$ 6,309	\$ 4,781	\$ 1,528	\$ (11,638)	\$ (8,903)	\$ (48)	\$ (10,173)
12	June	\$ 6,099	\$ 6,612	\$ (512)	\$ (10,173)	\$ (7,782)	\$ (42)	\$ (10,740)
13	July	\$ 6,134	\$ 7,468	\$ (1,335)	\$ (10,740)	\$ (8,216)	\$ (44)	\$ (12,132)
14	August	\$ 6,409	\$ 7,314	\$ (906)	\$ (12,132)	\$ (9,281)	\$ (50)	\$ (13,103)
15	September	\$ 6,327	\$ 6,611	\$ (284)	\$ (13,103)	\$ (10,024)	\$ (54)	\$ (13,457)
16	October	\$ 6,016	\$ 5,952	\$ 64	\$ (13,457)	\$ (10,294)	\$ (55)	\$ (13,465)
17	November	\$ 5,945	\$ 5,044	\$ 902	\$ (13,465)	\$ (10,301)	\$ (55)	\$ (12,636)
18	December 2018	\$ 5,594	\$ 6,288	\$ (694)	\$ (12,636)	\$ (9,666)	\$ (52)	\$ (13,398)
19	Total			<u>\$ (10,274)</u>			<u>\$ (744)</u>	

Notes:

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

EXHIBIT A-3 -TU
DOCKET E-2, SUB 1207

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 :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16,2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate Rate of Return	Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (j)	
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (j)	
3	After tax overall return				<u>7.0491% (f)</u>			<u>6.6352% (j)</u>	
4	Discounted monthly after tax overall return				<u>0.5693% (g)</u>			<u>0.5368% (k)</u>	
5	Demand allocation factor							<u>6.1557% (l)</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)	\$ (1,592)
8	February	\$ 386	\$ 892	\$ (506)	\$ (1,592)	\$ (1,218)	\$ (7)	\$ (2,107)
9	March	\$ 764	\$ 752	\$ 12	\$ (2,107)	\$ (1,612)	\$ (9)	\$ (2,107)
10	April	\$ 915	\$ 759	\$ 156	\$ (2,107)	\$ (1,612)	\$ (9)	\$ (1,963)
11	May	\$ 783	\$ 739	\$ 44	\$ (1,963)	\$ (1,501)	\$ (8)	\$ (1,930)
12	June	\$ 757	\$ 967	\$ (210)	\$ (1,930)	\$ (1,476)	\$ (8)	\$ (2,150)
13	July	\$ 761	\$ 1,052	\$ (291)	\$ (2,150)	\$ (1,645)	\$ (9)	\$ (2,452)
14	August	\$ 795	\$ 1,071	\$ (276)	\$ (2,452)	\$ (1,876)	\$ (10)	\$ (2,741)
15	September	\$ 785	\$ 972	\$ (187)	\$ (2,741)	\$ (2,097)	\$ (11)	\$ (2,943)
16	October	\$ 747	\$ 941	\$ (195)	\$ (2,943)	\$ (2,251)	\$ (12)	\$ (3,153)
17	November	\$ 738	\$ 844	\$ (106)	\$ (3,153)	\$ (2,412)	\$ (13)	\$ (3,276)
18	December 2018	\$ 694	\$ 622	\$ 72	\$ (3,276)	\$ (2,506)	\$ (13)	\$ (3,222)
19	Total			<u>\$ (2,283)</u>			<u>\$ (147)</u>	

Notes:

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

EXHIBIT A-4 -TU
DOCKET E-2, SUB 1207

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 :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16,2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate Rate of Return	Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (j)	
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (j)	
3	After tax overall return				<u>7.0491% (f)</u>			<u>6.6352% (j)</u>	
4	Discounted monthly after tax overall return				<u>0.5693% (g)</u>			<u>0.5368% (k)</u>	
5	Demand allocation factor							<u>0.0241% (l)</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)	\$ (9)
8	February	\$ 2	\$ 4	\$ (3)	\$ (9)	\$ (7)	\$ (0)	\$ (12)
9	March	\$ 3	\$ 3	\$ 0	\$ (12)	\$ (9)	\$ (0)	\$ (12)
10	April	\$ 4	\$ 3	\$ 1	\$ (12)	\$ (9)	\$ (0)	\$ (11)
11	May	\$ 3	\$ 2	\$ 1	\$ (11)	\$ (8)	\$ (0)	\$ (10)
12	June	\$ 3	\$ 3	\$ (0)	\$ (10)	\$ (8)	\$ (0)	\$ (10)
13	July	\$ 3	\$ 4	\$ (1)	\$ (10)	\$ (8)	\$ (0)	\$ (12)
14	August	\$ 3	\$ 4	\$ (1)	\$ (12)	\$ (9)	\$ (0)	\$ (13)
15	September	\$ 3	\$ 4	\$ (1)	\$ (13)	\$ (10)	\$ (0)	\$ (14)
16	October	\$ 3	\$ 3	\$ (0)	\$ (14)	\$ (10)	\$ (0)	\$ (14)
17	November	\$ 3	\$ 2	\$ 0	\$ (14)	\$ (11)	\$ (0)	\$ (13)
18	December 2018	\$ 3	\$ 4	\$ (1)	\$ (13)	\$ (10)	\$ (0)	\$ (14)
19	Total			<u>\$ (10)</u>			<u>\$ (1)</u>	

Notes:

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

EXHIBIT A-5 -TU
DOCKET E-2, SUB 1207

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 :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16,2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate Rate of Return	Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (j)	
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (j)	
3	After tax overall return				<u>7.0491% (f)</u>			<u>6.6352% (j)</u>	
4	Discounted monthly after tax overall return				<u>0.5693% (g)</u>			<u>0.5368% (k)</u>	
5	Demand allocation factor							<u>0.0709% (l)</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							\$ 20
7	January 2018	\$ 3	\$ 10	\$ (6)	\$ 20	\$ 15	\$ 0	\$ 13
8	February	\$ 4	\$ 8	\$ (4)	\$ 13	\$ 10	\$ 0	\$ 10
9	March	\$ 9	\$ 7	\$ 2	\$ 10	\$ 7	\$ 0	\$ 11
10	April	\$ 11	\$ 9	\$ 2	\$ 11	\$ 9	\$ 0	\$ 13
11	May	\$ 9	\$ 10	\$ (1)	\$ 13	\$ 10	\$ 0	\$ 12
12	June	\$ 9	\$ 16	\$ (7)	\$ 12	\$ 9	\$ 0	\$ 5
13	July	\$ 9	\$ 25	\$ (17)	\$ 5	\$ 4	\$ 0	\$ (12)
14	August	\$ 9	\$ 50	\$ (41)	\$ (12)	\$ (9)	\$ (0)	\$ (53)
15	September	\$ 9	\$ 87	\$ (78)	\$ (53)	\$ (40)	\$ (0)	\$ (131)
16	October	\$ 9	\$ 42	\$ (34)	\$ (131)	\$ (100)	\$ (1)	\$ (165)
17	November	\$ 8	\$ 20	\$ (12)	\$ (165)	\$ (126)	\$ (1)	\$ (178)
18	December 2018	\$ 8	\$ 12	\$ (4)	\$ (178)	\$ (136)	\$ (1)	\$ (183)
19	Total			<u>\$ (200)</u>			<u>\$ (2)</u>	

Notes:

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

EXHIBIT A-6 -TU
DOCKET E-2, SUB 1207

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 :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16,2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate Rate of Return	Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (j)	
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (j)	
3	After tax overall return				<u>7.0491% (f)</u>			<u>6.6352% (j)</u>	
4	Discounted monthly after tax overall return				<u>0.5693% (g)</u>			<u>0.5368% (k)</u>	
5	Demand allocation factor							<u>0.0073% (l)</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 2018	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3)
19	Total			<u>\$ (2)</u>			<u>\$ (0)</u>		

Notes:

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

EXHIBIT A-7 -TU
DOCKET E-2, SUB 1207

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 :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16,2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate Rate of Return	Capitalization Ratio (h)	Cost Rate (l)	After Tax Weighted Rate Rate of Return	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (j)	
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (j)	
3	After tax overall return				<u>7.0491% (f)</u>			<u>6.6352% (j)</u>	
4	Discounted monthly after tax overall return				<u>0.5693% (g)</u>			<u>0.5368% (k)</u>	
5	Demand allocation factor							<u>28.1566% (l)</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	February	\$ 1,765	\$ 3,951	\$ (2,185)	\$ (8,545)	\$ (6,537)	\$ (37)	\$ (49)
9	March	\$ 3,494	\$ 3,873	\$ (379)	\$ (10,779)	\$ (8,246)	\$ (46)	\$ (60)
10	April	\$ 4,185	\$ 3,897	\$ 288	\$ (11,218)	\$ (8,582)	\$ (46)	\$ (60)
11	May	\$ 3,581	\$ 3,862	\$ (281)	\$ (10,990)	\$ (8,408)	\$ (45)	\$ (59)
12	June	\$ 3,462	\$ 3,970	\$ (507)	\$ (11,330)	\$ (8,668)	\$ (47)	\$ (61)
13	July	\$ 3,482	\$ 4,164	\$ (682)	\$ (11,898)	\$ (9,102)	\$ (49)	\$ (64)
14	August	\$ 3,638	\$ 4,278	\$ (640)	\$ (12,644)	\$ (9,673)	\$ (52)	\$ (68)
15	September	\$ 3,592	\$ 3,915	\$ (323)	\$ (13,352)	\$ (10,214)	\$ (55)	\$ (72)
16	October	\$ 3,415	\$ 4,275	\$ (860)	\$ (13,746)	\$ (10,516)	\$ (56)	\$ (74)
17	November	\$ 3,375	\$ 3,785	\$ (409)	\$ (14,680)	\$ (11,230)	\$ (60)	\$ (79)
18	December 2018	\$ 3,175	\$ 3,361	\$ (186)	\$ (15,168)	\$ (11,604)	\$ (62)	\$ (81)
19	Total			<u>\$ (8,934)</u>			<u>\$ (758)</u>	

Notes:

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

EXHIBIT A-8 -TU
DOCKET E-2, SUB 1207

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 :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16,2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate	Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (j)	
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (j)	
3	After tax overall return				7.0491% (f)			6.6352% (j)	
4	Discounted monthly after tax overall return				0.5693% (g)			0.5368% (k)	
5	Demand allocation factor							15.9864% (l)	

	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 2018	\$ 1,803	\$ 1,675	\$ 128	\$ (1,482)	\$ (1,134)	(6) \$ (8)	\$ (1,363)
19	Total			\$ (984)			\$ (81)	

Notes:

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

EXHIBIT B -TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
COST COMPONENTS OF JOINT AGENCY ASSET RIDER
CALCULATION OF NC RETAIL NCEMPA RIDER REVENUE for TEST YEAR ENDING DECEMBER 31, 2018
(Thousands of Dollars)

Line No.	Description	For the Month												Year to Date
		January	February	March	April	May	June	July	August	September	October	November	December	Total
		NC Retail	NC Retail	NC Retail	NC Retail	NC Retail	NC Retail	NC Retail	NC Retail	NC Retail	NC Retail	NC Retail	NC Retail	NC Retail
		Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue
		Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	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	Levelized recovery of pretax cost of certain acquisition costs at the purchase date	\$ 4,942	\$ 4,941	\$ 4,817	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,694	\$ 4,694	\$ 4,694	\$ 56,951 (a)
2	Incremental pretax cost for acquisition costs not included in the levelization of costs	\$ 550	\$ 585	\$ 593	\$ 595	\$ 599	\$ 599	\$ 597	\$ 593	\$ 591	\$ 588	\$ 582	\$ 578	\$ 7,050 (b)
3	Incremental pretax cost for financing and operating costs related to capital additions since the purchase date	\$ 631	\$ 646	\$ 670	\$ 734	\$ 858	\$ 931	\$ 957	\$ 972	\$ 980	\$ 987	\$ 1,002	\$ 1,041	\$ 10,408 (c)
4	Incremental pretax cost for operating costs on acquired assets	\$ 5,223	\$ 6,537	\$ 9,279	\$ 8,307	\$ 6,039	\$ 5,544	\$ 5,590	\$ 6,131	\$ 5,962	\$ 5,332	\$ 5,181	\$ 4,949	\$ 74,074 (d)
5	Pretax cost of service change from re-apportionment of system costs due to the NCEMPA asset purchase	\$ (6,958)	\$ (6,958)	\$ (3,479)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (17,395) (e)
6	Pretax cost increment (decrement) for amortization of deferred costs	\$ 511	\$ 511	\$ 511	\$ 511	\$ 511	\$ 511	\$ 511	\$ 511	\$ 511	\$ 511	\$ 511	\$ -	\$ 5,621 (f)
7	Total pre-tax cost for joint agency asset rider (Sum of Lines 1 - Line 6)	\$ 4,898	\$ 6,261	\$ 12,391	\$ 14,841	\$ 12,702	\$ 12,280	\$ 12,349	\$ 12,903	\$ 12,739	\$ 12,112	\$ 11,970	\$ 11,262	\$ 136,708
8	Regulatory fee (Line 7 / (1 - (g)) x (g))	\$ 7	\$ 9	\$ 17	\$ 21	\$ 18	\$ 17	\$ 17	\$ 18	\$ 18	\$ 17	\$ 17	\$ 16	\$ 192 (g)
9	Total actual revenue for calculation of joint agency asset rider (Line 7 + Line 8)	\$ 4,905	\$ 6,270	\$ 12,408	\$ 14,862	\$ 12,720	\$ 12,297	\$ 12,367	\$ 12,921	\$ 12,757	\$ 12,129	\$ 11,987	\$ 11,278	\$ 136,900

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

January - June

July - December

0.140%

0.140%

EXHIBIT C -TU
DOCKET E-2, SUB 1207

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, 2018
(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	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 20,565 (a)
3	Change in Revenue Requirement - Actual vs. Estimated	\$ 97	\$ 97	\$ 48	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ 241 (b)
3	Total Harris Nuclear Unit 1 (Line 2 + Line 3)	\$ 1,811	\$ 1,810	\$ 1,762	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 20,807
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	\$ 6,014 (c)
6	Change in Revenue Requirement - Actual vs. Estimated	\$ 23	\$ 23	\$ 12	\$ 0	\$ 0	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ 58 (d)
7	Total Brunswick Nuclear Unit 1 (Line 5 + Line 6)	\$ 525	\$ 524	\$ 513	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 6,072
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	\$ 6,002 (e)
10	Change in Revenue Requirement - Actual vs. Estimated	\$ 23	\$ 22	\$ 11	\$ 0	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ 56 (f)
11	Total Brunswick Nuclear Unit 2 (Line 9 + Line 10)	\$ 523	\$ 523	\$ 511	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,058
12	Revenue related to purchase of the Mayo Coal Unit													
13	Levelized Revenue	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 4,891 (g)
14	Change in Revenue Requirement - Actual vs. Estimated	\$ 18	\$ 18	\$ 9	\$ 0	\$ 0	\$ (0)	\$ (0)	\$ 0	\$ (0)	\$ 0	\$ 0	\$ (0)	\$ 46 (h)
15	Total Mayo Coal Unit (Line 13 + Line 14)	\$ 426	\$ 426	\$ 417	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 4,937
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	\$ 622 (i)
18	Change in Revenue Requirement - Actual vs. Estimated	\$ 2	\$ 2	\$ 1	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 6 (j)
19	Total Roxboro Coal Unit (Line 17 + Line 18)	\$ 54	\$ 54	\$ 53	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 628
20	Revenue related to the Acquisition costs above net book value for the above plants													
21	Levelized Revenue	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 18,219 (k)
22	Change in Revenue Requirement - Actual vs. Estimated	\$ 85	\$ 85	\$ 43	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 230 (l)
23	Total Acquisition costs above net book value for above plants (Line 21 + Line 22)	\$ 1,604	\$ 1,603	\$ 1,562	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 18,450
24	Total monthly levelized revenue (Line 3 + Line 7 + Line 11 + Line 15 + Line 19 + Line 23)	\$ 4,942	\$ 4,941	\$ 4,817	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,694	\$ 4,694	\$ 4,694	\$ 56,951

Notes:
(a) From Exhibit C1-Actual-TU, Col P.
(c) From Exhibit C2-Actual-TU, Col P.
(e) From Exhibit C3-Actual-TU, Col P.
(g) From Exhibit C4-Actual-TU, Col P.
(i) From Exhibit C5-Actual-TU, Col P.
(k) From Exhibit C6-Actual-TU, Col P.

(b) From Exhibit C1-Actual-TU, Col O.
(d) From Exhibit C2-Actual-TU, Col O.
(f) From Exhibit C3-Actual-TU, Col O.
(h) From Exhibit C4-Actual-TU, Col O.
(j) From Exhibit C5-Actual-TU, Col O.
(l) From Exhibit C6-Actual-TU, Col O.

