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June 20, 2018

**VIA ELECTRONIC FILING AND  
HAND DELIVERY**

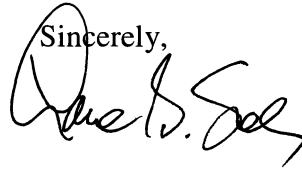
Ms. M. Lynn Jarvis, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

**RE: Duke Energy Progress, LLC's Joint Agency Asset Rider Application  
Docket No. E-2, Sub 1176**

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

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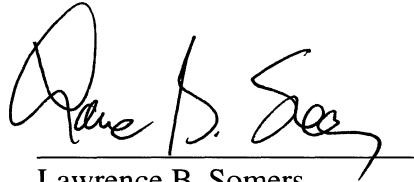
JUN 20 2018

**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 1176, 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  
Public Staff  
North Carolina Utilities Commission  
4326 Mail Service Center  
Raleigh, NC 27699-4300  
[david.drooz @psncuc.nc.gov](mailto:david.drooz@psncuc.nc.gov)

This the 20<sup>st</sup> day of June, 2018.



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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1176

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

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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, 2019. 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  
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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 17, 2017, the Commission issued its *Order Approving Joint Agency Asset Rider*, which established the JAAR to recover the costs expected to be incurred by DEP from December 1, 2017 through November 30, 2018, and included a Joint Agency Asset rolling recovery factor ("RRF") adjustment related to the under recovery of costs incurred for the test year ended December 31, 2016.

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, 2017 through December 31, 2017. The rate period to be used in this Application for these proceedings is December 1, 2018 through November 30, 2019.

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, 2017 of \$41 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, 2018:

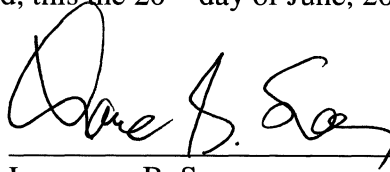
<b>Rate Class</b>	<b>Applicable Schedule(s)</b>	<b>Incremental Rate*</b>
<b>Non-Demand Rate Class (dollars per kilowatt-hour)</b>		
Residential	RES, R-TOUD, R-TOUE, R-TOU	0.00427
Small General Service	SGS, SGS-TOUE	0.00513
Medium General Service	CH-TOUE, CSE, CSG	0.00382
Seasonal and Intermittent Service	SI	0.00383
Traffic Signal Service	TSS, TFS	0.00219
Outdoor Lighting Service	ALS, SLS, SLR, SFLS	0.00000
<b>Demand Rate Classes (dollars per kilowatt)</b>		
Medium General Service	MGS, GS-TES, AP-TES, SGS-TOU	1.27
Large General Service	LGS, LGS-TOU	1.30

\* 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, 2019.

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 20<sup>th</sup> day of June, 2018.



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ATTORNEYS FOR DUKE ENERGY PROGRESS, LLC





BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1176

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

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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”).

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

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

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

3 A. Yes, I provided testimony in Docket No. E-2, Sub 1143 on DEP's 2017  
4 JAAR cost recovery application.

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 1143. 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, 2017, as well as estimated costs for the rate period December  
11 2018 through November 2019.

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 HAS 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 2018 through November 2019. 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 2017 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.

1 Exhibit H – Computes the monthly revenue requirement to cover the costs  
2 incurred in the four-month period between the date of acquisition and the  
3 implementation of the Initial Rider (August through November 2015) that  
4 the Company is deferring. DEP is amortizing these deferred costs over a  
5 three-year period beginning December 1, 2015. The amortization period  
6 ends November 30, 2018.

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

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

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

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

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



1 A. The adjustments in item 4 must be included in the JAAR until retail and  
2 wholesale cost allocations are adjusted in a North Carolina retail rate case to  
3 reflect the change in jurisdictional allocation factors resulting from the  
4 additional NCEMPA load that will be served by the Company's portfolio of  
5 generating facilities. As a consequence of the joint agency asset purchase, a  
6 greater portion of the cost of the Company's other generating facilities  
7 reflected in DEP's existing base rates, should be allocated to its wholesale  
8 jurisdiction, while a lesser portion should be allocated to its retail  
9 jurisdictions. On Exhibits G-TU and G-1-TU the Company shows the  
10 decrease in amounts that would be allocated to North Carolina retail  
11 jurisdiction in DEP's general rate case in Docket No. E-2, Sub 1023 if  
12 additional wholesale sales to NCEMPA had been reflected. In this filing,  
13 the annual revenue reduction to North Carolina retail revenue requirements  
14 for the test period January 2017 through December 2017 totals \$87 million.  
15 However, for the prospective period December 2018 through November  
16 2019, the jurisdictional reallocation credit (revenue reduction) is not  
17 applicable. The reallocation between retail and wholesale jurisdictions is  
18 reflected in the base rates approved as a part of DEP's base rate filing in  
19 Docket No. E-2, Sub 1142. As such, the annual revenue reduction will not  
20 be included in the JAAR revenue requirements beyond March 16, 2018 (the  
21 effective date for new base rates under DEP's most recent rate case).

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

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

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

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

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

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

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

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

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

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

8 A. For the true-up calculations, the Company intends to file two versions of the  
9 C Exhibits each year. One set of Exhibits will support the estimated  
10 levelized revenue requirement for the test period. This version of the  
11 Exhibits may be revised/restated at the beginning of the year to reflect  
12 changes in certain key inputs (e.g., changes that impact the after-tax cost of  
13 capital). For test year 2017, there were no revisions to the estimated  
14 levelized calculations (as filed on Exhibits C-1-E through C-6-E under  
15 Docket No. E-2, Sub 1143). A second set of C Exhibits is included in the  
16 C-TU set of work papers to compute the true-up for the difference between  
17 the estimated unlevelized revenue requirements for the test period compared  
18 to the actual requirements for the test period.

19 For prospective period December 2018 through November 2019, the  
20 levelization schedules (C-1-E through C-6-E) have been recast to reflect the  
21 new capital structure and returns as approved in DEP's most recent rate case  
22 and the new composite tax rate based on the Tax Cuts and Jobs Act of 2017.

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 2017 to the estimated  
11 unlevel revenue requirement for test period 2017 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 2019, the Company will compare the actual  
14 unlevel revenue requirements for test period 2018 to the original unlevel  
15 revenue requirement for 2018 to compute a true-up for the 2018 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 2017 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 2016 cost of service study. As of the beginning of the  
16 2017 test period, the 2016 cost of service study was the latest one available.

17 **Q. WHAT ARE THE IMPACTS OF DEP'S MOST RECENT RATE**  
18 **CASE ON THE JAAR?**

19 A. DEP filed for a base rate case adjustment in Docket No. E-2, Sub 1142 in  
20 the summer of 2017. The Commission approved new rates in its February  
21 23, 2018 *Order Accepting Stipulation, Deciding Contested Issues and*  
22 *Granting Partial Rate Increase*, and the new rates became effective March  
23 16, 2018. The terms of the approved new rates resulted in the following

1 changes which impact the prospective revenue calculations in JAAR: 1)  
2 new debt and equity return rates as well as a revised capital structure were  
3 approved; 2) new depreciation rates for capital assets were approved; and 3)  
4 the reallocation of the cost of generating facilities in rate base between retail  
5 and wholesale jurisdictions was incorporated into base rates.

6 The new return rates and capital structure impact the weighted  
7 average cost of capital which is used to calculate the return needed on  
8 incremental investments in rate base (including assets subject to levelized  
9 recovery, other assets acquired and capital additions). In addition, the  
10 changes in weighted average cost of capital impact the calculation of the  
11 levelized annuity payments on assets subject to levelization.

12 A new depreciation study was filed and approved in connection with  
13 the rate case. In addition to new depreciation rates, the plant retirement date  
14 for Roxboro Fossil Unit 4 and Roxboro Common was updated. Updated  
15 composite depreciation rates based on the new study were used to estimate  
16 depreciation expense on capital additions for the prospective period. In  
17 addition, the levelization recovery period for Roxboro was updated to  
18 reflect the new retirement date.

19 Composite depreciation rates were previously used to estimate  
20 future depreciation expense for assets subject to levelized recovery.  
21 Composite rates are established such that they can be applied to the total  
22 amount of depreciable base for generating plant assets, taking into  
23 consideration the total amount of accumulated depreciation to-date and the

1 remaining balance that must be depreciated in the future using the  
2 composite rates. Use of the new composite rates in the levelization  
3 calculations resulted in over recovery of the acquisition costs. The portion  
4 of the assets acquired from NCEMPA were more depreciated than the  
5 portion of the assets owned by DEP. As a result, the application of  
6 composite depreciation rates to the subset of acquired assets produces an  
7 inappropriate over recovery. Effective with this filing, depreciation expense  
8 for assets subject to levelization has been computed such that it will recover  
9 the acquisition cost plus the latest cost of removal estimate. See Exhibit C-  
10 11-E.

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

13 A. The North Carolina retail revenue requirement is allocated among customer  
14 classes, as shown on Exhibits A-E and A-TU, using the production demand  
15 allocation factors from the Company's 2017 cost of service study. The  
16 allocated revenue requirement for each North Carolina retail customer class  
17 is then divided by estimated billing units, either kWh or kW, to produce a  
18 billing factor per unit.