EXHIBIT C-1-Estimate-TU
DOCKET E-2, SUB 1207

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 2017	REVISIONS FOR 2018
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)		346
TAX LIFE	15 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (e)
DEPRECIATION RATE			(e)
FIRST YEAR BOOK DEPRECIATION RATE			
WEIGHTED ANNUAL INTEREST RATE			1.9440% (e)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			5.1480% (e)
NC RETAIL ALLOCATION FACTOR	61.33723% (c)		

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)
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	\$ 24,699
2018	January	\$ 223,128	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 215,226	\$ 349	\$ 923	\$ 284	\$ 2,204				
	February	\$ 222,480	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,546	\$ 648	\$ 214,365	\$ 347	\$ 920	\$ 283	\$ 2,198				
	March	\$ 221,832	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,760	\$ 648	\$ 213,503	\$ 346	\$ 916	\$ 281	\$ 2,191				
	April	\$ 221,184	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,974	\$ 648	\$ 212,641	\$ 344	\$ 912	\$ 280	\$ 2,185				
	May	\$ 220,535	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 9,187	\$ 648	\$ 211,779	\$ 343	\$ 909	\$ 279	\$ 2,179				
	June	\$ 219,887	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 9,401	\$ 648	\$ 210,917	\$ 342	\$ 905	\$ 278	\$ 2,173				
	July	\$ 219,239	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 9,615	\$ 648	\$ 210,055	\$ 340	\$ 901	\$ 277	\$ 2,166				
	August	\$ 218,591	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 9,828	\$ 648	\$ 209,193	\$ 339	\$ 897	\$ 276	\$ 2,160				
	September	\$ 217,942	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 10,042	\$ 648	\$ 208,332	\$ 338	\$ 894	\$ 275	\$ 2,154				
	October	\$ 217,294	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 10,255	\$ 648	\$ 207,470	\$ 336	\$ 890	\$ 273	\$ 2,148				
	November	\$ 216,646	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 10,469	\$ 648	\$ 206,608	\$ 335	\$ 886	\$ 272	\$ 2,142				
	December	\$ 215,998	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 10,683	\$ 648	\$ 205,746	\$ 333	\$ 883	\$ 271	\$ 2,135	\$ 24,460			
2019	\$ 208,219	6.930%	\$ 16,818	\$ 9,039	\$ 2,124	\$ 12,807	\$ 7,779	\$ 200,364	\$ 3,895	\$ 10,315	\$ 3,169	\$ 25,157	\$ 22,204				
2020	\$ 200,440	6.230%	\$ 15,119	\$ 7,341	\$ 1,725	\$ 14,532	\$ 7,779	\$ 190,660	\$ 3,706	\$ 9,815	\$ 3,015	\$ 24,316	\$ 20,163				
2021	\$ 192,661	5.900%	\$ 14,319	\$ 6,540	\$ 1,537	\$ 16,069	\$ 7,779	\$ 181,250	\$ 3,524	\$ 9,331	\$ 2,866	\$ 23,499	\$ 18,307				
2022	\$ 184,882	5.900%	\$ 14,319	\$ 6,540	\$ 1,537	\$ 17,606	\$ 7,779	\$ 171,935	\$ 3,342	\$ 8,851	\$ 2,719	\$ 22,691	\$ 16,608				
2023	\$ 177,104	5.910%	\$ 14,343	\$ 6,564	\$ 1,543	\$ 19,148	\$ 7,779	\$ 162,616	\$ 3,161	\$ 8,371	\$ 2,572	\$ 21,883	\$ 15,047				
2024	\$ 169,325	5.900%	\$ 14,319	\$ 6,540	\$ 1,537	\$ 20,685	\$ 7,779	\$ 153,298	\$ 2,980	\$ 7,892	\$ 2,424	\$ 21,075	\$ 13,614				
2025	\$ 161,546	5.910%	\$ 14,343	\$ 6,564	\$ 1,543	\$ 22,228	\$ 7,779	\$ 143,979	\$ 2,799	\$ 7,412	\$ 2,277	\$ 20,267	\$ 12,300				
2026	\$ 153,767	5.900%	\$ 14,319	\$ 6,540	\$ 1,537	\$ 23,764	\$ 7,779	\$ 134,661	\$ 2,618	\$ 6,932	\$ 2,130	\$ 19,459	\$ 11,095				
2027	\$ 145,988	5.910%	\$ 14,343	\$ 6,564	\$ 1,543	\$ 25,307	\$ 7,779	\$ 125,342	\$ 2,437	\$ 6,453	\$ 1,982	\$ 18,650	\$ 9,990				
2028	\$ 138,210	5.900%	\$ 14,319	\$ 6,540	\$ 1,537	\$ 26,844	\$ 7,779	\$ 116,024	\$ 2,256	\$ 5,973	\$ 1,835	\$ 17,842	\$ 8,979				
2029	\$ 130,431	5.910%	\$ 14,343	\$ 6,564	\$ 1,543	\$ 28,386	\$ 7,779	\$ 106,705	\$ 2,074	\$ 5,493	\$ 1,687	\$ 17,034	\$ 8,053				
2030	\$ 122,652	2.950%	\$ 7,159	\$ (620)	\$ (146)	\$ 28,241	\$ 7,779	\$ 98,228	\$ 1,910	\$ 5,057	\$ 1,553	\$ 16,299	\$ 7,239				
2031	\$ 114,873	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 26,413	\$ 7,779	\$ 91,436	\$ 1,778	\$ 4,707	\$ 1,446	\$ 15,709	\$ 6,555				
2032	\$ 107,094	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 24,585	\$ 7,779	\$ 85,485	\$ 1,662	\$ 4,401	\$ 1,352	\$ 15,193	\$ 5,956				
2033	\$ 99,315	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 22,757	\$ 7,779	\$ 79,534	\$ 1,546	\$ 4,094	\$ 1,258	\$ 14,677	\$ 5,406				
2034	\$ 91,537	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 20,929	\$ 7,779	\$ 73,583	\$ 1,430	\$ 3,788	\$ 1,164	\$ 14,161	\$ 4,900				
2035	\$ 83,758	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 19,101	\$ 7,779	\$ 67,633	\$ 1,315	\$ 3,482	\$ 1,070	\$ 13,645	\$ 4,436				
2036	\$ 75,979	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 17,273	\$ 7,779	\$ 61,682	\$ 1,199	\$ 3,175	\$ 975	\$ 13,129	\$ 4,010				
2037	\$ 68,200	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 15,445	\$ 7,779	\$ 55,731	\$ 1,083	\$ 2,869	\$ 881	\$ 12,613	\$ 3,619				
2038	\$ 60,421	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 13,617	\$ 7,779	\$ 49,780	\$ 968	\$ 2,563	\$ 787	\$ 12,096	\$ 3,261				
2039	\$ 52,643	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 11,789	\$ 7,779	\$ 43,829	\$ 852	\$ 2,256	\$ 693	\$ 11,580	\$ 2,933				
2040	\$ 44,864	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 9,960	\$ 7,779	\$ 37,879	\$ 736	\$ 1,950	\$ 599	\$ 11,064	\$ 2,632				
2041	\$ 37,085	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 8,132	\$ 7,779	\$ 31,928	\$ 621	\$ 1,644	\$ 505	\$ 10,548	\$ 2,358				
2042	\$ 29,306	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 6,304	\$ 7,779	\$ 25,977	\$ 505	\$ 1,337	\$ 411	\$ 10,032	\$ 2,107				
2043	\$ 21,527	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 4,476	\$ 7,779	\$ 20,026	\$ 389	\$ 1,031	\$ 317	\$ 9,516	\$ 1,877				
2044	\$ 13,749	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 2,648	\$ 7,779	\$ 14,076	\$ 274	\$ 725	\$ 223	\$ 9,000	\$ 1,668				
2045	\$ 5,970	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 820	\$ 7,779	\$ 8,125	\$ 158	\$ 418	\$ 128	\$ 8,484	\$ 1,477				
2046	TEN MONTHS	\$ (384)	0.000%	\$ -	\$ (6,353)	\$ (1,493)	\$ (673)	\$ 6,353	\$ 2,719	\$ 53	\$ 140	\$ 43	\$ 6,589	\$ 1,078			
TOTAL			\$ 242,200	\$ (2,861)		\$ 245,061		\$ 65,187	\$ 171,072	\$ 59,062	\$ 540,382	\$ 242,331					

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 and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J-TU - Cost of Capital.

(c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study as filed under E-2 Sub 1176.

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

(e) 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.

	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 24,699	\$ 242,331	\$ 267,030
Annual payment	\$ 1,902	\$ 18,663	\$ 20,565
Monthly payment	\$ 159	\$ 1,555	\$ 1,714

EXHIBIT C-1 Actual -TU
DOCKET E-2, SUB 1207

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	2017	2018
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		34.01% (b)	23.50% (c)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (d)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			
WEIGHTED ANNUAL INTEREST RATE			1.9440% (d)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			5.1480% (d)
NC RETAIL ALLOCATION FACTOR		61.33723% (b)	61.52780% (e)

		REVISIONS BASED ON 2018 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 DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)															
										INTEREST (Col I)	EQUITY (Col J)																								
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	\$	32,642		\$	22,272	\$	10,370	\$	15,655					
2017				\$	20,750	\$	11,936	\$	249	\$	8,119.220	\$	8,814	\$	218,467	\$	4,692	\$	11,810	\$	6,087	\$	28,753		\$	22,179	\$	9,225	\$	26,290					
2018	January	\$	223,129	7.700%	\$	1,562	\$	914	\$	215	\$	8,334	\$	648	\$	215,226	\$	385	\$	970	\$	298	\$	2,301		\$	2,204	\$	97	\$	1,714	\$	587	\$	27,022
	February	\$	222,480	7.700%	\$	1,562	\$	914	\$	215	\$	8,549	\$	648	\$	214,363	\$	384	\$	966	\$	297	\$	2,294		\$	2,198	\$	97	\$	1,714	\$	581	\$	27,750
	March	\$	221,832	7.700%	\$	1,562	\$	914	\$	215	\$	8,763	\$	648	\$	213,500	\$	364	\$	939	\$	288	\$	2,240		\$	2,191	\$	48	\$	1,714	\$	526	\$	28,430
	April	\$	221,184	7.700%	\$	1,562	\$	914	\$	215	\$	8,978	\$	648	\$	212,637	\$	344	\$	912	\$	280	\$	2,185		\$	2,185	\$	(0)	\$	1,714	\$	471	\$	29,057
	May	\$	220,536	7.700%	\$	1,562	\$	914	\$	215	\$	9,193	\$	648	\$	211,774	\$	343	\$	909	\$	279	\$	2,179		\$	2,179	\$	(0)	\$	1,714	\$	465	\$	29,680
	June	\$	219,887	7.700%	\$	1,562	\$	914	\$	215	\$	9,408	\$	648	\$	210,911	\$	342	\$	905	\$	278	\$	2,173		\$	2,173	\$	(0)	\$	1,714	\$	459	\$	30,301
	July	\$	219,239	7.700%	\$	1,562	\$	914	\$	215	\$	9,622	\$	648	\$	210,048	\$	340	\$	901	\$	277	\$	2,166		\$	2,166	\$	(0)	\$	1,714	\$	453	\$	30,919
	August	\$	218,591	7.700%	\$	1,562	\$	914	\$	215	\$	9,837	\$	648	\$	209,185	\$	339	\$	897	\$	276	\$	2,160		\$	2,160	\$	(0)	\$	1,714	\$	446	\$	31,533
	September	\$	217,943	7.700%	\$	1,562	\$	914	\$	215	\$	10,052	\$	648	\$	208,322	\$	337	\$	894	\$	275	\$	2,154		\$	2,154	\$	(0)	\$	1,714	\$	440	\$	32,145
	October	\$	217,295	7.700%	\$	1,562	\$	914	\$	215	\$	10,267	\$	648	\$	207,459	\$	336	\$	890	\$	273	\$	2,148		\$	2,148	\$	(0)	\$	1,714	\$	434	\$	32,754
	November	\$	216,646	7.700%	\$	1,562	\$	914	\$	215	\$	10,481	\$	648	\$	206,596	\$	335	\$	886	\$	272	\$	2,141		\$	2,142	\$	(0)	\$	1,714	\$	428	\$	33,360
	December	\$	215,998	7.700%	\$	1,562	\$	914	\$	215	\$	10,696	\$	648	\$	205,733	\$	333	\$	883	\$	271	\$	2,135		\$	2,135	\$	(0)	\$	1,714	\$	421	\$	33,963

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) Based on the assumptions as filed with the Commission under Docket E-2, Sub 1176.
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
- (d) After tax cost of capital and weighted annual interest and after tax equity rates were updated for DEP's last general rate case. See Exhibit J-TU - Cost of Capital
- (e) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study

Latest Levelized Payment Calculations			
	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 24,699	\$ 242,331	\$ 267,030
Annual payment	\$ 1,902	\$ 18,663	\$ 20,565
Monthly payment	\$ 159	\$ 1,555	\$ 1,714

EXHIBIT C-2-Estimate-TU
DOCKET E-2, SUB 1207

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)

	ESTIMATE	REVISIONS FOR 2017	REVISIONS FOR 2018
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)		224.27
TAX LIFE	15 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (e)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			
WEIGHTED ANNUAL INTEREST RATE			1.9440% (e)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			5.1480% (e)
NC RETAIL ALLOCATION FACTOR	61.33723% (c)		

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																		
	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	\$ 63,248																	
2015	\$ 61,489	5.000%	\$ 3,162	\$ 1,404	\$ 494	\$ 494	\$ 1,759	\$ 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	\$ 4,208	\$ 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	\$ 4,204	\$ 53,849	\$ 1,157	\$ 2,911	\$ 1,500	\$ 9,772		\$ 7,026	\$ 2,746	\$ 8,131	\$ 7,639	
2018	January	\$ 52,840	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,107	\$ 237	\$ 51,872	\$ 84	\$ 223	\$ 68	\$ 612					
	February	\$ 52,603	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,148	\$ 237	\$ 51,594	\$ 84	\$ 221	\$ 68	\$ 610					
	March	\$ 52,365	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,190	\$ 237	\$ 51,315	\$ 83	\$ 220	\$ 68	\$ 608					
	April	\$ 52,128	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,231	\$ 237	\$ 51,036	\$ 83	\$ 219	\$ 67	\$ 606					
	May	\$ 51,891	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,272	\$ 237	\$ 50,758	\$ 82	\$ 218	\$ 67	\$ 604					
	June	\$ 51,654	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,314	\$ 237	\$ 50,479	\$ 82	\$ 217	\$ 67	\$ 602					
	July	\$ 51,416	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,355	\$ 237	\$ 50,201	\$ 81	\$ 215	\$ 66	\$ 600					
	August	\$ 51,179	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,396	\$ 237	\$ 49,922	\$ 81	\$ 214	\$ 66	\$ 598					
	September	\$ 50,942	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,437	\$ 237	\$ 49,644	\$ 80	\$ 213	\$ 65	\$ 596					
	October	\$ 50,705	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,479	\$ 237	\$ 49,365	\$ 80	\$ 212	\$ 65	\$ 594					
	November	\$ 50,467	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,520	\$ 237	\$ 49,087	\$ 80	\$ 211	\$ 65	\$ 592					
	December	\$ 50,230	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,561	\$ 237	\$ 48,808	\$ 79	\$ 209	\$ 64	\$ 590	\$ 6,777				
2019	\$ 47,383	6.930%	\$ 4,460	\$ 1,613	\$ 379	\$ 1,940	\$ 2,847	\$ 47,056	\$ 915	\$ 2,422	\$ 744	\$ 6,928	\$ 6,115					
2020	\$ 44,536	6.230%	\$ 4,010	\$ 1,163	\$ 273	\$ 2,214	\$ 2,847	\$ 43,883	\$ 853	\$ 2,259	\$ 694	\$ 6,653	\$ 5,517					
2021	\$ 41,689	5.900%	\$ 3,797	\$ 950	\$ 223	\$ 2,437	\$ 2,847	\$ 40,787	\$ 793	\$ 2,100	\$ 645	\$ 6,385	\$ 4,974					
2022	\$ 38,842	5.900%	\$ 3,797	\$ 950	\$ 223	\$ 2,660	\$ 2,847	\$ 37,717	\$ 733	\$ 1,942	\$ 596	\$ 6,118	\$ 4,478					
2023	\$ 35,995	5.910%	\$ 3,804	\$ 957	\$ 225	\$ 2,885	\$ 2,847	\$ 34,646	\$ 674	\$ 1,784	\$ 548	\$ 5,852	\$ 4,024					
2024	\$ 33,148	5.900%	\$ 3,797	\$ 950	\$ 223	\$ 3,109	\$ 2,847	\$ 31,575	\$ 614	\$ 1,625	\$ 499	\$ 5,586	\$ 3,608					
2025	\$ 30,302	5.910%	\$ 3,804	\$ 957	\$ 225	\$ 3,333	\$ 2,847	\$ 28,504	\$ 554	\$ 1,467	\$ 451	\$ 5,319	\$ 3,228					
2026	\$ 27,455	5.900%	\$ 3,797	\$ 950	\$ 223	\$ 3,557	\$ 2,847	\$ 25,433	\$ 494	\$ 1,309	\$ 402	\$ 5,053	\$ 2,881					
2027	\$ 24,608	5.910%	\$ 3,804	\$ 957	\$ 225	\$ 3,782	\$ 2,847	\$ 22,362	\$ 435	\$ 1,151	\$ 354	\$ 4,787	\$ 2,564					
2028	\$ 21,761	5.900%	\$ 3,797	\$ 950	\$ 223	\$ 4,005	\$ 2,847	\$ 19,291	\$ 375	\$ 993	\$ 305	\$ 4,520	\$ 2,275					
2029	\$ 18,914	5.910%	\$ 3,804	\$ 957	\$ 225	\$ 4,230	\$ 2,847	\$ 16,220	\$ 315	\$ 835	\$ 257	\$ 4,254	\$ 2,011					
2030	\$ 16,067	2.950%	\$ 1,899	\$ (948)	\$ (223)	\$ 4,007	\$ 2,847	\$ 13,372	\$ 260	\$ 688	\$ 211	\$ 4,007	\$ 1,780					
2031	\$ 13,220	0.000%	\$ -	\$ (2,847)	\$ (669)	\$ 3,338	\$ 2,847	\$ 10,971	\$ 213	\$ 565	\$ 174	\$ 3,799	\$ 1,585					
2032	\$ 10,373	0.000%	\$ -	\$ (2,847)	\$ (669)	\$ 2,669	\$ 2,847	\$ 8,793	\$ 171	\$ 453	\$ 139	\$ 3,610	\$ 1,415					
2033	\$ 7,526	0.000%	\$ -	\$ (2,847)	\$ (669)	\$ 2,000	\$ 2,847	\$ 6,615	\$ 129	\$ 341	\$ 105	\$ 3,421	\$ 1,260					
2034	\$ 4,679	0.000%	\$ -	\$ (2,847)	\$ (669)	\$ 1,331	\$ 2,847	\$ 4,437	\$ 86	\$ 228	\$ 70	\$ 3,232	\$ 1,118					
2035	\$ 1,832	0.000%	\$ -	\$ (2,847)	\$ (669)	\$ 662	\$ 2,847	\$ 2,259	\$ 44	\$ 116	\$ 36	\$ 3,043	\$ 989					
2036	NINE MONTHS \$ (130)	0.000%	\$ -	\$ (1,962)	\$ (461)	\$ 201	\$ 1,962	\$ 420	\$ 8	\$ 22	\$ 7	\$ 1,999	\$ 610					
TOTAL		100.000%	\$ 64,232	\$ 853			\$ 63,378		\$ 11,615	\$ 30,369	\$ 10,966	\$ 116,329	\$ 57,209					

- 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 and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J-TU - Cost of Capital.
- (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study as filed on Docket E-2, Sub 1176
- (d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
- (e) 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.