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

21 A. The information to compute the rider comes from three sources. The  
22 acquisition costs for the generating assets purchased are based on the actual  
23 amounts paid to NCEMPA to complete the purchase. For actuals associated



1 with nuclear fuel, dry cask storage, materials and supplies inventory, capital  
2 additions and operations and maintenance expenses, the primary source of  
3 data is DEP's internal accounting records, including records from the  
4 general ledger as well as records from its asset accounting sub ledger. The  
5 Company's books, records and reports are subject to review and audit by  
6 regulatory agencies, as well as periodic audits by independent auditors to  
7 provide assurances that, in all material respects, internal accounting controls  
8 are operating effectively and the Company's financial statements are  
9 accurate. The estimated costs for the December 2018 through November  
10 2019 rate period are based on information from the Company's financial  
11 budget. In most cases the data gathered is recorded and captured at a  
12 generating unit level, and then multiplied by the unit ownership percentage  
13 purchased by DEP to determine the incremental amounts that should be  
14 recovered through this rider.

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

18 A. During the test period, calendar year 2017, the Company collected more  
19 revenue than its revenue requirement, resulting in an over collection. The  
20 key drivers of the over collection were lower operating expenses and lower  
21 revenue requirement associated with capital additions. With respect to  
22 operating expenses, the reduction is attributable to lower outage costs which  
23 were offset partially by higher administrative and general expenses. The

1 increase in administrative and general expenses is due to the expiration of a  
2 credit that was given to NCEMPA based on previous contract terms through  
3 2016. Capital additions placed in service through December 31, 2017 are  
4 lower than estimated, resulting in less depreciation expense and lower  
5 returns being recovered.

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

11 **Q. HOW DO THE ESTIMATED COSTS FOR THE RATE PERIOD**  
12 **DECEMBER 2018 THROUGH NOVEMBER 2019 COMPARE TO**  
13 **THE LEVEL OF ESTIMATED COSTS IN CURRENT RATES?**

14 A. The estimated costs in this filing for the rate period December 2018 through  
15 November 2019 are lower than the costs that were estimated for the prior  
16 rate period December 2017 through November 2018 which are reflected in  
17 current rates. The key drivers of the decrease are reductions in the levelized  
18 revenue requirement and the amortization of deferred costs. The levelized  
19 revenue requirement associated with assets in service at the time of  
20 acquisition decreased due to the changes in the weighted average cost of  
21 capital as a result of new debt and equity returns approved under DEP's  
22 most recent rate case and the decrease in the corporate federal tax rate due  
23 to the Tax Cuts and Jobs Act of 2017. The revenue requirement related to

1 the deferred costs for the four-month period between the date of acquisition  
2 and the Initial Rider (August – November 2015) is no longer applicable.  
3 DEP amortized these costs over a three-year period which ends November  
4 30, 2018. In addition, estimated operating expenses decreased due to lower  
5 operation and maintenance costs as a result of reduced outage expenditures.

6 The decreases in the estimated revenue requirement were partially  
7 offset by increases for capital additions and the jurisdictional reallocation  
8 credit. The estimated operating expenses (depreciation) and return on  
9 capital additions increased due to more assets going into service. Base  
10 rates as approved and effective March 16, 2018 in Docket No. E-2, Sub  
11 1142 reflect an updated allocation of generating facilities in rate base  
12 between retail and wholesale jurisdictions. As such, the jurisdictional  
13 reallocation credit (revenue reduction) is no longer needed in this rider.

14 **Q. WHAT WAS THE IMPACT OF THE TAX CUTS AND JOBS ACT**  
15 **OF 2017 ON THE JOINT AGENCY ASSET RIDER?**

16 A. The Tax Cuts and Jobs Act of 2017 contains several provisions that  
17 impacted the JAAR revenue requirements. First and foremost, the  
18 corporate federal tax rate decreased to 21% from 35%; the manufacturing  
19 deduction was eliminated, and bonus depreciation for future periods was  
20 limited.

21 The decrease in the corporate tax rate impacted the amount of rate  
22 base, the amount of return on rate base and the amount of levelized revenue  
23 requirements. The reduction in the corporate federal tax rate impacted the

1 deferred tax balances included in rate base associated with assets subject to  
2 levelization, nuclear fuel assets and capital additions. Adjustments to  
3 restate deferred tax balances to reflect the amount that will be realized by  
4 the Company using the new income tax rate and the elimination of the  
5 manufacturing deduction were made in December 2017. The adjustments  
6 are reflected as separate lines on the applicable schedules. The excess  
7 deferred taxes associated with this adjustment will be returned to customers  
8 in conjunction with other excess deferred tax amounts in DEP's next rate  
9 case, or as otherwise directed by the Commission.

10 In addition to the impact on deferred tax balances, the tax rate  
11 reduction impacted the amount of income tax associated with the equity  
12 return and also impacted the after-tax cost of capital. Both items decreased  
13 with the implementation of the 21% tax rate and the elimination of the  
14 manufacturing deduction. The estimated levelized revenue calculations  
15 reflect both the lower taxes due on the equity return starting in 2018 and the  
16 lower after-tax cost of capital used to determine the level payment. The  
17 prospective revenue requirement for other assets acquired and capital  
18 additions also reflect the reduced taxes due on the pre-tax cost of capital.

19 Limitations on bonus depreciation related to the third provision  
20 discussed above are reflected in the estimates of tax amortization for  
21 nuclear fuel and depreciation of capital additions for the prospective  
22 revenue calculations.

1 **Q. FILED EXHIBIT A-1-TU REFLECTS A CUMULATIVE**  
2 **REGULATORY FEE ADJUSTMENT. EXPLAIN THE NATURE OF**  
3 **THIS ADJUSTMENT.**

4 A. While preparing the exhibits for the current year filing, it was determined  
5 that the Revenue Collected amounts reported in column B inadvertently  
6 excluded the regulatory fee which is being collected through the rider. The  
7 adjustment line calculates the regulatory fee associated with revenue  
8 collected from December 2015 – December 2016 and the impact on the  
9 required returns and the rolling recovery factor balance. Revenue collected  
10 amounts for test year 2017 appropriately reflect the regulatory fee.

11 **Q. HOW ARE FUEL-RELATED BENEFITS ASSOCIATED WITH THE**  
12 **ACQUISITION OF THE JOINT AGENCY ASSETS REFLECTED IN**  
13 **CUSTOMER RATES?**

14 A. The fuel-related benefits arise from the reduction in system average fuel  
15 costs per kilowatt-hour which results from the addition of lower cost  
16 generation to DEP's generation portfolio. The actual fuel savings continue  
17 to be reflected in DEP's fuel costs and in its subsequently proposed fuel  
18 rates. In compliance with Rule R8-70(e)(1)(vi), the Company has included  
19 as Exhibit L a report of the actual fuel savings experienced during the test  
20 period from January 2017 – December 2017. The exhibit shows a total of  
21 \$41 million in savings for the test period.

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

- 1 A. The requested rate decrease represents a 0.4%, 0.5% and 0.5% decrease in  
 2 rates for the average residential, commercial and industrial customer,  
 3 respectively. The impact of the rate change for a residential customer  
 4 consuming 1,000 kWh per month is a decrease of \$0.49.
- 5 **Q. WHAT SPECIFIC REQUEST IS BEING MADE OF THE**  
 6 **COMMISSION?**
- 7 A. The Company requests that the Commission approve the following Joint  
 8 Agency Asset Rider rates, to become effective December 1, 2018. The  
 9 estimated costs recovered in these rates will be subject to true-up in  
 10 subsequent annual rider proceedings.

Rate Class	Applicable Schedule(s)	Incremental Rate*
<b>Non-Demand Rate Class (dollars per kilowatt-hour)</b>		
Residential	RES, R-TOUD, R-TOUE, R-TOU	0.00427
Small General Service	SGS, SGS-TOUE	0.00513
Medium General Service	CH-TOUE, CSE, CSG	0.00382
Seasonal and Intermittent Service	SI	0.00383
Traffic Signal Service	TSS, TFS	0.00219
Outdoor Lighting Service	ALS, SLS, SLR, SFLS	
<b>Demand Rate Classes (dollars per kilowatt)</b>		
Medium General Service	MGS, GS-TES, AP-TES, SGS-TOU	1.27
Large General Service	LGS, LGS-TOU	1.30

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

- 12 **Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**
- 13 A. Yes, it does.

## SUMMARY OF EXHIBITS

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 2018 - NOVEMBER 2019
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

## SUMMARY OF EXHIBITS

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

EXHIBIT D-4-E	ESTIMATED DRY CASK STORAGE BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
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, 2017
EXHIBIT E-3-E	ACTUAL DEPRECIATION EXPENSE on CAPITAL ADDITIONS by GENERATING UNIT by month FROM DATE of PURCHASE through DECEMBER 31, 2017
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, 2018
EXHIBIT A - TU	CALCULATION OF JOINT AGENCY ASSET RIDER
EXHIBIT A-1 -TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR



## SUMMARY OF EXHIBITS

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

EXHIBIT B - TU	CALCULATION OF NC RETAIL NCEMPA RIDER REVENUE for TEST YEAR ENDING DECEMBER 31, 2017
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, 2017
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
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 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 2017
EXHIBIT D-1B - TU	ACCUMULATED DEFERRED INCOME TAXES ASSOCIATED WITH NUCLEAR FUEL SINCE THE DATE OF PURCHASE

## SUMMARY OF EXHIBITS

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

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 2017
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 2017
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 2017 ADDITIONS
EXHIBIT E-5 - TU	DEFERRED TAXES ON CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH SINCE THE DATE OF PURCHASE VINTAGE YEAR 2016 ADDITIONS
EXHIBIT E-6 - 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
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, 2019
EXHIBIT L	FUEL SAVINGS BY CUSTOMER CLASS RELATED TO FACILITIES ACQUIRED FROM NCEMPA

SUMMARY RATE

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

<u>Line No.</u>	<u>Description</u>	<u>Prospective Rate (a)</u> (Col. A)	<u>Rolling Recovery Factor (b)</u> (Col. B)	<u>Combined Rate</u> (Col. C) = A + B	
Allocation of monthly revenue to customer groups:					
Customers billed based on KWH					
1	Residential	\$ 0.00456	\$ (0.00029)	\$ 0.00427	per KWH
2	Small General Service	\$ 0.00542	\$ (0.00029)	\$ 0.00513	per KWH
3	Medium General Service -KWH	\$ 0.00411	\$ (0.00029)	\$ 0.00382	per KWH
4	Seasonal Intermittent	\$ 0.00412	\$ (0.00029)	\$ 0.00383	per KWH
5	Lighting	\$ -	\$ -	\$ -	per KWH
6	Traffic Signal	\$ 0.00248	\$ (0.00029)	\$ 0.00219	per KWH
Customers billed based on KW					
7	Medium General Service -KW	\$ 1.35	\$ (0.08)	\$ 1.27	per KW
8	Large General Service	\$ 1.38	\$ (0.08)	\$ 1.30	per KW

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

EXHIBIT A - E

DUKE ENERGY PROGRESS, LLC  
NCEMPA GENERATION ASSET PURCHASE  
CALCULATION OF JOINT AGENCY ASSET RIDER  
FOR DECEMBER 2018 - NOVEMBER 2019

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		\$ 147,654 (a)			
Allocation of monthly revenue to customer classes:						
Customers billed based on KWH						
2	Residential	48.5813%	\$ 71,732		15,734,225,000	\$ 0.00456 per KWH
3	Small General Service	6.5799%	\$ 9,716		1,793,551,000	\$ 0.00542 per KWH
4	Medium General Service -KWH	0.0247%	\$ 37		8,875,507	\$ 0.00411 per KWH
5	Seasonal Intermittent	0.1462%	\$ 216		52,470,176	\$ 0.00412 per KWH
6	Lighting	0.0000%	\$ -			
7	Traffic Signal	0.0082%	\$ 12		4,888,497	\$ 0.00248 per KWH
		<u>55.3404%</u>	<u>\$ 81,712</u>			
Customers billed based on KW						
8	Medium General Service -KW	28.7789%	\$ 42,493	31,580,896		\$ 1.35 per KW
9	Large General Service	15.8808%	\$ 23,449	16,947,042		\$ 1.38 per KW
		<u>44.6596%</u>	<u>\$ 65,942</u>			
10		<u>100.0000%</u>	<u>\$ 147,654</u>			

Notes:

- (a) From Exhibit B-E, Line 7
- (b) From Exhibit I-E, Column D
- (c) From Exhibit K-E, Billing Determinants for the Twelve Months Ended November 30, 2019

EXHIBIT B - E

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 2018 - NOVEMBER 2019  
 (Thousands of Dollars)

Line No.	<u>Description</u>	NC Retail Annual Revenue Amount (f) (Col A)
1	Levelized recovery of pretax cost of certain acquisition costs at the purchase date	\$ 56,314 (a)
2	Incremental pretax cost for acquisition costs not included in the levelization of costs	\$ 8,276 (b)
3	Incremental pretax cost for financing and operating costs related to capital additions since the purchase date	\$ 12,473 (c)
4	Incremental pretax cost for operating costs on acquired assets	<u>\$ 70,385 (d)</u>
5	Total annual pre-tax deferred cost for joint agency asset rider (Line 1 + Line 2 + Line 3 + Line 4)	\$ 147,447
6	Regulatory fee (Line 8 / (1 - 0.140%) x 0.140%)	<u>\$ 207 (e)</u>
7	Total annual revenue for calculation of joint agency asset rider (Line 7 + Line 8)	<u><u>\$ 147,654</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 2017 cost of service study of 61.33723%

## EXHIBIT C - E

DUKE ENERGY PROGRESS, LLC  
 NCEMPA GENERATION ASSET PURCHASE  
 SUMMARY OF ANNUAL LEVELIZATION REVENUE TO BE INCLUDED IN THE JOINT AGENCY PURCHASE RIDER  
 FOR DECEMBER 2018 - NOVEMBER 2019  
 (Thousands of Dollars)

<u>Line No.</u>	<u>Description</u>	<u>Annual NC Retail Revenue Amount</u> (Col A)
1	Levelized Revenue related to purchase of the Harris Nuclear Unit 1	\$ 20,565 (a)
2	Levelized Revenue related to purchase of the Brunswick Nuclear Unit 1	\$ 6,014 (b)
3	Levelized Revenue related to purchase of the Brunswick Nuclear Unit 2	\$ 6,002 (c)
4	Levelized Revenue related to purchase of the Mayo Coal Unit	\$ 4,891 (d)
5	Levelized Revenue related to purchase of the Roxboro Coal Unit	\$ 622 (e)
6	Levelized Revenue related to the Acquisition costs above net book value for the above plants	\$ 18,219 (f)
7	Total annual levelized revenue (Line 1 + Line 2 + Line 3 + Line 4 + Line 5 + Line 6)	<u>\$ 56,314</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

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
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)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)
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	61.33723% (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 INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
									INTEREST (Col I)	EQUITY (Col J)							
Beg Balance July 31, 2015	\$ 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	\$ 4,301
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	\$ 14,683
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	\$ 24,699
2018	\$ 215,997	7.700%	\$ 18,687	\$ 10,908	\$ 2,563	\$ 10,683	\$ 7,779	\$ 210,486	\$ 4,092	\$ 10,836	\$ 3,329	\$ 26,035	\$ 24,460				
2019	\$ 208,218	6.930%	\$ 16,818	\$ 9,039	\$ 2,124	\$ 12,807	\$ 7,779	\$ 200,363	\$ 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	\$ 171,934	\$ 3,342	\$ 8,851	\$ 2,719	\$ 22,691	\$ 16,607				
2023	\$ 177,103	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	\$ 169,324	5.900%	\$ 14,319	\$ 6,540	\$ 1,537	\$ 20,685	\$ 7,779	\$ 153,297	\$ 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	\$ 134,660	\$ 2,618	\$ 6,932	\$ 2,130	\$ 19,458	\$ 11,094				
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	\$ 138,209	5.900%	\$ 14,319	\$ 6,540	\$ 1,537	\$ 26,844	\$ 7,779	\$ 116,023	\$ 2,255	\$ 5,973	\$ 1,835	\$ 17,842	\$ 8,979				
2029	\$ 130,430	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	\$ 91,536	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	\$ 67,632	\$ 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	\$ 52,642	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	\$ 13,748	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 2,648	\$ 7,779	\$ 14,075	\$ 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)	\$ -	\$ (6,353)	\$ (1,493)	\$ (673)	\$ 6,353	\$ 2,719	\$ 53	\$ 140	\$ 6,589	\$ 1,078				
TOTAL			\$ 242,200	\$ (2,861)			\$ 245,061		\$ 65,187	\$ 171,072	\$ 59,062	\$ 540,381	\$ 242,330				

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 - 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 and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J - 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	\$ 242,330	\$ 267,030
Annual payment	\$ 1,902	\$ 18,663	\$ 20,565
Monthly payment	\$ 159	\$ 1,555	\$ 1,714

EXHIBIT C-2-E

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
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)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)
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	61.33723% (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 EQUITY (Col I) (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)	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	\$ 50,230	7.700%	\$ 4,956	\$ 2,109	\$ 496	\$ 1,561	\$ 2,847	\$ 50,340	\$ 979	\$ 2,592	\$ 796	\$ 7,213	\$ 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)	\$ 200	\$ 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 - 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 and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J - 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-3-E

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
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)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)
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	61.33723% (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		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
									INTEREST (Col I)	EQUITY (Col J)							
Beg Balance July 31, 2015	\$ 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%	\$ 4,557	\$ 1,505	\$ 354	\$ 1,941	\$ 3,052	\$ 48,468	\$ 942	\$ 2,495	\$ 766	\$ 7,256	\$ 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	\$ 2,440	\$ 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 - 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 and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J - 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	\$ 60,937
Annual payment	\$ 531	\$ 5,471	\$ 6,002
Monthly payment	\$ 44	\$ 456	\$ 500