	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 7,639	\$ 57,209	\$ 64,848
Annual payment	\$ 708	\$ 5,306	\$ 6,014
Monthly payment	\$ 59	\$ 442	\$ 501

EXHIBIT C-2 Actual -TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA 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)

	2015	2017	2018
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		34.01% (b)	23.50% (c)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (d)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			
WEIGHTED ANNUAL INTEREST RATE			1.9440% (d)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			5.1480% (d)
NC RETAIL ALLOCATION FACTOR		61.33723% (b)	61.52780% (e)

		REVISIONS BASED ON 2018 TEST YEAR ACTUALS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) Based on the assumptions as filed with the Commission under Docket E-2, Sub 1176.
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
- (d) After tax cost of capital and weighted annual interest and after tax equity rates were updated for DEP's last general rate case. See Exhibit J-TU - Cost of Capital
- (e) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study

Latest Levelized Payment Calculations			
	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 7,639	\$ 57,209	\$ 64,848
Annual payment	\$ 708	\$ 5,306	\$ 6,014
Monthly payment	\$ 59	\$ 442	\$ 501

EXHIBIT C-3-Estimate-TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA 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 2017	REVISIONS FOR 2018
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		34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (e)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			
WEIGHTED ANNUAL INTEREST RATE			1.9440% (e)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			5.1480% (e)
NC RETAIL ALLOCATION FACTOR	61.33723% (c)		

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECAION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING																	
	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	\$ 5,395
2018 January	\$ 51,504	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,617	\$ 254	\$ 50,029	\$ 81	\$ 215	\$ 66	\$ 616					
February	\$ 51,250	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,647	\$ 254	\$ 49,745	\$ 81	\$ 213	\$ 66	\$ 614					
March	\$ 50,996	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,676	\$ 254	\$ 49,461	\$ 80	\$ 212	\$ 65	\$ 612					
April	\$ 50,741	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,706	\$ 254	\$ 49,178	\$ 80	\$ 211	\$ 65	\$ 610					
May	\$ 50,487	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,735	\$ 254	\$ 48,894	\$ 79	\$ 210	\$ 64	\$ 608					
June	\$ 50,233	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,765	\$ 254	\$ 48,610	\$ 79	\$ 209	\$ 64	\$ 606					
July	\$ 49,978	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,794	\$ 254	\$ 48,326	\$ 78	\$ 207	\$ 64	\$ 604					
August	\$ 49,724	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,824	\$ 254	\$ 48,042	\$ 78	\$ 206	\$ 63	\$ 602					
September	\$ 49,470	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,853	\$ 254	\$ 47,759	\$ 77	\$ 205	\$ 63	\$ 600					
October	\$ 49,215	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,883	\$ 254	\$ 47,475	\$ 77	\$ 204	\$ 63	\$ 597					
November	\$ 48,961	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,912	\$ 254	\$ 47,191	\$ 76	\$ 202	\$ 62	\$ 595					
December	\$ 48,707	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,942	\$ 254	\$ 46,907	\$ 76	\$ 201	\$ 62	\$ 593	\$ 6,817				
2019	\$ 45,655	6.930%	\$ 4,101	\$ 1,049	\$ 247	\$ 2,188	\$ 3,052	\$ 45,116	\$ 877	\$ 2,323	\$ 713	\$ 6,965	\$ 6,147				
2020	\$ 42,603	6.230%	\$ 3,687	\$ 635	\$ 149	\$ 2,337	\$ 3,052	\$ 41,866	\$ 814	\$ 2,155	\$ 662	\$ 6,683	\$ 5,542				
2021	\$ 39,551	5.900%	\$ 3,491	\$ 439	\$ 103	\$ 2,441	\$ 3,052	\$ 38,688	\$ 752	\$ 1,992	\$ 612	\$ 6,407	\$ 4,992				
2022	\$ 36,499	5.900%	\$ 3,491	\$ 439	\$ 103	\$ 2,544	\$ 3,052	\$ 35,533	\$ 691	\$ 1,829	\$ 562	\$ 6,134	\$ 4,489				
2023	\$ 33,447	5.910%	\$ 3,497	\$ 445	\$ 105	\$ 2,648	\$ 3,052	\$ 32,377	\$ 629	\$ 1,667	\$ 512	\$ 5,860	\$ 4,029				
2024	\$ 30,396	5.900%	\$ 3,491	\$ 439	\$ 103	\$ 2,752	\$ 3,052	\$ 29,221	\$ 568	\$ 1,504	\$ 462	\$ 5,586	\$ 3,609				
2025	\$ 27,344	5.910%	\$ 3,497	\$ 445	\$ 105	\$ 2,856	\$ 3,052	\$ 26,066	\$ 507	\$ 1,342	\$ 412	\$ 5,313	\$ 3,224				
2026	\$ 24,292	5.900%	\$ 3,491	\$ 439	\$ 103	\$ 2,960	\$ 3,052	\$ 22,910	\$ 445	\$ 1,179	\$ 362	\$ 5,039	\$ 2,873				
2027	\$ 21,240	5.910%	\$ 3,497	\$ 445	\$ 105	\$ 3,064	\$ 3,052	\$ 19,754	\$ 384	\$ 1,017	\$ 312	\$ 4,765	\$ 2,553				
2028	\$ 18,188	5.900%	\$ 3,491	\$ 439	\$ 103	\$ 3,168	\$ 3,052	\$ 16,598	\$ 323	\$ 854	\$ 262	\$ 4,491	\$ 2,260				
2029	\$ 15,136	5.910%	\$ 3,497	\$ 445	\$ 105	\$ 3,272	\$ 3,052	\$ 13,442	\$ 261	\$ 692	\$ 213	\$ 4,218	\$ 1,994				
2030	\$ 12,084	2.950%	\$ 1,746	\$ (1,306)	\$ (307)	\$ 2,965	\$ 3,052	\$ 10,491	\$ 204	\$ 540	\$ 166	\$ 3,962	\$ 1,760				
2031	\$ 9,032	0.000%	\$ -	\$ (3,052)	\$ (717)	\$ 2,248	\$ 3,052	\$ 7,952	\$ 155	\$ 409	\$ 126	\$ 3,742	\$ 1,561				
2032	\$ 5,980	0.000%	\$ -	\$ (3,052)	\$ (717)	\$ 1,531	\$ 3,052	\$ 5,617	\$ 109	\$ 289	\$ 89	\$ 3,539	\$ 1,387				
2033	\$ 2,929	0.000%	\$ -	\$ (3,052)	\$ (717)	\$ 814	\$ 3,052	\$ 3,282	\$ 64	\$ 169	\$ 52	\$ 3,337	\$ 1,229				
2034 TWELVE MONTHS	\$ (98)	0.000%	\$ -	\$ (3,027)	\$ (711)	\$ 102	\$ 3,027	\$ 957	\$ 19	\$ 49	\$ 15	\$ 3,110	\$ 1,076				
TOTAL		100.000%	\$ 59,057	\$ 436			\$ 58,621		\$ 10,539	\$ 27,541	\$ 10,000	\$ 103,013	\$ 55,542				

- 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 and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J-TU - Cost of Capital.
- (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study
- (d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
- (e) 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.

	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 5,395	\$ 55,542	\$ 60,938
Annual payment	\$ 531	\$ 5,471	\$ 6,002
Monthly payment	\$ 44	\$ 456	\$ 500

EXHIBIT C-3 Actual -TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE BRUNSWICK UNIT 2 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	2017	2018
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		34.01% (b)	23.50% (c)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (d)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			
WEIGHTED ANNUAL INTEREST RATE			1.9440% (d)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			5.1480% (d)
NC RETAIL ALLOCATION FACTOR		61.33723% (b)	61.52780% (e)

REVISIONS BASED ON 2018 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)
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 January	\$ 51,504	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,618	\$ 254	\$ 50,029	\$ 90	\$ 225	\$ 69	\$ 638	\$ 616	\$ 23	\$ 500	\$ 500	\$ 138	\$ 5,913	
February	\$ 51,250	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,647	\$ 254	\$ 49,745	\$ 89	\$ 224	\$ 69	\$ 636	\$ 614	\$ 22	\$ 500	\$ 500	\$ 136	\$ 6,083	
March	\$ 50,996	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,677	\$ 254	\$ 49,461	\$ 84	\$ 218	\$ 67	\$ 623	\$ 612	\$ 11	\$ 500	\$ 500	\$ 123	\$ 6,239	
April	\$ 50,741	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,707	\$ 254	\$ 49,177	\$ 80	\$ 211	\$ 65	\$ 610	\$ 610	\$ 0	\$ 500	\$ 500	\$ 110	\$ 6,383	
May	\$ 50,487	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,737	\$ 254	\$ 48,893	\$ 79	\$ 210	\$ 64	\$ 608	\$ 608	\$ (0)	\$ 500	\$ 500	\$ 108	\$ 6,525	
June	\$ 50,233	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,766	\$ 254	\$ 48,608	\$ 79	\$ 209	\$ 64	\$ 606	\$ 606	\$ (0)	\$ 500	\$ 500	\$ 105	\$ 6,666	
July	\$ 49,978	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,796	\$ 254	\$ 48,324	\$ 78	\$ 207	\$ 64	\$ 604	\$ 604	\$ (0)	\$ 500	\$ 500	\$ 103	\$ 6,806	
August	\$ 49,724	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,826	\$ 254	\$ 48,040	\$ 78	\$ 206	\$ 63	\$ 602	\$ 602	\$ (0)	\$ 500	\$ 500	\$ 101	\$ 6,945	
September	\$ 49,470	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,856	\$ 254	\$ 47,756	\$ 77	\$ 205	\$ 63	\$ 599	\$ 600	\$ (0)	\$ 500	\$ 500	\$ 99	\$ 7,082	
October	\$ 49,215	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,885	\$ 254	\$ 47,472	\$ 77	\$ 204	\$ 63	\$ 597	\$ 597	\$ (0)	\$ 500	\$ 500	\$ 97	\$ 7,218	
November	\$ 48,961	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,915	\$ 254	\$ 47,188	\$ 76	\$ 202	\$ 62	\$ 595	\$ 595	\$ (0)	\$ 500	\$ 500	\$ 95	\$ 7,352	
December	\$ 48,707	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,945	\$ 254	\$ 46,904	\$ 76	\$ 201	\$ 62	\$ 593	\$ 593	\$ (0)	\$ 500	\$ 500	\$ 93	\$ 7,485	

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) Based on the assumptions as filed with the Commission under Docket E-2, Sub 1176.
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
- (d) After tax cost of capital and weighted annual interest and after tax equity rates were updated for DEP's last general rate case. See Exhibit J-TU - Cost of Capital
- (e) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study

Latest Levelized Payment Calculations			
	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 5,395	\$ 55,542	\$ 60,938
Annual payment	\$ 531	\$ 5,471	\$ 6,002
Monthly payment	\$ 44	\$ 456	\$ 500

EXHIBIT C-4-Estimate-TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA 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
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		34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (e)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			
WEIGHTED ANNUAL INTEREST RATE			1.9440% (e)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			5.1480% (e)
NC RETAIL ALLOCATION FACTOR	61.33723% (c)		

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																	
	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 - N)	CUMULATIVE 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	\$ 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	\$ 5,395
2018 January	\$ 40,907	6.177%	\$ 247	\$ 49	\$ 12	\$ 111	\$ 197	\$ 40,900	\$ 66	\$ 175	\$ 54	\$ 493					
February	\$ 40,709	6.177%	\$ 247	\$ 49	\$ 12	\$ 123	\$ 197	\$ 40,691	\$ 66	\$ 175	\$ 54	\$ 492					
March	\$ 40,512	6.177%	\$ 247	\$ 49	\$ 12	\$ 135	\$ 197	\$ 40,482	\$ 66	\$ 174	\$ 53	\$ 490					
April	\$ 40,315	6.177%	\$ 247	\$ 49	\$ 12	\$ 146	\$ 197	\$ 40,273	\$ 65	\$ 173	\$ 53	\$ 488					
May	\$ 40,117	6.177%	\$ 247	\$ 49	\$ 12	\$ 158	\$ 197	\$ 40,064	\$ 65	\$ 172	\$ 53	\$ 487					
June	\$ 39,920	6.177%	\$ 247	\$ 49	\$ 12	\$ 169	\$ 197	\$ 39,855	\$ 65	\$ 171	\$ 53	\$ 485					
July	\$ 39,722	6.177%	\$ 247	\$ 49	\$ 12	\$ 181	\$ 197	\$ 39,646	\$ 64	\$ 170	\$ 52	\$ 484					
August	\$ 39,525	6.177%	\$ 247	\$ 49	\$ 12	\$ 192	\$ 197	\$ 39,437	\$ 64	\$ 169	\$ 52	\$ 482					
September	\$ 39,328	6.177%	\$ 247	\$ 49	\$ 12	\$ 204	\$ 197	\$ 39,228	\$ 64	\$ 168	\$ 52	\$ 481					
October	\$ 39,130	6.177%	\$ 247	\$ 49	\$ 12	\$ 215	\$ 197	\$ 39,019	\$ 63	\$ 167	\$ 51	\$ 479					
November	\$ 38,933	6.177%	\$ 247	\$ 49	\$ 12	\$ 227	\$ 197	\$ 38,810	\$ 63	\$ 166	\$ 51	\$ 478					
December	\$ 38,735	6.177%	\$ 247	\$ 49	\$ 12	\$ 238	\$ 197	\$ 38,602	\$ 63	\$ 166	\$ 51	\$ 476	\$ 5,465				
2019	\$ 36,366	5.713%	\$ 2,737	\$ 368	\$ 86	\$ 325	\$ 2,369	\$ 37,269	\$ 725	\$ 1,919	\$ 589	\$ 5,602	\$ 4,944				
2020	\$ 33,997	5.285%	\$ 2,532	\$ 162	\$ 38	\$ 363	\$ 2,369	\$ 34,838	\$ 677	\$ 1,793	\$ 551	\$ 5,391	\$ 4,470				
2021	\$ 31,628	4.888%	\$ 2,341	\$ (28)	\$ (7)	\$ 357	\$ 2,369	\$ 32,453	\$ 631	\$ 1,671	\$ 513	\$ 5,184	\$ 4,038				
2022	\$ 29,259	4.522%	\$ 2,166	\$ (203)	\$ (48)	\$ 309	\$ 2,369	\$ 30,111	\$ 585	\$ 1,550	\$ 476	\$ 4,981	\$ 3,645				
2023	\$ 26,890	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ 254	\$ 2,369	\$ 27,793	\$ 540	\$ 1,431	\$ 440	\$ 4,780	\$ 3,286				
2024	\$ 24,521	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ 200	\$ 2,369	\$ 25,479	\$ 495	\$ 1,312	\$ 403	\$ 4,579	\$ 2,958				
2025	\$ 22,152	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ 145	\$ 2,369	\$ 23,164	\$ 450	\$ 1,192	\$ 366	\$ 4,378	\$ 2,657				
2026	\$ 19,783	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ 91	\$ 2,369	\$ 20,850	\$ 405	\$ 1,073	\$ 330	\$ 4,177	\$ 2,382				
2027	\$ 17,414	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ 36	\$ 2,369	\$ 18,535	\$ 360	\$ 954	\$ 293	\$ 3,977	\$ 2,130				
2028	\$ 15,045	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ (18)	\$ 2,369	\$ 16,221	\$ 315	\$ 835	\$ 257	\$ 3,776	\$ 1,900				
2029	\$ 12,676	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ (73)	\$ 2,369	\$ 13,906	\$ 270	\$ 716	\$ 220	\$ 3,575	\$ 1,690				
2030	\$ 10,307	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ (127)	\$ 2,369	\$ 11,592	\$ 225	\$ 597	\$ 183	\$ 3,374	\$ 1,499				
2031	\$ 7,938	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ (182)	\$ 2,369	\$ 9,277	\$ 180	\$ 478	\$ 147	\$ 3,174	\$ 1,324				
2032	\$ 5,569	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ (236)	\$ 2,369	\$ 6,963	\$ 135	\$ 358	\$ 110	\$ 2,973	\$ 1,166				
2033	\$ 3,200	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ (291)	\$ 2,369	\$ 4,648	\$ 90	\$ 239	\$ 74	\$ 2,772	\$ 1,021				
2034	\$ 831	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ (345)	\$ 2,369	\$ 2,334	\$ 45	\$ 120	\$ 37	\$ 2,571	\$ 890				
2035 SIX MONTHS	\$ (289)	2.231%	\$ 1,069	\$ (51)	\$ (12)	\$ (357)	\$ 1,120	\$ 623	\$ 12	\$ 32	\$ 10	\$ 1,174	\$ 381				
TOTAL		100.000%	\$ 47,827	\$ (1,521)		\$	49,349	\$ 929,852	\$ 9,250	\$ 24,188	\$ 8,715	\$ 91,502	\$ 45,847				

- 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 and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J-TU - Cost of Capital.
 - (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study
 - (d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
 - (e) 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.

	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 5,395	\$ 45,847	\$ 51,242
Annual payment	\$ 515	\$ 4,376	\$ 4,891
Monthly payment	\$ 43	\$ 365	\$ 408

EXHIBIT C-4 Actual -TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE MAYO 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	2017	2018
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		34.01% (b)	23.50% (c)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (d)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			1.9440% (d)
WEIGHTED ANNUAL INTEREST RATE			5.1480% (d)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			
NC RETAIL ALLOCATION FACTOR		61.33723% (b)	61.52780% (e)

REVISIONS BASED ON 2018 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 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)	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)
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	\$ 187	\$ 3,283	\$ 45,889	\$ 986	\$ 2,481	\$ 1,312	\$ 8,061				\$ 5,755	\$ 2,306	\$ 3,457	
2017			\$ 3,198	\$ (110)	\$ (87)	\$ 100	\$ 3,308	\$ 42,592	\$ 915	\$ 2,303	\$ 1,187	\$ 7,712				\$ 5,737	\$ 1,975	\$ 5,742	
2018 January	\$ 40,907	6.177%	\$ 247	\$ 50	\$ 12	\$ 111	\$ 197	\$ 40,900	\$ 73	\$ 184	\$ 57	\$ 511		\$ 493	\$ 18	\$ 408	\$ 104	\$ 5,878	
February	\$ 40,709	6.177%	\$ 247	\$ 50	\$ 12	\$ 123	\$ 197	\$ 40,691	\$ 73	\$ 183	\$ 56	\$ 510		\$ 492	\$ 18	\$ 408	\$ 102	\$ 6,014	
March	\$ 40,512	6.177%	\$ 247	\$ 50	\$ 12	\$ 135	\$ 197	\$ 40,482	\$ 69	\$ 178	\$ 55	\$ 499		\$ 490	\$ 9	\$ 408	\$ 92	\$ 6,139	
April	\$ 40,315	6.177%	\$ 247	\$ 50	\$ 12	\$ 147	\$ 197	\$ 40,273	\$ 65	\$ 173	\$ 53	\$ 489		\$ 488	\$ 0	\$ 408	\$ 81	\$ 6,253	
May	\$ 40,117	6.177%	\$ 247	\$ 50	\$ 12	\$ 158	\$ 197	\$ 40,063	\$ 65	\$ 172	\$ 53	\$ 487		\$ 487	\$ 0	\$ 408	\$ 79	\$ 6,366	
June	\$ 39,920	6.177%	\$ 247	\$ 50	\$ 12	\$ 170	\$ 197	\$ 39,854	\$ 65	\$ 171	\$ 53	\$ 485		\$ 485	\$ (0)	\$ 408	\$ 78	\$ 6,479	
July	\$ 39,722	6.177%	\$ 247	\$ 50	\$ 12	\$ 182	\$ 197	\$ 39,645	\$ 64	\$ 170	\$ 52	\$ 484		\$ 484	\$ (0)	\$ 408	\$ 76	\$ 6,590	
August	\$ 39,525	6.177%	\$ 247	\$ 50	\$ 12	\$ 193	\$ 197	\$ 39,436	\$ 64	\$ 169	\$ 52	\$ 482		\$ 482	\$ 0	\$ 408	\$ 75	\$ 6,701	
September	\$ 39,327	6.177%	\$ 247	\$ 50	\$ 12	\$ 205	\$ 197	\$ 39,227	\$ 64	\$ 168	\$ 52	\$ 481		\$ 481	\$ (0)	\$ 408	\$ 73	\$ 6,811	
October	\$ 39,130	6.177%	\$ 247	\$ 50	\$ 12	\$ 217	\$ 197	\$ 39,018	\$ 63	\$ 167	\$ 51	\$ 479		\$ 479	\$ 0	\$ 408	\$ 72	\$ 6,920	
November	\$ 38,933	6.177%	\$ 247	\$ 50	\$ 12	\$ 229	\$ 197	\$ 38,809	\$ 63	\$ 166	\$ 51	\$ 478		\$ 478	\$ 0	\$ 408	\$ 70	\$ 7,028	
December	\$ 38,735	6.177%	\$ 247	\$ 50	\$ 12	\$ 240	\$ 197	\$ 38,599	\$ 63	\$ 166	\$ 51	\$ 476		\$ 476	\$ (0)	\$ 408	\$ 69	\$ 7,135	

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) Based on the assumptions as filed with the Commission under Docket E-2, Sub 1176.
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
- (d) After tax cost of capital and weighted annual interest and after tax equity rates were updated for DEP's last general rate case. See Exhibit J-TU - Cost of Capital
- (e) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study

Latest Levelized Payment Calculations			
	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 5,395	\$ 45,847	\$ 51,242
Annual payment	\$ 515	\$ 4,376	\$ 4,891
Monthly payment	\$ 43	\$ 365	\$ 408

EXHIBIT C-5-Estimate-TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE ROXBORO COAL STATION - ESTIMATE
NC RETAIL ALLOCTION 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
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)		6/20/2035 (e)
LEVELIZATION PERIOD IN MONTHS	239 (a)		215
TAX LIFE	20 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (e)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			
WEIGHTED ANNUAL INTEREST RATE			1.9440% (e)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			5.1480% (e)
NC RETAIL ALLOCATION FACTOR	61.33723% (c)		

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	MACRS RATE	TAX	TAX DEPR.	ANNUAL	DEFERRED	BOOK	AVERAGE	COST OF CAPITAL		INCOME	NC RETAIL	NC RETAIL	LEVELIZED	CURRENT	CUMULATIVE	DEFERRAL							
		END OF PERIOD	FOR 20 YR	ANNUAL	MINUS	DEF. TAXES	TAX		INVESTMENT	INTEREST	EQUITY								TAXES	REVENUE	REVENUE	MONTH	DEFERRAL	PLUS	PRESENT
		INVESTMENT	PROPERTY (c)	DEPRECIATION	BOOK DEPR.	DEPR.	BALANCE		DEPRECIATION	YEAR	(Col I)								(Col J)	(Col K)	(Col L)	PRES VALUE	REVENUE	(L - O)	INTEREST
		(Col A)	(Col B)	(Col C)	(Col D)	(Col E)	(Col F)	(Col G)	(Col H)			(Col K)	(Col L)	(Col M)	(Col N)	(Col O)	(Col P)	(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)	\$ (9)	\$ 482	\$ 5,366	\$ 115	\$ 290	\$ 149	\$ 1,036		\$ 899	\$ 137	\$ 418	\$ 393							
2018	January	\$ 5,094.5	6.177%	\$ 33	\$ 5	\$ 1	\$ (7)	\$ 28	\$ 5,116	\$ 8	\$ 22	\$ 7	\$ 65												
	February	\$ 5,066.4	6.177%	\$ 33	\$ 5	\$ 1	\$ (6)	\$ 28	\$ 5,087	\$ 8	\$ 22	\$ 7	\$ 65												
	March	\$ 5,038.4	6.177%	\$ 33	\$ 5	\$ 1	\$ (5)	\$ 28	\$ 5,058	\$ 8	\$ 22	\$ 7	\$ 65												
	April	\$ 5,010.4	6.177%	\$ 33	\$ 5	\$ 1	\$ (4)	\$ 28	\$ 5,029	\$ 8	\$ 22	\$ 7	\$ 64												
	May	\$ 4,982.4	6.177%	\$ 33	\$ 5	\$ 1	\$ (3)	\$ 28	\$ 5,000	\$ 8	\$ 21	\$ 7	\$ 64												
	June	\$ 4,954.3	6.177%	\$ 33	\$ 5	\$ 1	\$ (2)	\$ 28	\$ 4,971	\$ 8	\$ 21	\$ 7	\$ 64												
	July	\$ 4,926.3	6.177%	\$ 33	\$ 5	\$ 1	\$ (1)	\$ 28	\$ 4,941	\$ 8	\$ 21	\$ 7	\$ 64												
	August	\$ 4,898.3	6.177%	\$ 33	\$ 5	\$ 1	\$ 1	\$ 28	\$ 4,912	\$ 8	\$ 21	\$ 6	\$ 64												
	September	\$ 4,870.3	6.177%	\$ 33	\$ 5	\$ 1	\$ 2	\$ 28	\$ 4,883	\$ 8	\$ 21	\$ 6	\$ 63												
	October	\$ 4,842.2	6.177%	\$ 33	\$ 5	\$ 1	\$ 3	\$ 28	\$ 4,854	\$ 8	\$ 21	\$ 6	\$ 63												
	November	\$ 4,814.2	6.177%	\$ 33	\$ 5	\$ 1	\$ 4	\$ 28	\$ 4,825	\$ 8	\$ 21	\$ 6	\$ 63												
	December	\$ 4,786.2	6.177%	\$ 33	\$ 5	\$ 1	\$ 5	\$ 28	\$ 4,796	\$ 8	\$ 21	\$ 6	\$ 63	\$ 720											
2019		\$ 4,450	5.713%	\$ 365	\$ 29	\$ 7	\$ 12	\$ 336	\$ 4,610	\$ 90	\$ 237	\$ 73	\$ 736	\$ 650											
2020		\$ 4,114	5.285%	\$ 337	\$ 1	\$ 0	\$ 12	\$ 336	\$ 4,270	\$ 83	\$ 220	\$ 68	\$ 707	\$ 586											
2021		\$ 3,777	4.888%	\$ 312	\$ (24)	\$ (6)	\$ 6	\$ 336	\$ 3,936	\$ 77	\$ 203	\$ 62	\$ 678	\$ 528											
2022		\$ 3,441	4.522%	\$ 289	\$ (48)	\$ (11)	\$ (5)	\$ 336	\$ 3,608	\$ 70	\$ 186	\$ 57	\$ 649	\$ 475											
2023		\$ 3,105	4.462%	\$ 285	\$ (51)	\$ (12)	\$ (17)	\$ 336	\$ 3,284	\$ 64	\$ 169	\$ 52	\$ 621	\$ 427											
2024		\$ 2,769	4.461%	\$ 285	\$ (51)	\$ (12)	\$ (29)	\$ 336	\$ 2,960	\$ 58	\$ 152	\$ 47	\$ 593	\$ 383											
2025		\$ 2,432	4.462%	\$ 285	\$ (51)	\$ (12)	\$ (41)	\$ 336	\$ 2,635	\$ 51	\$ 136	\$ 42	\$ 565	\$ 343											
2026		\$ 2,096	4.461%	\$ 285	\$ (51)	\$ (12)	\$ (53)	\$ 336	\$ 2,311	\$ 45	\$ 119	\$ 37	\$ 537	\$ 306											
2027		\$ 1,760	4.462%	\$ 285	\$ (51)	\$ (12)	\$ (65)	\$ 336	\$ 1,987	\$ 39	\$ 102	\$ 31	\$ 509	\$ 272											
2028		\$ 1,423	4.461%	\$ 285	\$ (51)	\$ (12)	\$ (77)	\$ 336	\$ 1,663	\$ 32	\$ 86	\$ 26	\$ 481	\$ 242											
2029		\$ 1,087	4.462%	\$ 285	\$ (51)	\$ (12)	\$ (89)	\$ 336	\$ 1,339	\$ 26	\$ 69	\$ 21	\$ 452	\$ 214											
2030		\$ 751	4.461%	\$ 285	\$ (51)	\$ (12)	\$ (101)	\$ 336	\$ 1,014	\$ 20	\$ 52	\$ 16	\$ 424	\$ 188											
2031		\$ 415	4.462%	\$ 285	\$ (51)	\$ (12)	\$ (113)	\$ 336	\$ 690	\$ 13	\$ 36	\$ 11	\$ 396	\$ 165											
2032		\$ 78	4.461%	\$ 285	\$ (51)	\$ (12)	\$ (125)	\$ 336	\$ 366	\$ 7	\$ 19	\$ 6	\$ 368	\$ 144											
2033	SIX MONTHS	\$ (81)	4.462%	\$ 285	\$ 126	\$ 30	\$ (96)	\$ 159	\$ 109	\$ 2	\$ 6	\$ 2	\$ 169	\$ 62											

TOTAL	100.000%	\$ 5,949	\$ (408)	\$ 6,357	\$ 1,068	\$ 2,790	\$ 1,020	\$ 11,235	\$ 5,706
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- 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 and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J-TU - Cost of Capital.
- (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study
- (d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
- (e) 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.

	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 393	\$ 5,706	\$ 6,099
Annual payment	\$ 40	\$ 582	\$ 622
Monthly payment	\$ 3	\$ 48	\$ 52

EXHIBIT C-5 Actual -TU
DOCKET E-2, SUB 1207

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	2017	2018
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 (f)
LEVELIZATION PERIOD IN MONTHS	239 (a)		215 (f)
TAX LIFE	20 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (c)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (d)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			1.9440% (d)
WEIGHTED ANNUAL INTEREST RATE			5.1480% (d)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			
NC RETAIL ALLOCATION FACTOR		61.33723% (b)	61.52780% (e)

BASED ON 2018 TEST YEAR ACTUALS																																			
YEAR		NC RETAIL	MACRS RATE	TAX	TAX DEPR.	ANNUAL	DEFERRED	BOOK	AVERAGE	COST OF CAPITAL		INCOME	NC RETAIL	NC RETAIL	ESTIMATED	TRUE-UP	LEVELIZED	CURRENT	CUMULATIVE	DEFERRAL															
		END OF PERIOD	FOR 20 YR	ANNUAL	MINUS	DEF. TAXES	TAX	DEPRECIATION	INVESTMENT	INTEREST	EQUITY	TAXES	REVENUE	REVENUE	NC RETAIL	MONTH	DEFERRAL	PLUS	DEFERRAL	PRESENT															
		BALANCE	PROPERTY (c)	DEPRECIATION	BOOK DEPR.	DEPR.	BALANCE	DEPRECIATION	YEAR					PRES VALUE	REVENUE	AMOUNT	REVENUE	DEFERRAL	INTEREST	VALUE															
		(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)	(Col N)	(Col O)	(Col P)	(Col Q)	(Col R)	(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	January	\$	5,094	6.177%	\$	33	\$	5	\$	1	\$	(7)	\$	28	\$	5,116	\$	9	\$	23	\$	7	\$	67		\$	65	\$	2	\$	52	\$	15	\$	436
	February	\$	5,066	6.177%	\$	33	\$	5	\$	1	\$	(6)	\$	28	\$	5,087	\$	9	\$	23	\$	7	\$	67		\$	65	\$	2	\$	52	\$	15	\$	454
	March	\$	5,038	6.177%	\$	33	\$	5	\$	1	\$	(5)	\$	28	\$	5,058	\$	9	\$	22	\$	7	\$	66		\$	65	\$	1	\$	52	\$	14	\$	471
	April	\$	5,010	6.177%	\$	33	\$	5	\$	1	\$	(4)	\$	28	\$	5,029	\$	8	\$	22	\$	7	\$	64		\$	64	\$	0	\$	52	\$	13	\$	486
	May	\$	4,982	6.177%	\$	33	\$	5	\$	1	\$	(3)	\$	28	\$	5,000	\$	8	\$	21	\$	7	\$	64		\$	64	\$	0	\$	52	\$	12	\$	501
	June	\$	4,954	6.177%	\$	33	\$	5	\$	1	\$	(2)	\$	28	\$	4,971	\$	8	\$	21	\$	7	\$	64		\$	64	\$	0	\$	52	\$	12	\$	516
	July	\$	4,926	6.177%	\$	33	\$	5	\$	1	\$	(0)	\$	28	\$	4,941	\$	8	\$	21	\$	7	\$	64		\$	64	\$	0	\$	52	\$	12	\$	530
	August	\$	4,898	6.177%	\$	33	\$	5	\$	1	\$	1	\$	28	\$	4,912	\$	8	\$	21	\$	6	\$	64		\$	64	\$	0	\$	52	\$	12	\$	545
	September	\$	4,870	6.177%	\$	33	\$	5	\$	1	\$	2	\$	28	\$	4,883	\$	8	\$	21	\$	6	\$	63		\$	63	\$	0	\$	52	\$	11	\$	559
	October	\$	4,842	6.177%	\$	33	\$	5	\$	1	\$	3	\$	28	\$	4,854	\$	8	\$	21	\$	6	\$	63		\$	63	\$	0	\$	52	\$	11	\$	574
	November	\$	4,814	6.177%	\$	33	\$	5	\$	1	\$	4	\$	28	\$	4,825	\$	8	\$	21	\$	6	\$	63		\$	63	\$	0	\$	52	\$	11	\$	588
	December	\$	4,786	6.177%	\$	33	\$	5	\$	1	\$	5	\$	28	\$	4,795	\$	8	\$	21	\$	6	\$	63		\$	63	\$	0	\$	52	\$	11	\$	602

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) Based on the assumptions as filed with the Commission under Docket E-2, Sub 1176.
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
- (d) After tax cost of capital and weighted annual interest and after tax equity rates were updated for DEP's last general rate case. See Exhibit J-TU - Cost of Capital
- (e) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study
- (f) The plant retirement date was updated in connection with DEP's last general rate case. See Exhibit C-8-TU.