EXHIBIT C-4-E

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
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)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)
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	61.33723% (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		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	EQUITY							
									(Col I)	(Col J)							
Beg Balance July 31, 2015	\$ 49,060																
2015	\$ 47,696	3.750%	\$ 1,765	\$ 401	\$ 141	\$ 141	\$ 1,365	\$ 48,307	\$ 432	\$ 1,088	\$ 590	\$ 3,475		\$ 2,495	\$ 980	\$ 996	
2016	\$ 44,412	7.219%	\$ 3,416	\$ 133	\$ 45	\$ 186	\$ 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)	\$ 99	\$ 3,308	\$ 42,592	\$ 915	\$ 2,303	\$ 1,187	\$ 7,712		\$ 5,737	\$ 1,975	\$ 5,742	\$ 5,395
2018	\$ 38,735	6.177%	\$ 2,959	\$ 590	\$ 139	\$ 237	\$ 2,369	\$ 39,752	\$ 773	\$ 2,046	\$ 629	\$ 5,817	\$ 5,465				
2019	\$ 36,366	5.713%	\$ 2,737	\$ 368	\$ 86	\$ 324	\$ 2,369	\$ 37,270	\$ 725	\$ 1,919	\$ 589	\$ 5,602	\$ 4,944				
2020	\$ 33,997	5.285%	\$ 2,532	\$ 162	\$ 38	\$ 362	\$ 2,369	\$ 34,839	\$ 677	\$ 1,794	\$ 551	\$ 5,391	\$ 4,470				
2021	\$ 31,628	4.888%	\$ 2,341	\$ (28)	\$ (7)	\$ 356	\$ 2,369	\$ 32,454	\$ 631	\$ 1,671	\$ 513	\$ 5,184	\$ 4,038				
2022	\$ 29,259	4.522%	\$ 2,166	\$ (203)	\$ (48)	\$ 308	\$ 2,369	\$ 30,112	\$ 585	\$ 1,550	\$ 476	\$ 4,981	\$ 3,645				
2023	\$ 26,890	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ 253	\$ 2,369	\$ 27,794	\$ 540	\$ 1,431	\$ 440	\$ 4,780	\$ 3,287				
2024	\$ 24,521	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ 199	\$ 2,369	\$ 25,480	\$ 495	\$ 1,312	\$ 403	\$ 4,579	\$ 2,958				
2025	\$ 22,152	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ 144	\$ 2,369	\$ 23,165	\$ 450	\$ 1,193	\$ 366	\$ 4,378	\$ 2,657				
2026	\$ 19,783	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ 90	\$ 2,369	\$ 20,851	\$ 405	\$ 1,073	\$ 330	\$ 4,178	\$ 2,382				
2027	\$ 17,414	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ 35	\$ 2,369	\$ 18,536	\$ 360	\$ 954	\$ 293	\$ 3,977	\$ 2,130				
2028	\$ 15,045	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ (19)	\$ 2,369	\$ 16,222	\$ 315	\$ 835	\$ 257	\$ 3,776	\$ 1,900				
2029	\$ 12,676	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ (74)	\$ 2,369	\$ 13,907	\$ 270	\$ 716	\$ 220	\$ 3,575	\$ 1,690				
2030	\$ 10,307	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ (128)	\$ 2,369	\$ 11,593	\$ 225	\$ 597	\$ 183	\$ 3,375	\$ 1,499				
2031	\$ 7,938	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ (183)	\$ 2,369	\$ 9,278	\$ 180	\$ 478	\$ 147	\$ 3,174	\$ 1,324				
2032	\$ 5,569	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ (237)	\$ 2,369	\$ 6,964	\$ 135	\$ 359	\$ 110	\$ 2,973	\$ 1,166				
2033	\$ 3,200	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ (292)	\$ 2,369	\$ 4,649	\$ 90	\$ 239	\$ 74	\$ 2,772	\$ 1,021				
2034	\$ 831	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ (346)	\$ 2,369	\$ 2,335	\$ 45	\$ 120	\$ 37	\$ 2,572	\$ 890				
2035 SIX MONTHS	\$ (289)	2.231%	\$ 1,069	\$ (51)	\$ (12)	\$ (358)	\$ 1,120	\$ 624	\$ 12	\$ 32	\$ 10	\$ 1,174	\$ 382				
TOTAL		100.000%	\$ 47,827	\$ (1,521)			\$ 49,349	\$ 492,614	\$ 9,250	\$ 24,189	\$ 8,716	\$ 91,504	\$ 45,848				

- 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 - 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 and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J - 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	\$ 45,848	\$ 51,243
Annual payment	\$ 515	\$ 4,376	\$ 4,891
Monthly payment	\$ 43	\$ 365	\$ 408

EXHIBIT C-5-E

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
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)
AFTER TAX COST OF CAPITAL DEPRECIATION RATE	6.5956% (a)	6.6189% (b)	6.4416% (e)
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	61.33723% (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 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
									INTEREST (Col I)	EQUITY (Col J)							
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	\$ 5,365.58	\$ 115	\$ 290	\$ 149	\$ 1,036		\$ 899	\$ 137	\$ 418	\$ 393
2018	\$ 4,786	6.177%	\$ 394	\$ 58	\$ 14	\$ 5	\$ 336	\$ 4,956	\$ 96	\$ 255	\$ 78	\$ 766	\$ 720				
2019	\$ 4,450	5.713%	\$ 365	\$ 29	\$ 7	\$ 12	\$ 336	\$ 4,609	\$ 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)	\$ 7	\$ 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	\$ 2,959	\$ 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	\$ 1,338	\$ 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					

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 - 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 and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J - 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

	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-6-E

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
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	6.5956% (a)	6.6189% (b)	6.4416% (e)
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	61.33723% (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 DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK AMORTIZATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST EQUITY (Col I) (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	\$ 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	\$ 184,259	7.700%	\$ 16,521	\$ 8,695	\$ 2,043	\$ 9,155	\$ 7,826	\$ 180,038	\$ 3,500	\$ 9,268	\$ 2,847	\$ 23,441	\$ 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	\$ 12,113	\$ 7,826	\$ 161,059	\$ 3,131	\$ 8,291	\$ 2,547	\$ 21,795	\$ 18,073				
2021	\$ 160,782	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	\$ 143,053	\$ 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	\$ 17,802	\$ 7,826	\$ 116,160	\$ 2,258	\$ 5,980	\$ 1,837	\$ 17,901	\$ 10,864				
2026	\$ 121,653	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	\$ 113,827	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	\$ 89,268	\$ 1,735	\$ 4,596	\$ 1,412	\$ 15,568	\$ 7,835				
2029	\$ 98,175	5.910%	\$ 12,680	\$ 4,855	\$ 1,141	\$ 22,355	\$ 7,826	\$ 80,304	\$ 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	\$ 65,353	\$ 1,270	\$ 3,364	\$ 1,034	\$ 13,494	\$ 5,631				
2032	\$ 74,698	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 18,325	\$ 7,826	\$ 59,366	\$ 1,154	\$ 3,056	\$ 939	\$ 12,975	\$ 5,087				
2033	\$ 66,872	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 16,486	\$ 7,826	\$ 53,379	\$ 1,038	\$ 2,748	\$ 844	\$ 12,456	\$ 4,588				
2034	\$ 59,046	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	\$ 41,406	\$ 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)	\$ 9,130	\$ 7,826	\$ 29,432	\$ 572	\$ 1,515	\$ 465	\$ 10,379	\$ 2,978				
2038	\$ 27,743	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 7,291	\$ 7,826	\$ 23,445	\$ 456	\$ 1,207	\$ 371	\$ 9,859	\$ 2,658				
2039	\$ 19,917	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 5,452	\$ 7,826	\$ 17,459	\$ 339	\$ 899	\$ 276	\$ 9,340	\$ 2,365				
2040	\$ 12,091	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 3,612	\$ 7,826	\$ 11,472	\$ 223	\$ 591	\$ 181	\$ 8,821	\$ 2,099				
2041	\$ 4,265	0.000%	\$ -	\$ (7,826)	\$ (1,839)	\$ 1,773	\$ 7,826	\$ 5,485	\$ 107	\$ 282	\$ 87	\$ 8,302	\$ 1,856				
2042	\$ -	0.000%	\$ -	\$ (4,265)	\$ (1,002)	\$ 771	\$ 4,265	\$ 860	\$ 17	\$ 44	\$ 14	\$ 4,340	\$ 911				
		100.000%	\$ 214,128	\$ 3,281		\$ 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 - 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 and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J - 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

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%

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

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 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

DUKE ENERGY PROGRESS, LLC  
 NCEMPA GENERATION ASSET PURCHASE  
 CALCULATION OF REVENUE REQUIREMENT FOR ACQUISITION COSTS EXCLUDED FROM THE LEVELIZATION  
 EXCLUDING CWIP  
 FOR DECEMBER 2018 - NOVEMBER 2019  
 (Thousands of Dollars)

<u>Line No.</u>		<u>Amount (Col A)</u>
1	Average Net Nuclear Fuel Inventory excluding CWIP	\$ 66,001 (a)
2	Average Deferred Tax Asset (Liability) Associated with Nuclear Fuel	\$ 1,136 (b)
3	Average Materials and Supplies Inventory	\$ 61,100 (c)
4	Average Dry Cask Storage	\$ 4,363 (d)
5	Total average system investment for the rate period (Line 1 + Line 2 + Line 3 + Line 4)	<u>\$ 132,599</u>
6	Allocated to NC retail (Line 5 x 61.33723%)	<u>\$ 81,332 (e)</u>
7	Rate base pre-tax annual cost of capital	8.6740% (f)
8	Total annual NC retail revenues required for financing costs on above investments (Line 6 x Line 7)	<u>\$ 7,055</u>
9	NC retail pre-tax return on deferred tax assets related to NCEMPA's nuclear decommissioning funds	\$ 1,221 (g)
10	Total annual NC retail revenues required for financing costs (Line 8 + Line 9)	<u><u>\$ 8,276</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 2017 cost of service study of: 61.33723%  
 (f) From Exhibit J-E: Cost of Capital, Line 3, Column K  
 (g) From Exhibit D-3-E: Deferred tax asset , Column K