Latest Levelized Payment Calculations			
	2017	Future	
	Ending	Revenue Streams	
	Deferral	2018 Forward	Total
Net present value	\$ 393	\$ 5,706	\$ 6,099
Annual payment	\$ 40	\$ 582	\$ 622
Monthly payment	\$ 3	\$ 48	\$ 52

EXHIBIT C-6-Estimate-TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
LEVELIZED COST FOR THE ACQUISITION ADJUSTMENT - ESTIMATE
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 2017	REVISIONS FOR 2018
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)	34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (e)
AMORTIZATION RATE			(e)
FIRST YEAR AMORTIZATION RATE			
WEIGHTED INTEREST RATE			1.9440% (e)
WEIGHTED NET OF TAX EQUITY RATE			5.1480% (e)
NC RETAIL ALLOCATION FACTOR	61.33723% (c)		

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

		NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL AMORTIZATION (Col C)	TAX DEPR. MINUS BOOK AMOR. (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)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
										INTEREST (Col I)	EQUITY (Col J)							
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	\$ 16,973
2018	January	\$ 191,433	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 7,282	\$ 652	\$ 184,562	\$ 299	\$ 792	\$ 243	\$ 1,986					
	February	\$ 190,781	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 7,452	\$ 652	\$ 183,739	\$ 298	\$ 788	\$ 242	\$ 1,980					
	March	\$ 190,128	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 7,623	\$ 652	\$ 182,917	\$ 296	\$ 785	\$ 241	\$ 1,974					
	April	\$ 189,476	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 7,793	\$ 652	\$ 182,095	\$ 295	\$ 781	\$ 240	\$ 1,968					
	May	\$ 188,824	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 7,963	\$ 652	\$ 181,272	\$ 294	\$ 778	\$ 239	\$ 1,962					
	June	\$ 188,172	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 8,134	\$ 652	\$ 180,450	\$ 292	\$ 774	\$ 238	\$ 1,956					
	July	\$ 187,520	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 8,304	\$ 652	\$ 179,627	\$ 291	\$ 771	\$ 237	\$ 1,950					
	August	\$ 186,868	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 8,474	\$ 652	\$ 178,805	\$ 290	\$ 767	\$ 236	\$ 1,945					
	September	\$ 186,216	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 8,644	\$ 652	\$ 177,982	\$ 288	\$ 764	\$ 235	\$ 1,939					
	October	\$ 185,563	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 8,815	\$ 652	\$ 177,160	\$ 287	\$ 760	\$ 233	\$ 1,933					
	November	\$ 184,911	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 8,985	\$ 652	\$ 176,338	\$ 286	\$ 756	\$ 232	\$ 1,927					
	December	\$ 184,259	7.700%	\$ 1,377	\$ 725	\$ 170	\$ 9,155	\$ 652	\$ 175,515	\$ 284	\$ 753	\$ 231	\$ 1,921	\$ 22,023				
2019		\$ 176,433	6.930%	\$ 14,869	\$ 7,043	\$ 1,655	\$ 10,810	\$ 7,826	\$ 170,363	\$ 3,312	\$ 8,770	\$ 2,694	\$ 22,602	\$ 19,949				
2020		\$ 168,607	6.230%	\$ 13,367	\$ 5,541	\$ 1,302	\$ 12,112	\$ 7,826	\$ 161,059	\$ 3,131	\$ 8,291	\$ 2,547	\$ 21,795	\$ 18,073				
2021		\$ 160,781	5.900%	\$ 12,659	\$ 4,833	\$ 1,136	\$ 13,248	\$ 7,826	\$ 152,014	\$ 2,955	\$ 7,826	\$ 2,404	\$ 21,011	\$ 16,368				
2022		\$ 152,956	5.900%	\$ 12,659	\$ 4,833	\$ 1,136	\$ 14,384	\$ 7,826	\$ 143,052	\$ 2,781	\$ 7,364	\$ 2,262	\$ 20,233	\$ 14,809				
2023		\$ 145,130	5.910%	\$ 12,680	\$ 4,855	\$ 1,141	\$ 15,525	\$ 7,826	\$ 134,088	\$ 2,607	\$ 6,903	\$ 2,120	\$ 19,456	\$ 13,378				
2024		\$ 137,304	5.900%	\$ 12,659	\$ 4,833	\$ 1,136	\$ 16,661	\$ 7,826	\$ 125,124	\$ 2,432	\$ 6,441	\$ 1,979	\$ 18,678	\$ 12,066				
2025		\$ 129,478	5.910%	\$ 12,680	\$ 4,855	\$ 1,141	\$ 17,801	\$ 7,826	\$ 116,160	\$ 2,258	\$ 5,980	\$ 1,837	\$ 17,901	\$ 10,864				
2026		\$ 121,652	5.900%	\$ 12,659	\$ 4,833	\$ 1,136	\$ 18,937	\$ 7,826	\$ 107,196	\$ 2,084	\$ 5,518	\$ 1,695	\$ 17,123	\$ 9,763				
2027		\$ 113,826	5.910%	\$ 12,680	\$ 4,855	\$ 1,141	\$ 20,078	\$ 7,826	\$ 98,232	\$ 1,910	\$ 5,057	\$ 1,553	\$ 16,346	\$ 8,756				
2028		\$ 106,001	5.900%	\$ 12,659	\$ 4,833	\$ 1,136	\$ 21,214	\$ 7,826	\$ 89,267	\$ 1,735	\$ 4,595	\$ 1,412	\$ 15,568	\$ 7,835				
2029		\$ 98,175	5.910%	\$ 12,680	\$ 4,855	\$ 1,141	\$ 22,355	\$ 7,826	\$ 80,303	\$ 1,561	\$ 4,134	\$ 1,270	\$ 14,791	\$ 6,993				
2030		\$ 90,349	2.950%	\$ 6,329	\$ (1,496)	\$ (352)	\$ 22,003	\$ 7,826	\$ 72,083	\$ 1,401	\$ 3,711	\$ 1,140	\$ 14,078	\$ 6,253				
2031		\$ 82,523	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 20,164	\$ 7,826	\$ 65,352	\$ 1,270	\$ 3,364	\$ 1,033	\$ 13,494	\$ 5,631				
2032		\$ 74,697	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 18,325	\$ 7,826	\$ 59,366	\$ 1,154	\$ 3,056	\$ 939	\$ 12,975	\$ 5,087				
2033		\$ 66,871	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 16,486	\$ 7,826	\$ 53,379	\$ 1,038	\$ 2,748	\$ 844	\$ 12,456	\$ 4,588				
2034		\$ 59,045	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 14,647	\$ 7,826	\$ 47,392	\$ 921	\$ 2,440	\$ 749	\$ 11,936	\$ 4,130				
2035		\$ 51,220	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 12,808	\$ 7,826	\$ 41,405	\$ 805	\$ 2,132	\$ 655	\$ 11,417	\$ 3,712				
2036		\$ 43,394	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 10,969	\$ 7,826	\$ 35,419	\$ 689	\$ 1,823	\$ 560	\$ 10,898	\$ 3,328				
2037		\$ 35,568	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 9,129	\$ 7,826	\$ 29,432	\$ 572	\$ 1,515	\$ 465	\$ 10,379	\$ 2,978				
2038		\$ 27,742	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 7,290	\$ 7,826	\$ 23,445	\$ 456	\$ 1,207	\$ 371	\$ 9,859	\$ 2,658				
2039		\$ 19,916	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 5,451	\$ 7,826	\$ 17,458	\$ 339	\$ 899	\$ 276	\$ 9,340	\$ 2,365				
2040		\$ 12,090	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 3,612	\$ 7,826	\$ 11,471	\$ 223	\$ 591	\$ 181	\$ 8,821	\$ 2,099				
2041		\$ 4,264	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 1,773	\$ 7,826	\$ 5,485	\$ 107	\$ 282	\$ 87	\$ 8,302	\$ 1,856				
2042		\$ -	0.000%	\$ -	\$ (4,264)	\$ (1,002)	\$ 771	\$ 4,264	\$ 860	\$ 17	\$ 44	\$ 14	\$ 4,339	\$ 911				
			100.000%	\$ 214,128	\$ 3,281	\$ 771		\$ 210,847		\$ 49,421	\$ 129,541	\$ 45,390	\$ 435,199	\$ 206,470				

- 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 and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J-TU - Cost of Capital.
- (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study
- (d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
- (e) 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.

	2017 Ending Deferral	Future Revenue Streams	
		2018 Forward	Total
Net present value	\$ 16,973	\$ 206,470	\$ 223,444
Annual payment	\$ 1,384	\$ 16,835	\$ 18,219
Monthly payment	\$ 115	\$ 1,403	\$ 1,518

EXHIBIT C-6 Actual -TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA 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	2017	2018
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)	34.01% (b)	23.50% (c)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (d)
AMORTIZATION RATE			
FIRST YEAR AMORTIZATION RATE			1.9440% (d)
WEIGHTED INTEREST RATE			5.1480% (d)
WEIGHTED NET OF TAX EQUITY RATE			
NC RETAIL ALLOCATION FACTOR		61.33723% (b)	61.52780% (e)

BASED ON 2018 TEST YEAR ACTUALS																																			
		NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL AMORTIZATION (Col C)	TAX DEPR. MINUS BOOK AMOR. (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	\$	7,111.820	\$	7,826	\$	187,477	\$	4,027	\$	10,135	\$	5,223	\$	27,211			\$	19,746	\$	7,465	\$	18,067				
2018	January	\$	191,431	7.700%	\$	1,381	\$	727	\$	171	\$	7,283	\$	654	\$	184,561	\$	330	\$	831	\$	255	\$	2,071		\$	1,986	\$	85	\$	1,518	\$	553	\$	18,722
	February	\$	190,777	7.700%	\$	1,381	\$	727	\$	171	\$	7,453	\$	654	\$	183,736	\$	329	\$	828	\$	254	\$	2,065		\$	1,980	\$	85	\$	1,518	\$	547	\$	19,376
	March	\$	190,122	7.700%	\$	1,381	\$	727	\$	171	\$	7,624	\$	654	\$	182,911	\$	312	\$	804	\$	247	\$	2,017		\$	1,974	\$	43	\$	1,518	\$	499	\$	19,983
	April	\$	189,468	7.700%	\$	1,381	\$	727	\$	171	\$	7,795	\$	654	\$	182,086	\$	295	\$	781	\$	240	\$	1,970		\$	1,968	\$	2	\$	1,518	\$	452	\$	20,545
	May	\$	188,814	7.700%	\$	1,381	\$	727	\$	171	\$	7,966	\$	654	\$	181,261	\$	294	\$	778	\$	239	\$	1,964		\$	1,962	\$	2	\$	1,518	\$	446	\$	21,103
	June	\$	188,160	7.700%	\$	1,381	\$	727	\$	171	\$	8,137	\$	654	\$	180,436	\$	292	\$	774	\$	238	\$	1,958		\$	1,956	\$	2	\$	1,518	\$	440	\$	21,659
	July	\$	187,506	7.700%	\$	1,381	\$	727	\$	171	\$	8,307	\$	654	\$	179,611	\$	291	\$	771	\$	237	\$	1,952		\$	1,950	\$	2	\$	1,518	\$	434	\$	22,212
	August	\$	186,851	7.700%	\$	1,381	\$	727	\$	171	\$	8,478	\$	654	\$	178,786	\$	290	\$	767	\$	236	\$	1,946		\$	1,945	\$	2	\$	1,518	\$	428	\$	22,761
	September	\$	186,197	7.700%	\$	1,381	\$	727	\$	171	\$	8,649	\$	654	\$	177,961	\$	288	\$	763	\$	235	\$	1,940		\$	1,939	\$	2	\$	1,518	\$	422	\$	23,308
	October	\$	185,543	7.700%	\$	1,381	\$	727	\$	171	\$	8,820	\$	654	\$	177,136	\$	287	\$	760	\$	233	\$	1,934		\$	1,933	\$	2	\$	1,518	\$	416	\$	23,852
	November	\$	184,889	7.700%	\$	1,381	\$	727	\$	171	\$	8,991	\$	654	\$	176,311	\$	286	\$	756	\$	232	\$	1,929		\$	1,927	\$	2	\$	1,518	\$	410	\$	24,392
	December	\$	184,235	7.700%	\$	1,381	\$	727	\$	171	\$	9,162	\$	654	\$	175,486	\$	284	\$	753	\$	231	\$	1,923		\$	1,921	\$	2	\$	1,518	\$	404	\$	24,929

- Notes:
- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
- (b) Based on the assumptions as filed with the Commission under Docket E-2, Sub 1176.
- (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017 . See Exhibit J-TU - Cost of Capital.
- (d) After tax cost of capital and weighted annual interest and after tax equity rates were updated for DEP's last general rate case. See Exhibit J-TU - Cost of Capital
- (e) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study

Latest Levelized Payment Calculations			
	2017 Ending Deferral	Future Revenue Streams 2018	Total
Net present value	\$ 16,973	\$ 206,470	\$ 223,444
Annual payment	\$ 1,384	\$ 16,835	\$ 18,219
Monthly payment	\$ 115	\$ 1,403	\$ 1,518

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

				Revised based on Rate Case Proceeding under Docket E-2, Sub 1142	
Line No.	Plant	Retirement Date (Col A)	Calculation of Remaining Life (months) at 7/31/2015 (Col B)	Retirement Date (Col C)	Calculation of Remaining Life (months) at 12/31/2017 (Col D)
1	Closing Date of Purchase		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 1207

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 1207

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 1207

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
	Estimated								
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
	Actual								
1	NC Retail Allocation Factor	61.52780% (f)							
2	Brunswick 1 (including common)	\$ 273,020	0.0777%	\$ 212	\$ 131	\$ 53,077	\$ 53,208	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	\$ 384	\$ 223,777	\$ 224,161	345.80	\$ 7,779
5	Mayo	\$ 178,639	0.2632%	\$ 470	\$ 289	\$ 41,104	\$ 41,394	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
 (f) From Exhibit I-E: Demand Allocator to NC Retail from 2018 cost of service study as adjusted for NCEMPA Purchase

EXHIBIT D -TU
DOCKET E-2, SUB 1207

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													\$ 49,082 (a)
2	Deferred Tax Asset (Liability) on Net Nuclear Fuel Inventory													\$ (778) (b)
3	Materials and Supplies Inventory													\$ 60,664 (c)
4	Dry Cask Storage													\$ 3,576 (d)
5	Total average system investment for the rate period (Line 1 + Line 2 + Line 3 + Line 4)													\$ 112,544
6	Allocated to NC retail (Line 5 x 61.52780%)													\$ 69,246 (e)
7	Rate base pre-tax cost of capital - discounted year to date rate													8.7800% (f)
8	Total Year to Date NC retail revenues required for financing costs on above investmen (Line 6 x Line 7)													\$ 6,080
9	Year to Date NC retail pre-tax return on deferred tax assets related to NCEMPA's nuclear decommissioning funds													\$ 970 (g)
10	Total Year to Date NC retail revenues required for financing costs (Line 8 + Line 9)													\$ 7,050
11	Current Month NC retail revenues required for financing costs													

- 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 2018 cost of service study of: 61.52780%
 - (f) From Exhibit J-TU: Cost of Capital, discounted before tax rate,
Annual rate applicable for January 1, 2018 - March 15, 2018, Column H, Line 3 9.2179%
Annual rate applicable for March 16, 2018 - March 15, 2018, Column M, Line 3 8.6740%
 - (g) From Exhibit D-3: Deferred tax asset, Column L

EXHIBIT D-1A -TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
ACTUAL NET NUCLEAR FUEL BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2018
(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 2018							
1	2017	December	\$ 11,113	\$ 20,382	\$ 7,428	\$ 38,923	(a)
2	2018	January	\$ 17,954	\$ 19,569	\$ 6,744	\$ 44,266	\$ 41,595
3	2018	February	\$ 25,875	\$ 18,874	\$ 6,029	\$ 50,778	\$ 44,656
4	2018	March	\$ 25,831	\$ 18,023	\$ 10,782	\$ 54,636	\$ 47,151
5	2018	April	\$ 25,259	\$ 17,207	\$ 15,418	\$ 57,883	\$ 49,297
6	2018	May	\$ 24,461	\$ 16,354	\$ 15,832	\$ 56,648	\$ 50,522
7	2018	June	\$ 23,732	\$ 15,720	\$ 15,433	\$ 54,885	\$ 51,145
8	2018	July	\$ 22,929	\$ 14,952	\$ 14,394	\$ 52,275	\$ 51,287
9	2018	August	\$ 22,125	\$ 14,100	\$ 13,601	\$ 49,826	\$ 51,124
10	2018	September	\$ 21,624	\$ 13,509	\$ 12,938	\$ 48,071	\$ 50,819
11	2018	October	\$ 20,826	\$ 12,676	\$ 12,154	\$ 45,657	\$ 50,350
12	2018	November	\$ 20,045	\$ 11,855	\$ 11,387	\$ 43,287	\$ 49,761
13	2018	December	\$ 19,268	\$ 11,048	\$ 10,614	\$ 40,930	\$ 49,082
14		Balance as of December 31, 2018	\$ 19,268	\$ 11,048	\$ 10,614	\$ 40,930	

Notes:

(a) Based on ending balances as of December 31, 2017 as filed with the Commission on Exhibit D-1A-TU under Docket E-2, Sub 1176.

EXHIBIT D-1B -TU
DOCKET E-2, SUB 1207

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

ADIT Expense (Income) Associated with Nuclear Fuel										ADIT Asset (Liability) Balance Associated with Nuclear Fuel														
Line No.				Brunswick 1 (Col A) (a)	Brunswick 2 (Col B) (b)	Harris (Col C) (c)	Total (Col D) (d)				Brunswick 1 (Col E)	Brunswick 2 (Col F)	Harris (Col G)	Total (Col H)	Year to Date Average (Col I)									
Current Test Year: Calendar 2018																								
1								Beginning Balance, January 1, 2018	\$	(275)	\$	(1,615)	\$	494	\$	(1,397)	(f)							
2	2018	January		\$	(39)	\$	(91)	\$	(37)	\$	(167)	\$	(236)	\$	(1,524)	\$	531	\$	(1,229)	\$	(1,313)			
3	2018	February		\$	(13)	\$	(63)	\$	(45)	\$	(121)	\$	(223)	\$	(1,461)	\$	576	\$	(1,109)	\$	(1,245)			
4	2018	March		\$	143	\$	(100)	\$	(63)	\$	(20)	\$	(365)	\$	(1,362)	\$	638	\$	(1,089)	\$	(1,206)			
5	2018	April		\$	18	\$	(91)	\$	88	\$	15	\$	(384)	\$	(1,270)	\$	551	\$	(1,104)	\$	(1,185)			
6	2018	May		\$	(35)	\$	(100)	\$	(4)	\$	(139)	\$	(349)	\$	(1,170)	\$	555	\$	(965)	\$	(1,149)			
7	2018	June		\$	(18)	\$	(49)	\$	30	\$	(38)	\$	(331)	\$	(1,122)	\$	525	\$	(927)	\$	(1,117)			
8	2018	July		\$	(36)	\$	(80)	\$	(54)	\$	(170)	\$	(295)	\$	(1,041)	\$	580	\$	(757)	\$	(1,072)			
9	2018	August		\$	(36)	\$	(100)	\$	(63)	\$	(199)	\$	(259)	\$	(941)	\$	643	\$	(558)	\$	(1,015)			
10	2018	September		\$	35	\$	(39)	\$	(33)	\$	(36)	\$	(295)	\$	(903)	\$	675	\$	(522)	\$	(966)			
11	2018	October		\$	(34)	\$	(95)	\$	(61)	\$	(191)	\$	(260)	\$	(808)	\$	736	\$	(332)	\$	(908)			
12	2018	November		\$	(31)	\$	(93)	\$	(57)	\$	(180)	\$	(230)	\$	(715)	\$	793	\$	(152)	\$	(845)			
13	2018	December		\$	(30)	\$	(89)	\$	(58)	\$	(177)	\$	(200)	\$	(625)	\$	851	\$	26	\$	(778)			
																Accumulated Deferred Tax Asset (Liability) as of December 31, 2018	\$	(200)	\$	(625)	\$	851	\$	26
14	Total deferred tax expense			\$	(75)	\$	(990)	\$	(358)	\$	(1,423)													

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 M, Line 11 23.50%

(f) Based on ending balances as of December 31, 2017 as filed with the Commission on Exhibit D-1B-TU under Docket E-2, Sub 1176.

EXHIBIT D1-C -TU
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)																																							
= E - I													= F - J													= G - K													= H - L												
Current Test Year: Calendar 2018																																																			
1	2018	January	\$	(167)	\$	(387)	\$	(159)	\$	(713)	\$	651	\$	427	\$	525	\$	1,603	\$	818	\$	814	\$	684	\$	2,315																									
2	2018	February	\$	(56)	\$	(268)	\$	(190)	\$	(514)	\$	651	\$	427	\$	525	\$	1,603	\$	707	\$	695	\$	715	\$	2,116																									
3	2018	March	\$	607	\$	(424)	\$	(267)	\$	(84)	\$	651	\$	427	\$	525	\$	1,603	\$	44	\$	851	\$	792	\$	1,686																									
4	2018	April	\$	79	\$	(389)	\$	373	\$	62	\$	651	\$	427	\$	525	\$	1,603	\$	572	\$	816	\$	152	\$	1,540																									
5	2018	May	\$	(147)	\$	(425)	\$	(18)	\$	(591)	\$	651	\$	427	\$	525	\$	1,603	\$	798	\$	852	\$	543	\$	2,193																									
6	2018	June	\$	(78)	\$	(207)	\$	126	\$	(160)	\$	651	\$	427	\$	525	\$	1,603	\$	729	\$	634	\$	399	\$	1,762																									
7	2018	July	\$	(151)	\$	(341)	\$	(231)	\$	(724)	\$	651	\$	427	\$	525	\$	1,603	\$	802	\$	768	\$	756	\$	2,326																									
8	2018	August	\$	(153)	\$	(425)	\$	(268)	\$	(847)	\$	651	\$	427	\$	525	\$	1,603	\$	804	\$	852	\$	793	\$	2,450																									
9	2018	September	\$	150	\$	(164)	\$	(138)	\$	(152)	\$	651	\$	427	\$	525	\$	1,603	\$	501	\$	591	\$	663	\$	1,755																									
10	2018	October	\$	(147)	\$	(406)	\$	(259)	\$	(812)	\$	651	\$	427	\$	525	\$	1,603	\$	798	\$	833	\$	784	\$	2,414																									
11	2018	November	\$	(130)	\$	(395)	\$	(242)	\$	(767)	\$	651	\$	427	\$	525	\$	1,603	\$	781	\$	822	\$	766	\$	2,369																									
12	2018	December	\$	(127)	\$	(380)	\$	(248)	\$	(755)	\$	651	\$	427	\$	525	\$	1,603	\$	778	\$	807	\$	773	\$	2,358																									
13	Total for the Test Period		\$	(321)	\$	(4,211)	\$	(1,522)	\$	(6,054)	\$	7,811	\$	5,123	\$	6,298	\$	19,232	\$	8,132	\$	9,334	\$	7,820	\$	25,286																									

EXHIBIT D-2 -TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
ACTUAL MATERIALS AND SUPPLIES BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2018
(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 2018							
1	2017 December	\$ 35,582	\$ 21,274	\$ 2,441	\$ 1,566	\$ 60,864	(c)
2	2018 January	\$ 35,942	\$ 21,284	\$ 2,437	\$ 1,561	\$ 61,225	\$ 61,044
3	2018 February	\$ 36,070	\$ 21,339	\$ 2,435	\$ 1,565	\$ 61,409	\$ 61,166
4	2018 March	\$ 35,675	\$ 21,272	\$ 2,438	\$ 1,560	\$ 60,945	\$ 61,111
5	2018 April	\$ 35,819	\$ 20,597	\$ 2,432	\$ 1,551	\$ 60,399	\$ 60,968
6	2018 May	\$ 35,785	\$ 20,605	\$ 2,434	\$ 1,554	\$ 60,378	\$ 60,870
7	2018 June	\$ 35,702	\$ 20,809	\$ 2,400	\$ 1,554	\$ 60,466	\$ 60,812
8	2018 July	\$ 35,963	\$ 20,836	\$ 2,417	\$ 1,563	\$ 60,778	\$ 60,808
9	2018 August	\$ 36,001	\$ 20,662	\$ 2,421	\$ 1,563	\$ 60,648	\$ 60,790
10	2018 September	\$ 35,984	\$ 20,636	\$ 2,416	\$ 1,566	\$ 60,602	\$ 60,771
11	2018 October	\$ 36,089	\$ 20,540	\$ 2,416	\$ 1,538	\$ 60,583	\$ 60,754
12	2018 November	\$ 35,692	\$ 20,538	\$ 2,402	\$ 1,530	\$ 60,162	\$ 60,705
13	2018 December	\$ 35,817	\$ 20,429	\$ 2,402	\$ 1,528	\$ 60,175	\$ 60,664
14	Balance as of December 31, 2018	\$ 35,817	\$ 20,429	\$ 2,402	\$ 1,528	\$ 60,175	

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, 2017 as filed with the Commission on Exhibit D-2-TU under Docket E-2, Sub 1176.

EXHIBIT D-3 -TU
DOCKET E-2, SUB 1207

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

	2015	2016	2017	2018
ASSUMPTIONS:				
DECOMMISSIONING FUNDS TRANSFERRED	\$ 287,077 (a)			
TAX LIFE USED FOR ACQUIRED NCEMPA ASSETS	15 (b)			
COMPOSITE TAX RATE		34.59% (c)	34.01% (d)	23.50% (e)
AFTER TAX COST OF CAPITAL		6.6071% (c)	6.6189% (d)	6.4416% (f)
WEIGHTED ANNUAL INTEREST RATE				1.9440% (g)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE				5.1480% (g)
NC RETAIL ALLOCATION FACTOR		60.60076% (c)	61.33723% (d)	61.52780% (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 January	\$ -	7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 9,721	\$ 9,588	\$ 17	\$ 43	\$ 13	\$ 74	\$ 74
February		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 9,988	\$ 9,855	\$ 18	\$ 44	\$ 14	\$ 76	\$ 149
March		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 10,254	\$ 10,121	\$ 17	\$ 45	\$ 14	\$ 75	\$ 225
April		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 10,520	\$ 10,387	\$ 17	\$ 45	\$ 14	\$ 75	\$ 300
May		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 10,787	\$ 10,654	\$ 17	\$ 46	\$ 14	\$ 77	\$ 377
June		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 11,053	\$ 10,920	\$ 18	\$ 47	\$ 14	\$ 79	\$ 456
July		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 11,320	\$ 11,186	\$ 18	\$ 48	\$ 15	\$ 81	\$ 537
August		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 11,586	\$ 11,453	\$ 19	\$ 49	\$ 15	\$ 83	\$ 619
September		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 11,852	\$ 11,719	\$ 19	\$ 50	\$ 15	\$ 85	\$ 704
October		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 12,119	\$ 11,985	\$ 19	\$ 51	\$ 16	\$ 87	\$ 791
November		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 12,385	\$ 12,252	\$ 20	\$ 53	\$ 16	\$ 89	\$ 879
December		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 12,651	\$ 12,518	\$ 20	\$ 54	\$ 17	\$ 90	\$ 970

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 1143
(d) From Exhibit D-3-TU as filed with the Commission under Docket E-2, Sub 1176
(e) From Exhibit J-TU, Column H and Column M, Line 11.
(f) From Exhibit J-TU, Column L, Line 4
(g) From Exhibit J-TU, Column K, Line 1 and Line 2
(h) From Exhibit I-TU

EXHIBIT D-4 -TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS

NCEMPA GENERATION ASSET PURCHASE

ACTUAL DRY CASK STORAGE BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2018

(Thousands of Dollars)

Line No.		Brunswick Common (Col A) (a)	Total (Col B)	Year to Date Average (Col C)
Current Test Year: Calendar 2018				
1	2017 December	\$ 3,554	\$ 3,554	
2	2018 January	\$ 3,554	\$ 3,554	\$ 3,554
3	2018 February	\$ 3,554	\$ 3,554	\$ 3,554
4	2018 March	\$ 3,607	\$ 3,607	\$ 3,567
5	2018 April	\$ 3,607	\$ 3,607	\$ 3,575
6	2018 May	\$ 3,607	\$ 3,607	\$ 3,580
7	2018 June	\$ 3,607	\$ 3,607	\$ 3,584
8	2018 July	\$ 3,607	\$ 3,607	\$ 3,587
9	2018 August	\$ 3,607	\$ 3,607	\$ 3,589
10	2018 September	\$ 3,552	\$ 3,552	\$ 3,585
11	2018 October	\$ 3,549	\$ 3,549	\$ 3,582
12	2018 November	\$ 3,546	\$ 3,546	\$ 3,579
13	2018 December	\$ 3,543	\$ 3,543	\$ 3,576
14	Balance as of December 31, 2018	\$ 3,543	\$ 3,543	

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.

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)

EXHIBIT E -TU
DOCKET E-2, SUB 1207

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	\$ 133,909	\$ 135,104	\$ 136,434	\$ 139,937	\$ 146,852	\$ 152,961	\$ 157,814	\$ 161,791	\$ 164,986	\$ 167,648	\$ 170,075	\$ 172,722	\$ 172,722 (a)
2	Actual accumulated depreciation on actual capital additions to plant in service since the purchase date allocated to purchase from NCEMPA	\$ (2,985)	\$ (3,092)	\$ (3,209)	\$ (3,340)	\$ (3,482)	\$ (3,642)	\$ (3,815)	\$ (3,997)	\$ (4,186)	\$ (4,380)	\$ (4,577)	\$ (4,779)	\$ (4,779) (b)
3	Accumulated deferred income tax asset / (liability) related to capital additions to plant in service	\$ (20,478)	\$ (20,647)	\$ (20,790)	\$ (20,935)	\$ (21,261)	\$ (21,939)	\$ (22,553)	\$ (23,056)	\$ (23,478)	\$ (23,826)	\$ (24,121)	\$ (24,390)	\$ (24,390) (c)
4	Total average net plant in service on capital additions for the test period (Line 1 + Line 2 + Line 3)	\$ 110,446	\$ 111,365	\$ 112,435	\$ 115,662	\$ 122,109	\$ 127,379	\$ 131,446	\$ 134,738	\$ 137,321	\$ 139,442	\$ 141,377	\$ 143,553	\$ 143,553
5	Allocation to NC retail (Line 4 x Line 11)	\$ 67,955	\$ 68,521	\$ 69,179	\$ 71,165	\$ 75,131	\$ 78,374	\$ 80,876	\$ 82,901	\$ 84,491	\$ 85,795	\$ 86,986	\$ 88,325	\$ 88,325
6	Rate base pre-tax cost of capital - discounted year to date rate	0.7375%	1.4804%	2.2073%	2.9175%	3.6327%	4.3528%	5.0779%	5.8081%	6.5434%	7.2837%	8.0292%	8.7800%	8.7800% (d)
7	Total year to date NC retail revenues required for cost of capital on above investments (Line 5 x Line 6)	\$ 501	\$ 1,014	\$ 1,527	\$ 2,076	\$ 2,729	\$ 3,411	\$ 4,107	\$ 4,815	\$ 5,529	\$ 6,249	\$ 6,984	\$ 7,755	\$ 7,755
Incremental operating expenses related to capital additions:														
8	Depreciation expense on actual capital additions for the test year - year to date	\$ 211	\$ 426	\$ 682	\$ 982	\$ 1,316	\$ 1,720	\$ 2,144	\$ 2,574	\$ 3,007	\$ 3,440	\$ 3,873	\$ 4,313	\$ 4,313 (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)	\$ 211	\$ 426	\$ 682	\$ 982	\$ 1,316	\$ 1,720	\$ 2,144	\$ 2,574	\$ 3,007	\$ 3,440	\$ 3,873	\$ 4,313	\$ 4,313
11	NC Retail allocation factor	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780% (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)	\$ 130	\$ 262	\$ 420	\$ 604	\$ 810	\$ 1,058	\$ 1,319	\$ 1,583	\$ 1,850	\$ 2,116	\$ 2,383	\$ 2,654	\$ 2,654
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)	\$ 631	\$ 1,277	\$ 1,947	\$ 2,681	\$ 3,539	\$ 4,470	\$ 5,426	\$ 6,398	\$ 7,379	\$ 8,365	\$ 9,368	\$ 10,408	\$ 10,408
14	Current Month NC retail revenues required for financial and operating expenses related to capital additions since the acquisition date	\$ 631	\$ 646	\$ 670	\$ 734	\$ 858	\$ 931	\$ 957	\$ 972	\$ 980	\$ 987	\$ 1,002	\$ 1,041	

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 E, Line 2 - Line 13

(d) From Exhibit J-TU: Cost of Capital

Annual rate applicable for January 1, 2018 - March 15, 2018, Column H, Line 3 9.2179%

Annual rate applicable for March 16, 2018 - March 15, 2018, Column M, Line 3 8.6740%

(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 2018 cost of service study 61.52780%

EXHIBIT E-1 -TU
DOCKET E-2, SUB 1207

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)

Line No.		ACTUAL CAPITAL ADDITIONS FOR THE MONTH						
		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 2018								
1								
2	2018 January	\$ 1,408	\$ 295	\$ 915	\$ 35	\$ (9)	\$ 16	\$ 2,660
3	2018 February	\$ 1,774	\$ 133	\$ 340	\$ 0	\$ 5	\$ 5	\$ 2,256
4	2018 March	\$ 3,222	\$ (267)	\$ (29)	\$ 0	\$ (0)	\$ 3	\$ 2,930
5	2018 April	\$ 12,781	\$ (93)	\$ 770	\$ 41	\$ 2	\$ 25	\$ 13,525
6	2018 May	\$ 908	\$ 2,628	\$ 15,921	\$ 0	\$ 8,023	\$ (3)	\$ 27,477
7	2018 June	\$ 5,655	\$ 22	\$ 1,045	\$ 307	\$ 1,154	\$ 4	\$ 8,186
8	2018 July	\$ 1,109	\$ 334	\$ 733	\$ 8	\$ (22)	\$ 12	\$ 2,175
9	2018 August	\$ 1,227	\$ 91	\$ 470	\$ 3	\$ 29	\$ (2)	\$ 1,818
10	2018 September	\$ (299)	\$ 63	\$ 396	\$ 0	\$ (27)	\$ 2	\$ 135
11	2018 October	\$ 155	\$ 63	\$ 204	\$ -	\$ 65	\$ 40	\$ 528
12	2018 November	\$ 1,714	\$ 162	\$ 359	\$ 234	\$ 20	\$ 25	\$ 2,514
13	2018 December	\$ 1,975	\$ 47	\$ 322	\$ 197	\$ 786	\$ 4,369	\$ 7,696
\$ 14,000	Total capital additions	\$ 31,630	\$ 3,477	\$ 21,446	\$ 826	\$ 10,026	\$ 4,494	\$ 71,899

		CUMULATIVE CAPITAL ADDITIONS							Year to Date	
		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)	Average (Col O)	
Beginning Balance as of January 1, 2018										(b)
	\$	45,092	\$ 30,680	\$ 44,939	\$ 3,335	\$ 4,118	\$ 4,415	\$ 132,579		
	\$	46,501	\$ 30,974	\$ 45,853	\$ 3,370	\$ 4,109	\$ 4,430	\$ 135,238	\$ 133,909	
	\$	48,274	\$ 31,107	\$ 46,193	\$ 3,370	\$ 4,114	\$ 4,436	\$ 137,495	\$ 135,104	
	\$	51,497	\$ 30,840	\$ 46,164	\$ 3,371	\$ 4,114	\$ 4,439	\$ 140,424	\$ 136,434	
	\$	64,278	\$ 30,747	\$ 46,934	\$ 3,411	\$ 4,116	\$ 4,463	\$ 153,949	\$ 139,937	
	\$	65,186	\$ 33,374	\$ 62,856	\$ 3,412	\$ 12,138	\$ 4,461	\$ 181,426	\$ 146,852	
	\$	70,841	\$ 33,396	\$ 63,901	\$ 3,719	\$ 13,292	\$ 4,464	\$ 189,612	\$ 152,961	
	\$	71,950	\$ 33,730	\$ 64,634	\$ 3,727	\$ 13,270	\$ 4,476	\$ 191,787	\$ 157,814	
	\$	73,177	\$ 33,822	\$ 65,104	\$ 3,730	\$ 13,299	\$ 4,474	\$ 193,605	\$ 161,791	
	\$	72,878	\$ 33,885	\$ 65,500	\$ 3,730	\$ 13,272	\$ 4,475	\$ 193,740	\$ 164,986	
	\$	73,033	\$ 33,948	\$ 65,704	\$ 3,730	\$ 13,338	\$ 4,515	\$ 194,268	\$ 167,648	
	\$	74,748	\$ 34,110	\$ 66,063	\$ 3,963	\$ 13,358	\$ 4,540	\$ 196,782	\$ 170,075	
	\$	76,722	\$ 34,157	\$ 66,385	\$ 4,161	\$ 14,144	\$ 8,909	\$ 204,477	\$ 172,722	
Capital Additions as of December 31, 2018										
	\$	76,722	\$ 34,157	\$ 66,385	\$ 4,161	\$ 14,144	\$ 8,909	\$ 204,477		

Notes:
(a) Capital additions for Brunswick Common are included with Brunswick 1.
(b) Based on ending balances as of December 31, 2017 as filed with the Commission on Exhibit E-1-TU under Docket E-2, Sub 1143.