## 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)

EXHIBIT

D-1A-E

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col C)	Total (Col D)
Next Rate Period: December 2018 - November 2019					
1	November	\$ 39,252	\$ 12,494	\$ 14,213	\$ 65,959
2	December	\$ 38,440	\$ 11,598	\$ 13,373	\$ 63,411
3	January	\$ 37,631	\$ 10,689	\$ 12,532	\$ 60,852
4	February	\$ 36,893	\$ 9,906	\$ 11,778	\$ 58,577
5	March	\$ 36,058	\$ 27,190	\$ 10,957	\$ 74,206
6	April	\$ 35,290	\$ 26,363	\$ 10,194	\$ 71,847
7	May	\$ 34,486	\$ 25,490	\$ 9,409	\$ 69,385
8	June	\$ 33,743	\$ 24,668	\$ 8,660	\$ 67,071
9	July	\$ 32,964	\$ 23,824	\$ 7,870	\$ 64,658
10	August	\$ 32,149	\$ 22,975	\$ 7,100	\$ 62,225
11	September	\$ 31,374	\$ 22,157	\$ 6,337	\$ 59,867
12	October	\$ 30,576	\$ 21,293	\$ 19,201	\$ 71,070
13	November	\$ 29,791	\$ 20,446	\$ 18,646	\$ 68,882
14	Average Balance for Next Rate Period	\$ 34,511	\$ 19,930	\$ 11,559	\$ 66,001

EXHIBIT D-1B-E

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 2018 - November 2018					
1	2018 January	\$ (43)	\$ (117)	\$ (65)	\$ (224)
2	2018 February	\$ (27)	\$ (91)	\$ (45)	\$ (162)
3	2018 March	\$ 147	\$ (109)	\$ (62)	\$ (24)
4	2018 April	\$ (40)	\$ (106)	\$ 98	\$ (49)
5	2018 May	\$ (45)	\$ (110)	\$ (44)	\$ (199)
6	2018 June	\$ (39)	\$ (102)	\$ (50)	\$ (190)
7	2018 July	\$ (41)	\$ (110)	\$ (54)	\$ (205)
8	2018 August	\$ (44)	\$ (107)	\$ (56)	\$ (207)
9	2018 September	\$ (40)	\$ (104)	\$ (48)	\$ (192)
10	2018 October	\$ (46)	\$ (111)	\$ (54)	\$ (210)
11	2018 November	\$ (44)	\$ (108)	\$ (60)	\$ (212)
Next Rate Period: December 2018 - November 2019					
12	2018 December	\$ (42)	\$ (110)	\$ (66)	\$ (219)
13	2019 January	\$ (62)	\$ (56)	\$ (33)	\$ (151)
14	2019 February	\$ (45)	\$ (27)	\$ (12)	\$ (85)
15	2019 March	\$ (68)	\$ 133	\$ (28)	\$ 37
16	2019 April	\$ (53)	\$ (37)	\$ (15)	\$ (105)
17	2019 May	\$ (61)	\$ (48)	\$ (20)	\$ (129)
18	2019 June	\$ (46)	\$ (36)	\$ (11)	\$ (94)
19	2019 July	\$ (55)	\$ (41)	\$ (21)	\$ (117)
20	2019 August	\$ (63)	\$ (42)	\$ (16)	\$ (122)
21	2019 September	\$ (54)	\$ (35)	\$ (15)	\$ (104)
22	2019 October	\$ (59)	\$ (46)	\$ 101	\$ (4)
23	2019 November	\$ (56)	\$ (42)	\$ 34	\$ (64)
24	Estimated Accumulated Deferred Tax Asset / (Liability) as of November 30, 2019				\$ 652
25	Average balance for the Next Rate Period				\$ 312

ADIT Asset (Liability) Balance Associated with Nuclear Fuel				
	Brunswick 1 (Col E)	Brunswick 2 (Col F)	Harris (Col G)	Total (Col H)
Beginning Balance	\$ (275)	\$ (1,615)	\$ 494	\$ (1,397)
	\$ (233)	\$ (1,498)	\$ 558	\$ (1,173)
	\$ (206)	\$ (1,408)	\$ 603	\$ (1,011)
	\$ (353)	\$ (1,299)	\$ 665	\$ (987)
	\$ (312)	\$ (1,193)	\$ 567	\$ (938)
	\$ (267)	\$ (1,083)	\$ 611	\$ (739)
	\$ (228)	\$ (981)	\$ 661	\$ (549)
	\$ (187)	\$ (871)	\$ 715	\$ (344)
	\$ (144)	\$ (764)	\$ 771	\$ (137)
	\$ (103)	\$ (661)	\$ 819	\$ 55
	\$ (58)	\$ (550)	\$ 873	\$ 265
	\$ (14)	\$ (442)	\$ 932	\$ 477
	\$ 28	\$ (332)	\$ 999	\$ 695
	\$ 90	\$ (275)	\$ 1,032	\$ 847
	\$ 136	\$ (248)	\$ 1,044	\$ 932
	\$ 204	\$ (381)	\$ 1,072	\$ 895
	\$ 256	\$ (344)	\$ 1,087	\$ 999
	\$ 317	\$ (296)	\$ 1,107	\$ 1,128
	\$ 363	\$ (260)	\$ 1,118	\$ 1,222
	\$ 418	\$ (218)	\$ 1,139	\$ 1,339
	\$ 482	\$ (176)	\$ 1,155	\$ 1,461
	\$ 536	\$ (141)	\$ 1,170	\$ 1,565
	\$ 595	\$ (95)	\$ 1,069	\$ 1,570
	\$ 652	\$ (52)	\$ 1,035	\$ 1,634
	\$ 652	\$ (52)	\$ 1,035	\$ 1,634
	\$ 312	\$ (251)	\$ 1,074	\$ 1,136

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 23.50%

EXHIBIT D-1C-E

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

Line No.	TAX DEPRECIATION EXPENSE MINUS BOOK AMORTIZATION				TAX BASIS DEPRECIATION EXPENSE ON NUCLEAR FUEL BY MONTH				BOOK AMORTIZATION EXPENSE ON NUCLEAR FUEL BY MONTH					
	Brunswick 1 (Col A) = E - I	Brunswick 2 (Col B) = F - J	Harris (Col C) = G - K	Total (Col D) = H - L	Brunswick 1 (Col E)	Brunswick 2 (Col F)	Harris (Col G)	Total (Col H)	Brunswick 1 (Col I)	Brunswick 2 (Col J)	Harris (Col K)	Total (Col L)		
Current Rate Period: January 2018 - November 2018														
1	2018	January	\$ (182)	\$ (497)	\$ (276)	\$ (955)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 861	\$ 924	\$ 834	\$ 2,619
3	2018	February	\$ (114)	\$ (385)	\$ (190)	\$ (689)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 794	\$ 812	\$ 748	\$ 2,354
4	2018	March	\$ 625	\$ (464)	\$ (263)	\$ (102)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 55	\$ 891	\$ 820	\$ 1,766
5	2018	April	\$ (171)	\$ (453)	\$ 416	\$ (208)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 851	\$ 880	\$ 142	\$ 1,872
6	2018	May	\$ (192)	\$ (468)	\$ (186)	\$ (845)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 871	\$ 894	\$ 744	\$ 2,509
7	2018	June	\$ (166)	\$ (432)	\$ (212)	\$ (810)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 845	\$ 859	\$ 770	\$ 2,474
8	2018	July	\$ (174)	\$ (468)	\$ (230)	\$ (872)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 854	\$ 894	\$ 788	\$ 2,536
9	2018	August	\$ (186)	\$ (456)	\$ (238)	\$ (879)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 866	\$ 883	\$ 796	\$ 2,544
10	2018	September	\$ (171)	\$ (441)	\$ (204)	\$ (816)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 851	\$ 868	\$ 762	\$ 2,481
11	2018	October	\$ (194)	\$ (470)	\$ (230)	\$ (895)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 874	\$ 897	\$ 788	\$ 2,559
12	2018	November	\$ (185)	\$ (461)	\$ (255)	\$ (901)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 865	\$ 888	\$ 812	\$ 2,565
Next Rate Period: December 2018 - November 2019														
13	2018	December	\$ (180)	\$ (469)	\$ (282)	\$ (932)	\$ 680	\$ 427	\$ 558	\$ 1,664	\$ 860	\$ 896	\$ 840	\$ 2,596
14	2019	January	\$ (264)	\$ (240)	\$ (141)	\$ (644)	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 863	\$ 908	\$ 841	\$ 2,613
15	2019	February	\$ (193)	\$ (115)	\$ (53)	\$ (362)	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 793	\$ 783	\$ 754	\$ 2,330
16	2019	March	\$ (289)	\$ 568	\$ (120)	\$ 159	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 888	\$ 100	\$ 821	\$ 1,809
17	2019	April	\$ (223)	\$ (159)	\$ (62)	\$ (445)	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 823	\$ 827	\$ 763	\$ 2,413
18	2019	May	\$ (259)	\$ (205)	\$ (84)	\$ (548)	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 858	\$ 874	\$ 785	\$ 2,516
19	2019	June	\$ (198)	\$ (154)	\$ (48)	\$ (400)	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 797	\$ 822	\$ 749	\$ 2,368
20	2019	July	\$ (234)	\$ (176)	\$ (89)	\$ (499)	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 833	\$ 844	\$ 790	\$ 2,467
21	2019	August	\$ (270)	\$ (180)	\$ (69)	\$ (519)	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 869	\$ 848	\$ 770	\$ 2,487
22	2019	September	\$ (230)	\$ (151)	\$ (63)	\$ (443)	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 829	\$ 819	\$ 764	\$ 2,412
23	2019	October	\$ (252)	\$ (196)	\$ 430	\$ (18)	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 852	\$ 864	\$ 271	\$ 1,987
24	2019	November	\$ (240)	\$ (179)	\$ 146	\$ (273)	\$ 599	\$ 668	\$ 701	\$ 1,968	\$ 840	\$ 847	\$ 555	\$ 2,241
25	Total		\$ (2,833)	\$ (1,657)	\$ (435)	\$ (4,924)	\$ 7,273	\$ 7,776	\$ 8,267	\$ 23,315	\$ 10,105	\$ 9,432	\$ 8,701	\$ 28,239

## EXHIBIT D-2-E

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 2018 - November 2019					
1	2018 November	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
2	2019 December	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
3	2019 January	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
4	2019 February	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
5	2019 March	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
6	2019 April	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
7	2019 May	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
8	2019 June	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
9	2019 July	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
10	2019 August	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
11	2019 September	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
12	2019 October	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
13	2019 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

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

	2015 Actual	2016 Actual	2017 Actual	2018 Estimate
ASSUMPTIONS:				
DECOMMISSIONING FUNDS TRANSFERRED	\$ 287,077			(a)
TAX LIFE USED FOR ACQUIRED NCEMPA ASSETS	15			(b)
COMPOSITE TAX RATE	35.16%	34.59%	34.01%	23.50% (c)
AFTER TAX COST OF CAPITAL	6.6189%			6.4416% (c)
WEIGHTED ANNUAL INTEREST RATE	2.1479%			1.9440% (c)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060%			5.1480% (c)
NC RETAIL ALLOCATION FACTOR	60.27603%	60.60076%	61.33723%	61.33723% (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%	\$ 13,559	\$ 13,559	\$ 3,186	\$ 12,641	\$ 11,048	\$ 215	\$ 569	\$ 175	\$ 958
2019	\$ -	6.930%	\$ 12,203	\$ 12,203	\$ 2,868	\$ 15,509	\$ 14,075	\$ 274	\$ 725	\$ 223	\$ 1,221

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

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 2018 - November 2019		
1	2018 November	\$ 4,363	\$ 4,363
2	2018 December	\$ 4,363	\$ 4,363
3	2019 January	\$ 4,363	\$ 4,363
4	2019 February	\$ 4,363	\$ 4,363
5	2019 March	\$ 4,363	\$ 4,363
6	2019 April	\$ 4,363	\$ 4,363
7	2019 May	\$ 4,363	\$ 4,363
8	2019 June	\$ 4,363	\$ 4,363
9	2019 July	\$ 4,363	\$ 4,363
10	2019 August	\$ 4,363	\$ 4,363
11	2019 September	\$ 4,363	\$ 4,363
12	2019 October	\$ 4,363	\$ 4,363
13	2019 November	\$ 4,363	\$ 4,363
14	Average Balance for Next Rate Period	\$ 4,363	\$ 4,363

## 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

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

Line No.		NC retail Amount (Col A)
1	Average incremental rate base for actual capital additions to plant in service through the end of the next rate period allocated to NCEMPA	\$ 105,527 (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	\$ 74,491 (b)
3	Total average net plant in service on capital additions for the next rate period (Line 1 + Line 2 )	<u>\$ 180,018</u>
4	Allocation to NC retail (Line 3 x Line 11)	<u>\$ 110,418</u>
5	Pre tax cost of capital on Rate base	8.6740% (c)
6	Total annual NC retail revenues required for cost of capital on above investments (Line 4 x Line 5)	<u>\$ 9,578</u>
Incremental operating expenses related to capital additions:		
7	Annual depreciation expense on actual capital additions for the next rate period	\$ 2,529 (d)
8	Annual depreciation expense on estimated capital additions for the next rate period	\$ 2,191 (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>\$ 4,720</u>
11	NC retail allocation factor	61.33723% (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>\$ 2,895</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>\$ 12,473</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  
 (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 2017 cost of service study as adjusted for NCEMPA Purchase

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	\$ 45,092	\$ (1,236)	\$ (1,557)	\$ (8,292)	\$ 34,007
2	Brunswick 2	\$ 30,680	\$ (709)	\$ (746)	\$ (3,819)	\$ 25,406
3	Brunswick Common	\$ -	\$ -	\$ -	\$ -	\$ -
4	Harris	\$ 44,939	\$ (649)	\$ (831)	\$ (7,036)	\$ 36,423
5	Mayo	\$ 3,335	\$ (118)	\$ (141)	\$ (440)	\$ 2,636
6	Roxboro 4	\$ 4,118	\$ (16)	\$ (34)	\$ (511)	\$ 3,557
7	Roxboro Common	\$ 4,415	\$ (151)	\$ (168)	\$ (597)	\$ 3,498
8	Total	<u>\$ 132,579</u>	<u>\$ (2,879)</u>	<u>\$ (3,478)</u>	<u>\$ (20,695)</u>	<u>\$ 105,527</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 G, Lines 1 - 7

EXHIBIT E-2-E

DUKE ENERGY PROGRESS, LLC  
NCEMPA GENERATION ASSET PURCHASE  
ACTUAL CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH FROM DATE OF PURCHASE THROUGH DECEMBER 31, 2017  
(Thousands of Dollars)

			ACTUAL CAPITAL ADDITIONS FOR THE 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 2016 - November 2017										
1	2017	Beginning Balance	\$ 24,007	\$ 13,753	\$ -	\$ 29,472	\$ 1,982	\$ 860	\$ 3,360	\$ 73,435
2	2017	January	\$ 1,750	\$ 2,288	\$ -	\$ 712	\$ 68	\$ 30	\$ (1)	\$ 4,846
3	2017	February	\$ (12)	\$ 18	\$ -	\$ 483	\$ 157	\$ 42	\$ 28	\$ 716
4	2017	March	\$ 4,830	\$ 674	\$ -	\$ 334	\$ 31	\$ (1)	\$ 7	\$ 5,876
5	2017	April	\$ (1,261)	\$ 5,091	\$ -	\$ 227	\$ (10)	\$ 21	\$ 2	\$ 4,070
6	2017	May	\$ 406	\$ 3,623	\$ -	\$ 402	\$ 460	\$ 340	\$ (1)	\$ 5,229
7	2017	June	\$ 1,694	\$ 2,199	\$ -	\$ 110	\$ 191	\$ 117	\$ 25	\$ 4,336
8	2017	July	\$ 640	\$ 120	\$ -	\$ 4,540	\$ 34	\$ 2,247	\$ 138	\$ 7,720
9	2017	August	\$ 6,173	\$ 753	\$ -	\$ 5,811	\$ 125	\$ 107	\$ 272	\$ 13,241
10	2017	September	\$ 3,227	\$ 1,315	\$ -	\$ 267	\$ 62	\$ 66	\$ (25)	\$ 4,912
11	2017	October	\$ (602)	\$ 143	\$ -	\$ 299	\$ 8	\$ (3)	\$ 99	\$ (56)
12	2017	November	\$ 3,536	\$ (39)	\$ -	\$ 1,174	\$ 94	\$ 114	\$ 35	\$ 4,913
13		Total	\$ 44,389	\$ 29,936	\$ -	\$ 43,832	\$ 3,202	\$ 3,939	\$ 3,939	\$ 129,238
Current Rate Period: December 2017 - November 2018										
14	2017	December	\$ 703	\$ 744	\$ -	\$ 1,107	\$ 133	\$ 179	\$ 476	\$ 3,341
15		Total	\$ 703	\$ 744	\$ -	\$ 1,107	\$ 133	\$ 179	\$ 476	\$ 3,341
16		Total to date	\$ 45,092	\$ 30,680	\$ -	\$ 44,939	\$ 3,335	\$ 4,118	\$ 4,415	\$ 132,579