EXHIBIT E-2 -TU
DOCKET E-2, SUB 1207

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 2018																		
1																		
2	2018	January	\$	94	\$	45	\$	50	\$	9	\$	2	\$	10	\$	211	\$	211
3	2018	February	\$	97	\$	46	\$	52	\$	9	\$	2	\$	10	\$	215	\$	426
4	2018	March	\$	113	\$	57	\$	64	\$	9	\$	4	\$	11	\$	256	\$	682
5	2018	April	\$	132	\$	67	\$	75	\$	9	\$	5	\$	11	\$	300	\$	982
6	2018	May	\$	165	\$	67	\$	76	\$	10	\$	5	\$	11	\$	333	\$	1,316
7	2018	June	\$	166	\$	75	\$	126	\$	10	\$	16	\$	11	\$	404	\$	1,720
8	2018	July	\$	181	\$	75	\$	128	\$	11	\$	19	\$	11	\$	425	\$	2,144
9	2018	August	\$	183	\$	76	\$	129	\$	11	\$	19	\$	11	\$	429	\$	2,574
10	2018	September	\$	186	\$	76	\$	130	\$	11	\$	19	\$	11	\$	433	\$	3,007
11	2018	October	\$	185	\$	76	\$	130	\$	11	\$	19	\$	11	\$	433	\$	3,440
12	2018	November	\$	186	\$	76	\$	131	\$	11	\$	19	\$	11	\$	434	\$	3,873
13	2018	December	\$	190	\$	77	\$	132	\$	11	\$	19	\$	11	\$	439	\$	4,313
14	Total Depreciation Expense		\$	1,879	\$	811	\$	1,224	\$	119	\$	149	\$	132	\$	4,313		

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)	
Beginning Balance as of January 1, 2018								(b)
\$ (1,236)	\$ (709)	\$ (649)	\$ (118)	\$ (16)	\$ (151)	\$ (2,879)		
\$ (1,330)	\$ (754)	\$ (700)	\$ (127)	\$ (18)	\$ (162)	\$ (3,090)	\$ (2,985)	
\$ (1,427)	\$ (800)	\$ (751)	\$ (135)	\$ (20)	\$ (172)	\$ (3,306)	\$ (3,092)	
\$ (1,540)	\$ (857)	\$ (815)	\$ (145)	\$ (24)	\$ (182)	\$ (3,562)	\$ (3,209)	
\$ (1,672)	\$ (923)	\$ (890)	\$ (154)	\$ (29)	\$ (194)	\$ (3,862)	\$ (3,340)	
\$ (1,837)	\$ (990)	\$ (966)	\$ (164)	\$ (34)	\$ (205)	\$ (4,195)	\$ (3,482)	
\$ (2,003)	\$ (1,064)	\$ (1,092)	\$ (173)	\$ (51)	\$ (216)	\$ (4,599)	\$ (3,642)	
\$ (2,184)	\$ (1,139)	\$ (1,220)	\$ (184)	\$ (70)	\$ (227)	\$ (5,024)	\$ (3,815)	
\$ (2,367)	\$ (1,215)	\$ (1,350)	\$ (194)	\$ (89)	\$ (238)	\$ (5,453)	\$ (3,997)	
\$ (2,554)	\$ (1,291)	\$ (1,480)	\$ (205)	\$ (108)	\$ (249)	\$ (5,886)	\$ (4,186)	
\$ (2,739)	\$ (1,367)	\$ (1,610)	\$ (216)	\$ (127)	\$ (260)	\$ (6,319)	\$ (4,380)	
\$ (2,925)	\$ (1,443)	\$ (1,741)	\$ (226)	\$ (146)	\$ (272)	\$ (6,753)	\$ (4,577)	
\$ (3,114)	\$ (1,520)	\$ (1,873)	\$ (237)	\$ (165)	\$ (283)	\$ (7,192)	\$ (4,779)	
Accumulated Depreciation as of December 31, 2018								
\$ (3,114)	\$ (1,520)	\$ (1,873)	\$ (237)	\$ (165)	\$ (283)	\$ (7,192)		

Notes:
(a) Capital additions for Brunswick Common are included with Brunswick 1.
(b) Based on ending balances as of December 31, 2017 as filed with the Commission on Exhibit E-2-TU under Docket E-2, Sub 1143.

EXHIBIT E-3 -TU
DOCKET E-2, SUB 1207

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)
		2018 (a) (Col A)	2017 (b) (Col A)	2016 (c) (Col B)	2015 (d) (Col C)		
	Deferred Tax Asset / (Liability) Balance						
1	Deferred Taxes December 31, 2017	\$ -	\$ (7,127)	\$ (10,131)	\$ (3,002)	\$ (20,261)	
2	Deferred Taxes - January 2018	\$ -	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (20,695)	\$ (20,478)
3	Deferred Taxes - February	\$ (290)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (20,985)	\$ (20,647)
4	Deferred Taxes - March	\$ (525)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (21,220)	\$ (20,790)
5	Deferred Taxes - April	\$ (820)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (21,514)	\$ (20,935)
6	Deferred Taxes - May	\$ (2,196)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (22,891)	\$ (21,261)
7	Deferred Taxes - June	\$ (5,315)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (26,009)	\$ (21,939)
8	Deferred Taxes - July	\$ (6,153)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (26,848)	\$ (22,553)
9	Deferred Taxes - August	\$ (6,389)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,084)	\$ (23,056)
10	Deferred Taxes - September	\$ (6,584)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,279)	\$ (23,478)
11	Deferred Taxes - October	\$ (6,609)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,304)	\$ (23,826)
12	Deferred Taxes - November	\$ (6,666)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,361)	\$ (24,121)
13	Deferred Taxes - December 2018	\$ (6,926)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,621)	\$ (24,390)

Notes:

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

EXHIBIT E-4 -TU
DOCKET E-2, SUB 1207

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)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2018 - 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, 2017	\$ 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, 2017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Deferred Taxes as of January 2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - (c)
17	Deferred Taxes as of February (Line 1 x Line 2)	\$ (141)	\$ (27)	\$ (119)	\$ (3)	\$ 1	\$ (1)	\$ (290) (c)
18	Deferred Taxes as of March (Line 1 x Line 3)	\$ (318)	\$ (38)	\$ (163)	\$ (4)	\$ 0	\$ (2)	\$ (525) (c)
19	Deferred Taxes as of April (Line 1 x Line 4)	\$ (640)	\$ (14)	\$ (159)	\$ (4)	\$ 0	\$ (2)	\$ (820) (c)
20	Deferred Taxes as of May (Line 1 x Line 5)	\$ (1,919)	\$ (6)	\$ (259)	\$ (8)	\$ 0	\$ (4)	\$ (2,196) (c)
21	Deferred Taxes as of June (Line 1 x Line 6)	\$ (2,009)	\$ (242)	\$ (2,329)	\$ (8)	\$ (722)	\$ (4)	\$ (5,315) (c)
22	Deferred Taxes as of July (Line 1 x Line 7)	\$ (2,575)	\$ (244)	\$ (2,465)	\$ (38)	\$ (826)	\$ (4)	\$ (6,153) (c)
23	Deferred Taxes as of August (Line 1 x Line 8)	\$ (2,686)	\$ (275)	\$ (2,560)	\$ (39)	\$ (824)	\$ (6)	\$ (6,389) (c)
24	Deferred Taxes as of September (Line 1 x Line 9)	\$ (2,808)	\$ (283)	\$ (2,621)	\$ (39)	\$ (826)	\$ (5)	\$ (6,584) (c)
25	Deferred Taxes as of October (Line 1 x Line 10)	\$ (2,779)	\$ (288)	\$ (2,673)	\$ (39)	\$ (824)	\$ (5)	\$ (6,609) (c)
26	Deferred Taxes as of November (Line 1 x Line 11)	\$ (2,794)	\$ (294)	\$ (2,699)	\$ (39)	\$ (830)	\$ (9)	\$ (6,666) (c)
27	Deferred Taxes as of December 2018 (Line 1 x Line 12)	\$ (2,966)	\$ (309)	\$ (2,746)	\$ (63)	\$ (832)	\$ (11)	\$ (6,926) (c)
28	Deferred Tax Balance at December 31, 2018	\$ (2,966)	\$ (309)	\$ (2,746)	\$ (63)	\$ (832)	\$ (11)	\$ (6,926)

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 1207

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)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2018 - 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, 2017 (Line 1 x Line 12)	\$ (2,446)	\$ (1,942)	\$ (2,154)	\$ (146)	\$ (370)	\$ (69)	\$ (7,127)
16	Deferred Taxes as of January 2018 (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
17	Deferred Taxes as of February (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
18	Deferred Taxes as of March (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
19	Deferred Taxes as of April (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
20	Deferred Taxes as of May (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
21	Deferred Taxes as of June (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
22	Deferred Taxes as of July (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
23	Deferred Taxes as of August (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
24	Deferred Taxes as of September (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
25	Deferred Taxes as of October (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
26	Deferred Taxes as of November (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
27	Deferred Taxes as of December 2018 (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	\$ (127)	\$ (7,561) (c)
28	Deferred Tax Balance at December 31, 2018	\$ (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-6 -TU
DOCKET E-2, SUB 1207

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)

			DEFERRED TAX BALANCES						
Line No.			Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2018 - 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, 2017	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131)
16	Deferred Taxes as of January 2018	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
17	Deferred Taxes as of February	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
18	Deferred Taxes as of March	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
19	Deferred Taxes as of April	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
20	Deferred Taxes as of May	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
21	Deferred Taxes as of June	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
22	Deferred Taxes as of July	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
23	Deferred Taxes as of August	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
24	Deferred Taxes as of September	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
25	Deferred Taxes as of October	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
26	Deferred Taxes as of November	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
27	Deferred Taxes as of December 2018	(Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
28	Deferred Tax Balance at December 31, 2018		\$ (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-7 -TU
DOCKET E-2, SUB 1207

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)

		DEFERRED TAX BALANCES						
Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2018 - 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 2017 (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
9	Deferred Taxes as of January 2018 (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 2018 (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
21	Deferred Tax Balance at December 31, 2017	\$ (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 2018

EXHIBIT F -TU
EXHIBIT E-2, SUB 1207

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	\$ 100,809	\$ 194,648	\$ 480,476	\$ 271,694	\$ 257,862	\$ 229,292	\$ 18,227	\$ 182,582	\$ 158,023	\$ 97,197	\$ 95,637	\$ 143,370	\$ 2,229,817	(c)	
2	Mayo 1 O&M	500-514	\$ 258,120	\$ 226,770	\$ 194,164	\$ 177,983	\$ 263,369	\$ 293,197	\$ 179,611	\$ 263,808	\$ 311,719	\$ 607,081	\$ 377,597	\$ 570,158	\$ 3,723,578	(c)	
3	Brunswick Plant O&M	517-532	\$ 3,427,334	\$ 3,226,204	\$ 8,658,880	\$ 3,271,841	\$ 2,863,184	\$ 2,962,794	\$ 3,073,526	\$ 3,008,990	\$ 3,055,168	\$ 2,848,103	\$ 2,738,482	\$ 2,261,695	\$ 41,396,201	(c)	
4	Harris 1 O&M	517-532	\$ 1,679,338	\$ 1,895,568	\$ 2,384,670	\$ 5,398,241	\$ 2,176,800	\$ 1,328,977	\$ 1,768,670	\$ 1,807,522	\$ 1,654,079	\$ 1,483,606	\$ 1,450,379	\$ 1,834,641	\$ 24,862,491	(c)	
5	A&G Expenses	929	\$ 1,743,719	\$ 3,894,975	\$ 2,079,892	\$ 2,885,129	\$ 2,828,069	\$ 2,819,023	\$ 2,600,452	\$ 2,714,985	\$ 2,902,361	\$ 2,230,624	\$ 2,409,295	\$ 1,890,694	\$ 30,999,217	(c)	
6	Payroll Taxes	408	\$ 311,194	\$ 283,178	\$ 266,856	\$ 358,680	\$ 297,030	\$ 272,838	\$ 274,540	\$ 333,360	\$ 401,876	\$ 226,751	\$ 184,362	\$ 169,478	\$ 3,380,143	(c)	
7	General Plant Return	454	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 709,542	\$ 218,226	\$ 218,226	\$ 218,226	\$ 218,226	\$ 2,618,712	(c)	
8	Dispatch Fee	456	\$ 2,613	\$ 2,586	\$ 2,945	\$ 2,817	\$ 2,976	\$ 2,904	\$ 3,048	\$ 3,054	\$ 2,846	\$ 3,004	\$ 3,037	\$ 3,425	\$ 35,255	(c)	
9	Auxiliary Power	447	\$ 89,231	\$ 38,403	\$ 52,768	\$ 72,249	\$ 64,554	\$ 30,277	\$ 13,978	\$ 12,634	\$ 58,750	\$ 26,710	\$ 21,882	\$ 20,449	\$ 501,885	(c)	
10	Site Representative	456	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 4,908	(c)	
11	Property taxes	408	\$ 494,790	\$ 494,790	\$ 494,790	\$ 494,790	\$ 494,790	\$ 494,790	\$ 581,933	\$ 507,239	\$ 507,239	\$ 507,239	\$ 507,239	\$ 507,239	\$ 6,086,872	(d)	
12	NCEMPA revenue included in cost of service for a return on coal inventory	454	\$ 18,199	\$ 3,340	\$ 2,467	\$ 5,237	\$ 4,647	\$ 14,251	\$ 9,241	\$ 7,578	\$ 5,138	\$ 3,942	\$ 42	\$ 9,890	\$ 83,972	(c)	
13	Incremental nuclear decommissioning costs	403	\$ 215,371	\$ 215,371	\$ 314,475	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 4,467,437	(b)	
14	Total		\$ 8,489,166	\$ 10,624,278	\$ 15,080,830	\$ 13,500,688	\$ 9,815,309	\$ 9,010,369	\$ 9,085,254	\$ 9,965,285	\$ 9,689,413	\$ 8,666,472	\$ 8,420,169	\$ 8,043,254	\$ 120,390,488		
15	Allocated to NC Retail (thousands of dollars) (a)		\$ 5,223	\$ 6,537	\$ 9,279	\$ 8,307	\$ 6,039	\$ 5,544	\$ 5,590	\$ 6,131	\$ 5,962	\$ 5,332	\$ 5,181	\$ 4,949	\$ 74,074		

Notes:

(a) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 cost of service study of 61.52780%

(b) From Exhibit F-1-TU, Line 14 and Line 22

(c) System amounts on lines 1-10 are the amounts that would have been billed to NCEMPA from January - December 2018.

(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 1207

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 E-2, Sub 1043:</u>						
1	NC Retail Nuclear decommissioning expense included in base rates excluding NCEMPA ownership	\$ 2,822,222	\$ -	\$ 93,404	\$ 4,734,151	\$ 7,649,777
2	NC retail allocation factor from last rate case	64.5074%	64.5074%	64.5074%	64.5074%	
3	System Amount excluding NCEMPA's ownership (Line 1 / Line 2)	\$ 4,375,036	\$ -	\$ 144,796	\$ 7,338,927	\$ 11,858,759
4	NC retail allocation factor - 2014 Cost of Service	60.7574%	60.7574%	60.7574%	60.7574%	
5	Reduction in NC retail allocation factor due to purchase from NCEMPA (Line 4 - Line 2)	-3.7500%	-3.7500%	-3.7500%	-3.7500%	
6	NC retail decrement included in rider for reduction in allocation factor (Line 5 * Line 3)	\$ (164,064)	\$ -	\$ (5,430)	\$ (275,210)	\$ (444,703) (a)
<u>Incremental decommissioning cost approved in Docket E-100, Sub 56:</u>						
7	NC Retail Nuclear decommissioning expense from 2015 study including purchase from NCEMPA	\$ 5,316,687	\$ 527,539	\$ 3,085,956	\$ 260,101	\$ 9,190,283
8	NC retail allocation factor used in 2015 study	60.7574%	60.7574%	60.7574%	60.7574%	
9	System Amount including NCEMPA's ownership (Line 7 / Line 8)	\$ 8,750,682	\$ 868,271	\$ 5,079,144	\$ 428,098	\$ 15,126,195
10	NCEMPA's ownership %	18.33%	18.33%	16.17%	0.00%	
11	Incremental decommissioning related to purchase from NCEMPA (Line 9 * Line 10)	\$ 1,604,000	\$ 159,154	\$ 821,298	\$ -	\$ 2,584,452
12	NC retail allocation factor - 2018 Cost of Service	61.5278%	61.5278%	61.5278%	61.5278%	
13	NC retail's incremental nuclear decommissioning expense (Line 11 x Line 12)	\$ 986,906	\$ 97,924	\$ 505,326	\$ -	\$ 1,590,156
14	Monthly system incremental nuclear decommissioning expense (line 11 divided by 12)	\$ 133,667	\$ 13,263	\$ 68,441	\$ -	\$ 215,371
<u>Decommissioning recovered in existing base rates under Docket E-2, Sub 1142:</u>						
15	NC Retail Nuclear decommissioning expense included in base rates	\$ 8,276,237	\$ 2,497,488	\$ 6,386,945	\$ 2,429,615	\$ 19,590,285
16	NC retail allocation factor used in rate case - 2016 Cost of Service	60.6008%	60.6008%	60.6008%	60.6008%	
17	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
18	NCEMPA's ownership %	18.33%	18.33%	16.17%	0.00%	
19	Incremental decommissioning related to purchase from NCEMPA (Line 9 * Line 10)	\$ 2,503,324	\$ 755,418	\$ 1,704,217	\$ -	\$ 4,962,959
20	NC retail allocation factor - 2018 Cost of Service	61.5278%	61.5278%	61.5278%	61.5278%	
21	NC retail's incremental nuclear decommissioning expense (Line 11 x Line 12)	\$ 1,540,240	\$ 464,792	\$ 1,048,567	\$ -	\$ 3,053,599
22	Monthly system incremental nuclear decommissioning expense (line 11 divided by 12)	\$ 208,610	\$ 62,952	\$ 142,018	\$ -	\$ 413,580

Notes:

(a) Amount represents reduction in nuclear decommissioning expenses incorporated in lower operating expenses in Exhibit G.

EXHIBIT G -TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF REVENUE DECREMENT FOR CHANGE IN NC RETAIL ALLOCATION FACTORS
RESULTING FROM THE PURCHASE OF NCEMPA ASSETS
(Thousands of Dollars)

Line No.		NC Retail	
		<u>Rate Base</u> (Col A)	<u>Cost of service</u> (Col B)
1	Lower Annual Operating expenses		\$ (57,479) (a)
2	Annual Pre-tax rate of return on lower rate base	\$ 282,266 (a)	\$ (26,019) (b)
3	Total annual reduction on NC retail revenues from change in allocation factors		<u>\$ (83,498)</u>
4	Monthly reduction in NC retail revenues from change in allocation factors		<u>\$ (6,958) (c) (d)</u>

Notes:

(a) From Exhibit G-1-TU, Line14 and Line 18

(b) Col. A times the annual pretax rate of return from Exhibit J-TU, Column H, Line 3.

9.2179%

(c) Assumes reduction happens pro rata throughout the year.

(d) Adjustment is applicable for January 1 - March 15th, 2018. New base rates under Docket E-2, Sub 1142 went into effect on March 16 2018. The new base rates reflect the appropriate allocation of costs between all jurisdictions; therefore, this adjustment is no longer needed after that date for rider recovery purposes.