EXHIBIT E-3-E

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, 2017  
 (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 2016 - November 2017										
1	2017	Beginning Balance	\$ 405	\$ 265	\$ -	\$ 151	\$ 35	\$ 1	\$ 42	\$ 899
2	2017	January	\$ 49	\$ 24	\$ -	\$ 36	\$ 5	\$ 1	\$ 9	\$ 124
3	2017	February	\$ 52	\$ 29	\$ -	\$ 37	\$ 6	\$ 1	\$ 9	\$ 133
4	2017	March	\$ 52	\$ 29	\$ -	\$ 37	\$ 6	\$ 1	\$ 9	\$ 134
5	2017	April	\$ 61	\$ 30	\$ -	\$ 38	\$ 6	\$ 1	\$ 9	\$ 144
6	2017	May	\$ 65	\$ 33	\$ -	\$ 38	\$ 6	\$ 1	\$ 9	\$ 152
7	2017	June	\$ 66	\$ 37	\$ -	\$ 39	\$ 7	\$ 1	\$ 9	\$ 159
8	2017	July	\$ 69	\$ 42	\$ -	\$ 39	\$ 8	\$ 1	\$ 9	\$ 167
9	2017	August	\$ 69	\$ 42	\$ -	\$ 43	\$ 8	\$ 2	\$ 9	\$ 172
10	2017	September	\$ 80	\$ 43	\$ -	\$ 48	\$ 8	\$ 2	\$ 10	\$ 190
11	2017	October	\$ 87	\$ 45	\$ -	\$ 48	\$ 8	\$ 2	\$ 10	\$ 200
12	2017	November	\$ 86	\$ 45	\$ -	\$ 48	\$ 8	\$ 2	\$ 10	\$ 199
13		Total	\$ 1,143	\$ 665	\$ -	\$ 600	\$ 110	\$ 14	\$ 142	\$ 2,673
Current Rate Period: December 2017 - November 2018										
14	2017	December	\$ 93	\$ 44	\$ -	\$ 49	\$ 8	\$ 2	\$ 10	\$ 206
15		Total	\$ 93	\$ 44	\$ -	\$ 49	\$ 8	\$ 2	\$ 10	\$ 206
16		Total depreciation expense to date	\$ 1,236	\$ 709	\$ -	\$ 649	\$ 118	\$ 16	\$ 151	\$ 2,879

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 2017 - November 2018									
1	2017 December								
2	2018 January	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
3	2018 February	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
4	2018 March	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
5	2018 April	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
6	2018 May	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
7	2018 June	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
8	2018 July	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
9	2018 August	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
10	2018 September	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
11	2018 October	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
12	2018 November	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
13	Total	\$ 1,038	\$ 497	\$ -	\$ 554	\$ 94	\$ 23	\$ 112	\$ 2,318
Next Rate Period: December 2018 - November 2019									
14	2018 December	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
15	2019 January	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
16	2019 February	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
17	2019 March	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
18	2019 April	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
19	2019 May	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
20	2019 June	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
21	2019 July	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
22	2019 August	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
23	2019 September	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
24	2019 October	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
25	2019 November	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
26	Total Estimated Additional Depreciation Expense	\$ 1,133	\$ 542	\$ -	\$ 605	\$ 103	\$ 25	\$ 122	\$ 2,529
27	Average Balance of Accumulated Depreciation on actual capital additions in the next rate period (b)	\$ (1,557)	\$ (746)	\$ -	\$ (831)	\$ (141)	\$ (34)	\$ (168)	\$ (3,478)

Notes:  
 (a) Estimated depreciation expense for December 2017 is not needed for this schedule. Actual depreciation expense for 2017 is captured on E-3-E for rider purposes.  
 (b) Amount reflects the weighted average ending balance based on monthly activity.

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

Line No.		Cumulative Additions through December 31, 2016 (Col A) (a)	Deferred Tax Percentage Vintage Years 2015 and 2016 (Col B) (b)	Calculated Deferred Taxes Vintage Years 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	Total Deferred Taxes (Col G) = C + F
1	Brunswick 1	\$ 24,007	24%	\$ (5,762)	\$ 21,085	12%	\$ (2,530)	\$ (8,292)
2	Brunswick 2	\$ 13,753	13%	\$ (1,788)	\$ 16,927	12%	\$ (2,031)	\$ (3,819)
3	Brunswick Common		0%	\$ -		0%	\$ -	\$ -
4	Harris	\$ 29,472	16%	\$ (4,716)	\$ 15,466	15%	\$ (2,320)	\$ (7,036)
5	Mayo	\$ 1,982	14%	\$ (277)	\$ 1,353	12%	\$ (162)	\$ (440)
6	Roxboro 4	\$ 860	14%	\$ (120)	\$ 3,258	12%	\$ (391)	\$ (511)
7	Roxboro Common	\$ 3,360	14%	\$ (470)	\$ 1,055	12%	\$ (127)	\$ (597)
7		<u>\$ 73,435</u>		<u>\$ (13,133)</u>	<u>\$ 59,144</u>		<u>\$ (7,561)</u>	<u>\$ (20,695)</u>

## Notes:

- (a) From Exhibit E-2-E, Line 1  
(b) Amounts represent deferred taxes as a percentage of gross capital additions.  
(c) From Exhibit E-2-E, Line 16 minus Line 1

EXHIBIT E-6-E

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	\$ 31,571	\$ (641)	\$ (3,575)	\$ 27,355
2	Brunswick 2	\$ 6,043	\$ (63)	\$ (637)	\$ 5,344
3	Brunswick Common	\$ -	\$ -	\$ -	\$ -
4	Harris	\$ 37,455	\$ (465)	\$ (5,401)	\$ 31,589
5	Mayo	\$ 1,252	\$ (21)	\$ (124)	\$ 1,108
6	Roxboro 4	\$ 6,550	\$ (101)	\$ (784)	\$ 5,664
7	Roxboro Common	\$ 4,026	\$ (115)	\$ (479)	\$ 3,431
8	Grand Total	<u>\$ 86,897</u>	<u>\$ (1,406)</u>	<u>\$ (11,001)</u>	<u>\$ 74,491</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

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 2017 - November 2018									
1	2017 December								(a)
2	2018 January	\$ 290	\$ 138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 428
3	2018 February	\$ 219	\$ 104	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 323
4	2018 March	\$ 6,936	\$ 78	\$ 3,332	\$ 182	\$ 1,624	\$ -	\$ -	\$ 12,153
5	2018 April	\$ 124	\$ 59	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 184
6	2018 May	\$ 94	\$ 45	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 138
7	2018 June	\$ 6,166	\$ 34	\$ 3,885	\$ 200	\$ 2,574	\$ 3,768	\$ -	\$ 16,626
8	2018 July	\$ 53	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 79
9	2018 August	\$ 40	\$ 19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 59
10	2018 September	\$ 5,610	\$ 14	\$ 15,484	\$ 176	\$ 2,252	\$ -	\$ -	\$ 23,537
11	2018 October	\$ 23	\$ 11	\$ 343	\$ -	\$ -	\$ -	\$ -	\$ 377
12	2018 November	\$ 17	\$ 8	\$ 343	\$ -	\$ -	\$ -	\$ -	\$ 369
13	Total	\$ 19,571	\$ 536	\$ -	\$ 23,388	\$ 558	\$ 6,450	\$ 3,768	\$ 54,272
Next Rate Period: December 2018 - November 2019									
14	2018 December	\$ 6,087	\$ -	\$ 13,886	\$ 66	\$ 93	\$ 239	\$ -	\$ 20,372
15	2019 January	\$ 0	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ 2
16	2019 February	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ 2
17	2019 March	\$ 5,076	\$ 7,689	\$ 1,099	\$ -	\$ -	\$ -	\$ -	\$ 13,864
18	2019 April	\$ -	\$ 164	\$ -	\$ -	\$ 8	\$ 22	\$ -	\$ 194
19	2019 May	\$ -	\$ 164	\$ -	\$ 17	\$ 11	\$ 29	\$ -	\$ 220
20	2019 June	\$ 5,368	\$ 164	\$ 1,044	\$ 53	\$ 2	\$ 5	\$ -	\$ 6,635
21	2019 July	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 163
22	2019 August	\$ -	\$ 163	\$ -	\$ 2,290	\$ -	\$ -	\$ -	\$ 2,452
23	2019 September	\$ 4,793	\$ 163	\$ 1,008	\$ 180	\$ 6	\$ 15	\$ -	\$ 6,166
24	2019 October	\$ -	\$ 163	\$ -	\$ -	\$ 32	\$ 81	\$ -	\$ 276
25	2019 November	\$ -	\$ 163	\$ 16,291	\$ 132	\$ 43	\$ 111	\$ -	\$ 16,740
26	Total Estimated Capital Additions	\$ 40,895	\$ 9,531	\$ -	\$ 56,719	\$ 3,297	\$ 6,645	\$ 4,270	\$ 121,357
27	Average Balance of Estimated Capital additions in the next rate period (b)	\$ 31,571	\$ 6,043	\$ -	\$ 37,455	\$ 1,252	\$ 6,550	\$ 4,026	\$ 86,897

Notes:

- (a) Estimated capital additions for December 2017 are not needed for this schedule. Actual capital additions for December 2017 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