EXHIBIT G-1 -TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF RATE BASE AND OPERATING EXPENSE DECREMENT FOR CHANGE IN NC RETAIL ALLOCATION FACTORS
(Thousands of Dollars)

Line No.		(Col A)	(Col B)	(Col C)	(Col D)
		Increase (Decrease)			
		<u>System</u>	<u>NC Retail</u>	<u>SC Retail</u>	<u>Wholesale</u>
<u>Total Impact of Including NCEMPA's Additional Load & Energy Only</u>					
1	Revenues: Off- System Sales credits mostly	-	(11,994)	(2,085)	14,079
2	Operating Expenses excl. Income Tax	-	(169,243)	(29,011)	198,254
3	Income Before Taxes	-	157,249	26,926	(184,175)
4	Income Tax Expense, ITC amortization	(0)	62,398	10,657	(73,055)
5	Income for Return	0	94,851	16,269	(111,120)
		-			
6	Rate Base	-	(282,266)	(45,709)	327,975
Less:					
<u>Impacts in the Fuel Clause</u>					
7	Revenues: Off- System Sales credits mostly	(0)	(11,466)	(2,000)	13,467
8	Operating Expenses excl. Income Tax	-	(111,764)	(19,438)	131,202
9	Income Before Taxes	(0)	100,298	17,438	(117,736)
10	Income Tax Expense, ITC amortization	(0)	39,799	6,902	(46,701)
11	Income for Return	0	60,498	10,536	(71,034)
12	Rate Base				
<u>Impact of Including NCEMPA's Additional Load & Energy Only:</u>					
<u>Excluding Fuel Clause Impacts</u>					
13	Revenues: Off- System Sales credits mostly	0	(528)	(85)	612
14	Operating Expenses excl. Income Tax	-	(57,479)	(9,573)	67,052
15	Income Before Taxes	0	56,951	9,488	(66,439)
16	Income Tax Expense, ITC amortization	0	22,599	3,755	(26,354)
17	Income for Return	(0)	34,352	5,733	(40,085)
18	Rate Base	-	(282,266)	(45,709)	327,975

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF THE MONTHLY AMORTIZATION OF NC RETAIL DEFERRED COST BALANCE
TO BE USED FOR THE RATE PERIOD JANUARY 1, 2018 - DECEMBER 31, 2018
(Thousands of Dollars)

EXHIBIT H -TU
DOCKET E-2, SUB 1207

Amortization Schedule

No.		Calculation of monthly rate of return :										January to March 15th		March 16th forward	
		2015 (a)				2016 (b)		2017 (b)		2018 (c)		2018 (c)			
		Capitalization Ratio (a)(b)	Cost Rate (a)(b)	Effective Income Tax Rate	After Tax Weighted Rate Rate of Return	Effective Income Tax Rate	After Tax Weighted Rate Rate of Return	Effective Income Tax Rate	After Tax Weighted Rate Rate of Return	Effective Income Tax Rate	After Tax Weighted Rate Rate of Return	Capitalization Ratio (c)	Cost Rate (c)	Effective Income Tax Rate	After Tax Weighted Rate Rate of Return
1	Long-term debt	47.00%	4.57%	35.1600%	1.3927%	34.5900%	1.4049%	34.01%	1.4174%	23.50%	1.6431%	48.0000%	4.0500%	23.50%	1.4872%
2	Member's equity	53.00%	10.20%		5.4060%		5.4060%		5.4060%		5.4060%	52.0000%	9.9000%		5.1480%
3	After tax overall return				6.7987%		6.8109%		6.8234%		7.0491%				6.6352%
4	Discounted monthly after tax overall return				0.5496%		0.5506%		0.5516%		0.5693%				0.5368%
5	Amortization Period in Months				36		35		23		11				8.5
		Net of Tax Beginning Deferred Balance (Col A)	Under (Over) Collection of Revenue (Col B)	Net of Tax Over (Under) Deferral Balance (Col C)	Amortization Of Net of Tax Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Net of Tax Ending Deferred Balance (Col G)							
6	July 2015	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -							
7	August	\$ -	\$ 4,872	\$ 3,159	\$ -	\$ -	\$ -	\$ 3,159							
8	September	\$ 3,159	\$ 4,872	\$ 3,159	\$ -	\$ 3,159	\$ 17.36	\$ 6,335							
9	October	\$ 6,335	\$ 4,872	\$ 3,159	\$ -	\$ 6,335	\$ 34.82	\$ 9,529							
10	November	\$ 9,529	\$ 4,872	\$ 3,159	\$ -	\$ 9,529	\$ 52.37	\$ 12,741							
11	December	\$ 12,741	\$ -	\$ -	\$ 391	\$ 12,741	\$ 70.02	\$ 12,420							
12	January 2016	\$ 12,420	\$ -	\$ -	\$ 391	\$ 12,420	\$ 68.38	\$ 12,097							
13	February	\$ 12,097	\$ -	\$ -	\$ 391	\$ 12,097	\$ 66.60	\$ 11,773							
14	March	\$ 11,773	\$ -	\$ -	\$ 391	\$ 11,773	\$ 64.82	\$ 11,446							
15	April	\$ 11,446	\$ -	\$ -	\$ 391	\$ 11,446	\$ 63.02	\$ 11,118							
16	May	\$ 11,118	\$ -	\$ -	\$ 391	\$ 11,118	\$ 61.22	\$ 10,789							
17	June	\$ 10,789	\$ -	\$ -	\$ 391	\$ 10,789	\$ 59.40	\$ 10,457							
18	July	\$ 10,457	\$ -	\$ -	\$ 391	\$ 10,457	\$ 57.58	\$ 10,124							
19	August	\$ 10,124	\$ -	\$ -	\$ 391	\$ 10,124	\$ 55.74	\$ 9,788							
20	September	\$ 9,788	\$ -	\$ -	\$ 391	\$ 9,788	\$ 53.89	\$ 9,451							
21	October	\$ 9,451	\$ -	\$ -	\$ 391	\$ 9,451	\$ 52.04	\$ 9,112							
22	November	\$ 9,112	\$ -	\$ -	\$ 391	\$ 9,112	\$ 50.17	\$ 8,771							
23	December	\$ 8,771	\$ -	\$ -	\$ 391	\$ 8,771	\$ 48.29	\$ 8,429							
24	January 2017	\$ 8,429	\$ -	\$ -	\$ 391	\$ 8,429	\$ 46.49	\$ 8,084							
25	February	\$ 8,084	\$ -	\$ -	\$ 391	\$ 8,084	\$ 44.59	\$ 7,738							
26	March	\$ 7,738	\$ -	\$ -	\$ 391	\$ 7,738	\$ 42.68	\$ 7,389							
27	April	\$ 7,389	\$ -	\$ -	\$ 391	\$ 7,389	\$ 40.76	\$ 7,039							
28	May	\$ 7,039	\$ -	\$ -	\$ 391	\$ 7,039	\$ 38.83	\$ 6,687							
29	June	\$ 6,687	\$ -	\$ -	\$ 391	\$ 6,687	\$ 36.88	\$ 6,333							
30	July	\$ 6,333	\$ -	\$ -	\$ 391	\$ 6,333	\$ 34.93	\$ 5,977							
31	August	\$ 5,977	\$ -	\$ -	\$ 391	\$ 5,977	\$ 32.97	\$ 5,619							
32	September	\$ 5,619	\$ -	\$ -	\$ 391	\$ 5,619	\$ 30.99	\$ 5,259							
33	October	\$ 5,259	\$ -	\$ -	\$ 391	\$ 5,259	\$ 29.01	\$ 4,897							
34	November	\$ 4,897	\$ -	\$ -	\$ 391	\$ 4,897	\$ 27.01	\$ 4,533							
35	December	\$ 4,533	\$ -	\$ -	\$ 391	\$ 4,533	\$ 25.00	\$ 4,167							
36	January 2018	\$ 4,167	\$ -	\$ -	\$ 391	\$ 4,167	\$ 22.37	\$ 3,798							
37	February	\$ 3,798	\$ -	\$ -	\$ 391	\$ 3,798	\$ 20.39	\$ 3,428							
38	March	\$ 3,428	\$ -	\$ -	\$ 391	\$ 3,428	\$ 18.40	\$ 3,055							
39	April	\$ 3,055	\$ -	\$ -	\$ 391	\$ 3,055	\$ 16.40	\$ 2,680							
40	May	\$ 2,680	\$ -	\$ -	\$ 391	\$ 2,680	\$ 14.39	\$ 2,304							
41	June	\$ 2,304	\$ -	\$ -	\$ 391	\$ 2,304	\$ 12.37	\$ 1,925							
42	July	\$ 1,925	\$ -	\$ -	\$ 391	\$ 1,925	\$ 10.33	\$ 1,545							
43	August	\$ 1,545	\$ -	\$ -	\$ 391	\$ 1,545	\$ 8.29	\$ 1,162							
44	September	\$ 1,162	\$ -	\$ -	\$ 391	\$ 1,162	\$ 6.24	\$ 777							
45	October	\$ 777	\$ -	\$ -	\$ 391	\$ 777	\$ 4.17	\$ 390							
46	November	\$ 390	\$ -	\$ -	\$ 392	\$ 390	\$ 2.09	\$ 0							
47	Total		\$ 19,488	\$ 12,636	\$ 14,077		\$ 1,441								
48	Monthly pre-tax amount to be included in Power Agency Asset Rider to amortize deferred balar					\$ 511									
49	Annual pre-tax amount					\$ 6,132									

(a) From Exhibit J-TU, Cost of Capital as filed under Docket E-2, Sub 1110
(b) From Exhibit J-TU, Cost of Capital as filed under Docket E-2, Sub 1143
(c) From Exhibit J-TU, Cost of Capital

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, 2018

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	3,750,145	29.71894%	Residential Class	30.51718%	49.5990%
2	NC RES-TOU	100,728	0.79824%	SGS Class	3.78746%	6.1557%
3	NC SGS	474,027	3.75654%	MGS Class	17.33896%	28.1807% **
4	NC SGS-CLR	3,901	0.03092%	SI Class	0.04362%	0.0709%
5	NC MGS-TOU	1,534,242	12.15848%	LGS Class	9.83610%	15.9864%
6	NC MGS	653,710	5.18048%	TSS Class	0.00448%	0.0073%
7	NC SI	5,504	0.04362%	ALS Class	0.00000%	0.0000%
8	NC LGS	183,991	1.45808%	SLS Class	0.00000%	0.0000%
9	NC LGS-TOU	227,561	1.80336%	SFLS Class	0.00000%	0.0000%
10	NC LGS-RTP	829,637	6.57466%	Total	61.52780%	100.0000%
11	NC TSS	566	0.00448%			
12	NC ALS	-	0.00000%			
13	NC SLS	-	0.00000%			
14	NC SFLS	-	0.00000%			
15	Total NCR	7,764,011	61.52780%			
16	NCEMC (Note 1)	1,780,265	14.10814%	**Allocation of MGS Class between kW and kWh billed customers		
17	Fayetteville	424,976	3.36782%			
18	FBEMC	69,623	0.55174%			
19	Piedmont EMC	21,284	0.16867%			
20	Haywood EMC	10,206	0.08088%			
21	Tri-Towns		0.00000%	MGS Class - billed on kWh basis 0.09% 0.0241% Note 2		
22	Waynesville	-	0.00000%			
23	Winterville		0.00000%	MGS Class - billed on kW basis 99.91% 28.1566% Note 2		
24	Total NCWHS	2,306,354	18.27726%			
25	NCEMPA	1,310,938	10.38885%	Total NC Retail Summer CP Demand (Line 15) 7,764,011 61.52780%		
26	Total NC	11,381,303	90.19391%			
27	SC RES	490,690	3.88859%	Total System with NCEMPA retained capacity (Line 47) 12,618,705		
28	SC RET	9,862	0.07816%			
29	SC SGS	69,776	0.55295%			
30	SC SGS-CLR	552	0.00437%			
31	SC MGS-TOU	201,037	1.59317%			
32	SC MGS	118,479	0.93892%			
33	SC SI	3,033	0.02403%			
34	SC LGS	104,339	0.82686%			
35	SC LGS-TOU	36,802	0.29165%			
36	SC LGS-CRTL-TOU	76,758	0.60829%			
37	SC LGS-RTP	80,521	0.63811%			
38	SC TSS	101	0.00080%			
39	SC ALS	-	0.00000%			
40	SC SLS	-	0.00000%			
41	SC SFLS	-	0.00000%			
42	Total SCR	1,191,950	9.44590%			
43	SCWHS (Camden)	45,452	0.36019%			
44	Total SC	1,237,402	9.80609%			
45	Total System with NCEMPA retained capacity	12,618,705	100.00000%			

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 1207

DUKE ENERGY PROGRESS
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)	(Col L)	(Col M)
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	2017 WEIGHTED COST OF CAPITAL			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		
				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%	1.4174%	2.1479%	2.1479%	1.6431%	2.1479%	48.00%	4.05%	1.9440%	1.4872%	1.9440%
2	COMMON STOCK EQUITY	53.00%	10.20%	5.4060%	5.4060%	8.1900%	5.4060%	5.4060%	7.0700%	52.00%	9.90%	5.1480%	5.1480%	6.7300%
3	TOTAL	100.00%		7.5539%	6.8234%	10.3379%	7.5539%	7.0491%	9.2179%	100.00%		7.0920%	6.6352%	8.6740%
4	Discounted annual rate to convert monthly to annual compounding				6.6189%	10.0300%		6.8311%	8.9300%				6.4416%	8.4200%
5	Discounted monthly rate to convert monthly to annual compounding				0.5516%	0.8232%		0.5693%	0.7375%				0.5368%	0.6956%
<u>CALCULATION OF COMPOSITE INCOME TAX RATES:</u>														
6	FEDERAL INCOME TAX RATE			2017 Statutory Rate	State Apportionment Factor	2017 Weighted Tax Rate	2018 Statutory Rate	State Apportionment Factor	2018 Weighted Tax Rate			2018 Statutory Rate	State Apportionment Factor	2018 Weighted Tax Rate
				35.00%		35.00%	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%			3.000%	84.6380%	2.5391%
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%					3.1691%
10	Federal production tax deduction percentage					9.0000%			0.0000%					0.0000%
11	Total composite federal and state income tax rate					34.01%			23.50%					23.50%
12	<u>NCUC REGULATORY FEE RATE</u>													
13		January - June	0.140%											
14		July - December	0.140%											

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
BILLING DETERMINANTS FOR THE TWELVE MONTH PERIOD ENDED NOVEMBER 30, 2020

	(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	12,302,290,710	
2	Residential Class	RES (EC)	kWh Energy Units	3,229,521,884	
3	Residential Class	R-TOU	kWh Energy Units	36,153,135	
4	Residential Class	R-TOU (EC)	kWh Energy Units	17,743,588	
5	Residential Class	R-TOUD	kWh Energy Units	250,580,153	
6	Residential Class	R-TOUD (EC)	kWh Energy Units	173,304,988	
7	Residential Class	R-TOUE	kWh Energy Units	0	
8	Residential Class	R-TOUE (EC)	kWh Energy Units	0	
9	Total Residential			(a) 16,009,594,458	
10	SGS Class	SGS	kWh Energy Units	1,769,718,882	
11	SGS Class	SGS-TOU-CLR	kWh Energy Units	29,703,239	
12	SGS Class	SGS-TOUE	kWh Energy Units	3,072,589	
13	Total SGS			(a) 1,802,494,710	
14	MGS Class	APH-TES	kW Demand Units		4,409
15	MGS Class	CH-TOUE	kWh Energy Units	7,715,061	
16	MGS Class	CSE	kWh Energy Units	1,166,342	
17	MGS Class	CSG	kWh Energy Units	18,810	
18	MGS Class	SGS-TES	kW Demand Units		41,046
19	MGS Class	SGS-TOU	kW Demand Units		19,331,165
20	MGS Class	MGS	kW Demand Units		12,005,716
21	Total MGS			(a) 8,900,213	31,382,336
22	LGS Class	LGS	kW Demand Units		2,512,663
23	LGS Class	LGS-RTP	kW Demand Units		43,897
24	LGS Class	LGS-RTP-TOU	kW Demand Units		11,212,643
25	LGS Class	LGS-TOU	kW Demand Units		3,073,783
26	Total LGs			(a)	16,842,986
27	SI Class	SI	kWh Energy Units	(b) 43,257,472	
28	TSS Class	TFS	kWh Energy Units	179,236	
29	TSS Class	TSS	kWh Energy Units	4,544,063	
30	Total TSS			(b) 4,723,299	
31	Total All Rates			17,868,970,152	48,225,322

NOTES:

KWh sales for MGS-kWh billed	8,900,213	0.09%
KWh sales for MGS-kW billed	10,381,905,523	99.91%
Total MGS Class KWH Sales for the Year were:	10,390,805,736	

(a) Source: 2019 Spring Sales Forecast

(b) Source: Monthly CIM Query of Billing Determinants for the twelve month period ended March 31, 2019.

DUKE ENERGY PROGRESS
FUEL SAVINGS BY CUSTOMER CLASS RELATED TO FACILITIES ACQUIRED FROM NCEMPA
TEST PERIOD: JANUARY 2018 - DECEMBER 2018

		(Col. A) Without Acquisition	(Col. B) Change	(Col. C) With Acquisition
<u>Fuel Costs - Dollars:</u>				
	Coal	\$ 300,148,168	\$ 18,243,445	\$ 318,391,613
	Reagents/By-products	104,499,626	\$ 967,307	\$ 105,466,933
	Gas	898,731,361	\$ -	\$ 898,731,361
	Biogas	179,596	\$ -	\$ 179,596
	Nuclear	158,389,577	\$ 25,774,303	\$ 184,163,880
	Hydro	0	\$ -	\$ -
	Purchased Power	527,852,191	\$ -	\$ 527,852,191
	Recovered through off-system sales	(207,269,136)	\$ -	\$ (207,269,136)
1	Total Cost	\$ 1,782,531,384	\$ 44,985,055	\$ 1,827,516,439
2	Sales - kWh	59,494,618,319	4,279,717,681	63,774,336,000
3	Average System Fuel Costs - cents/kwh Line 1 / Line 2	2.996		2.866
4	Reduction Average System Fuel Costs - ce Line 3 Col. C - Line 3 Co. A	(0.131)		
5	Total NC Retail Sales January - December - MWh	38,687,266		
6	NC Retail Share of Savings - Dollars Line 4 * Line 5	\$ (50,495,983)		
<u>Allocation Among Customer Classes:</u>				
	Residential	39.81%	\$ (20,100,422)	
	Small General Service	4.47%	\$ (2,255,496)	
	Medium General Service	28.77%	\$ (14,529,500)	
	Large General Service	26.16%	\$ (13,207,931)	
	Lighting	0.80%	\$ (402,634)	
	Total NC Retail	100.00%	\$ (50,495,983)	