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 2017 - November 2018																		
1	2017	December															(a)	
2	2018	January	\$ 290	\$ 138	\$ -	\$ -	\$ -	\$ -	\$ 428	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3	2018	February	\$ 219	\$ 104	\$ -	\$ -	\$ -	\$ -	\$ 323	\$ 1	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1	
4	2018	March	\$ 6,936	\$ 78	\$ 3,332	\$ 182	\$ 1,624	\$ -	\$ 12,153	\$ 1	\$ 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2	
5	2018	April	\$ 124	\$ 59	\$ -	\$ -	\$ -	\$ -	\$ 184	\$ 19	\$ 1	\$ -	\$ 6	\$ 1	\$ 2	\$ -	\$ 28	
6	2018	May	\$ 94	\$ 45	\$ -	\$ -	\$ -	\$ -	\$ 138	\$ 19	\$ 1	\$ -	\$ 6	\$ 1	\$ 2	\$ -	\$ 29	
7	2018	June	\$ 6,166	\$ 34	\$ 3,885	\$ 200	\$ 2,574	\$ 3,768	\$ 16,626	\$ 19	\$ 1	\$ -	\$ 6	\$ 1	\$ 2	\$ -	\$ 29	
8	2018	July	\$ 53	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ 79	\$ 35	\$ 1	\$ -	\$ 12	\$ 1	\$ 6	\$ 11	\$ 66	
9	2018	August	\$ 40	\$ 19	\$ -	\$ -	\$ -	\$ -	\$ 59	\$ 35	\$ 1	\$ -	\$ 12	\$ 1	\$ 6	\$ 11	\$ 66	
10	2018	September	\$ 5,610	\$ 14	\$ 15,484	\$ 176	\$ 2,252	\$ -	\$ 23,537	\$ 35	\$ 1	\$ -	\$ 12	\$ 1	\$ 6	\$ 11	\$ 67	
11	2018	October	\$ 23	\$ 11	\$ 343	\$ -	\$ -	\$ -	\$ 377	\$ 49	\$ 1	\$ -	\$ 39	\$ 2	\$ 10	\$ 11	\$ 111	
12	2018	November	\$ 17	\$ 8	\$ 343	\$ -	\$ -	\$ -	\$ 369	\$ 49	\$ 1	\$ -	\$ 39	\$ 2	\$ 10	\$ 11	\$ 112	
13	Total		\$ 19,571	\$ 536	\$ -	\$ 23,388	\$ 558	\$ 6,450	\$ 3,768	\$ 54,272	\$ 260	\$ 10	\$ -	\$ 132	\$ 8	\$ 46	\$ 53	\$ 510
Next Rate Period: December 2017 - November 2018																		
14	2018	December	\$ 6,087	\$ -	\$ -	\$ 13,886	\$ 66	\$ 93	\$ 239	\$ 20,372	\$ 49	\$ 1	\$ -	\$ 40	\$ 2	\$ 10	\$ 11	\$ 112
15	2019	January	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 2	\$ 64	\$ 1	\$ -	\$ 64	\$ 2	\$ 10	\$ 11	\$ 152
16	2019	February	\$ -	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 2	\$ 64	\$ 1	\$ -	\$ 64	\$ 2	\$ 10	\$ 11	\$ 152
17	2019	March	\$ 5,076	\$ 7,689	\$ -	\$ 1,099	\$ -	\$ -	\$ 13,864	\$ 64	\$ 1	\$ -	\$ 64	\$ 2	\$ 10	\$ 11	\$ 152	
18	2019	April	\$ -	\$ 164	\$ -	\$ -	\$ 8	\$ 22	\$ 194	\$ 77	\$ 20	\$ -	\$ 65	\$ 2	\$ 10	\$ 11	\$ 185	
19	2019	May	\$ -	\$ 164	\$ -	\$ -	\$ 17	\$ 11	\$ 220	\$ 77	\$ 21	\$ -	\$ 65	\$ 2	\$ 10	\$ 11	\$ 186	
20	2019	June	\$ 5,368	\$ 164	\$ -	\$ 1,044	\$ 53	\$ 2	\$ 6,635	\$ 77	\$ 21	\$ -	\$ 65	\$ 2	\$ 10	\$ 11	\$ 186	
21	2019	July	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ -	\$ 163	\$ 90	\$ 21	\$ -	\$ 67	\$ 2	\$ 10	\$ 11	\$ 202	
22	2019	August	\$ -	\$ 163	\$ -	\$ -	\$ 2,290	\$ -	\$ 2,452	\$ 90	\$ 22	\$ -	\$ 67	\$ 2	\$ 10	\$ 11	\$ 203	
23	2019	September	\$ 4,793	\$ 163	\$ -	\$ 1,008	\$ 180	\$ 6	\$ 6,166	\$ 90	\$ 22	\$ -	\$ 67	\$ 9	\$ 10	\$ 11	\$ 210	
24	2019	October	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ 32	\$ 276	\$ 102	\$ 23	\$ -	\$ 69	\$ 10	\$ 10	\$ 12	\$ 225	
25	2019	November	\$ -	\$ 163	\$ -	\$ 16,291	\$ 132	\$ 43	\$ 16,740	\$ 102	\$ 23	\$ -	\$ 69	\$ 10	\$ 10	\$ 12	\$ 225	
26	Total		\$ 40,895	\$ 9,531	\$ -	\$ 56,719	\$ 3,297	\$ 6,645	\$ 4,270	\$ 121,357	\$ 1,207	\$ 187	\$ -	\$ 898	\$ 54	\$ 166	\$ 190	\$ 2,701
27	Average Balance of Estimated Accumulated depreciation in the next rate period (b)									\$ (641)	\$ (63)	\$ -	\$ (465)	\$ (21)	\$ (101)	\$ (115)	\$ (1,406)	
28	Depreciation Rate (c)									2.9977%	2.9365%	0.0000%	2.0445%	3.6102%	1.8268%	3.3958%		
29	Depreciation expense on estimated capital additions in the next rate period (sum of Lines 14 through 25)									\$ 946	\$ 177	\$ -	\$ 766	\$ 45	\$ 120	\$ 137	\$ 2,191	

Notes:  
 (a) Estimated depreciation expense for December 2017 is not needed for this schedule. Actual depreciation expense for 2017 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

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)	12%	12%		15%	12%	12%	12%	
	Capital Additions								
	2018								
2	Gross Capital Additions in December	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - (b)
3	Gross Capital Additions in January	\$ 290	\$ 138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 428 (b)
4	Gross Capital Additions in February	\$ 219	\$ 104	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 323 (b)
5	Gross Capital Additions in March	\$ 6,936	\$ 78	\$ -	\$ 3,332	\$ 182	\$ 1,624	\$ -	\$ 12,153 (b)
6	Gross Capital Additions in April	\$ 124	\$ 59	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 184 (b)
7	Gross Capital Additions in May	\$ 94	\$ 45	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 138 (b)
8	Gross Capital Additions in June	\$ 6,166	\$ 34	\$ -	\$ 3,885	\$ 200	\$ 2,574	\$ 3,768	\$ 16,626 (b)
9	Gross Capital Additions in July	\$ 53	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 79 (b)
10	Gross Capital Additions in August	\$ 40	\$ 19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 59 (b)
11	Gross Capital Additions in September	\$ 5,610	\$ 14	\$ -	\$ 15,484	\$ 176	\$ 2,252	\$ -	\$ 23,537 (b)
12	Gross Capital Additions in October	\$ 23	\$ 11	\$ -	\$ 343	\$ -	\$ -	\$ -	\$ 377 (b)
13	Gross Capital Additions in November	\$ 17	\$ 8	\$ -	\$ 343	\$ -	\$ -	\$ -	\$ 369 (b)
	2019								
14	Gross Capital Additions in December	\$ 6,087	\$ -	\$ -	\$ 13,886	\$ 66	\$ 93	\$ 239	\$ 20,372 (b)
15	Gross Capital Additions in January	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 2 (b)
16	Gross Capital Additions in February	\$ -	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 2 (b)
17	Gross Capital Additions in March	\$ 5,076	\$ 7,689	\$ -	\$ 1,099	\$ -	\$ -	\$ -	\$ 13,864 (b)
18	Gross Capital Additions in April	\$ -	\$ 164	\$ -	\$ -	\$ -	\$ 8	\$ 22	\$ 194 (b)
19	Gross Capital Additions in May	\$ -	\$ 164	\$ -	\$ -	\$ 17	\$ 11	\$ 29	\$ 220 (b)
20	Gross Capital Additions in June	\$ 5,368	\$ 164	\$ -	\$ 1,044	\$ 53	\$ 2	\$ 5	\$ 6,635 (b)
21	Gross Capital Additions in July	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 163 (b)
22	Gross Capital Additions in August	\$ -	\$ 163	\$ -	\$ -	\$ 2,290	\$ -	\$ -	\$ 2,452 (b)
23	Gross Capital Additions in September	\$ 4,793	\$ 163	\$ -	\$ 1,008	\$ 180	\$ 6	\$ 15	\$ 6,166 (b)
24	Gross Capital Additions in October	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ 32	\$ 81	\$ 276 (b)
25	Gross Capital Additions in November	\$ -	\$ 163	\$ -	\$ 16,291	\$ 132	\$ 43	\$ 111	\$ 16,740 (b)
26	Balance at November 30, 2019	\$ 40,895	\$ 9,531	\$ -	\$ 56,719	\$ 3,297	\$ 6,645	\$ 4,270	\$ 121,357
	Deferred Tax Expense / (Benefit) (c)								
	2018								
27	Deferred Taxes in December	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
28	Deferred Taxes in January	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	Deferred Taxes in February	\$ 35	\$ 17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51
30	Deferred Taxes in March	\$ 26	\$ 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39
31	Deferred Taxes in April	\$ 832	\$ 9	\$ -	\$ 500	\$ 22	\$ 195	\$ -	\$ 1,558
32	Deferred Taxes in May	\$ 15	\$ 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22
33	Deferred Taxes in June	\$ 11	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17
34	Deferred Taxes in July	\$ 740	\$ 4	\$ -	\$ 583	\$ 24	\$ 309	\$ 452	\$ 2,112
35	Deferred Taxes in August	\$ 6	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9
36	Deferred Taxes in September	\$ 5	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7
37	Deferred Taxes in October	\$ 673	\$ 2	\$ -	\$ 2,323	\$ 21	\$ 270	\$ -	\$ 3,289
38	Deferred Taxes in November	\$ 3	\$ 1	\$ -	\$ 51	\$ -	\$ -	\$ -	\$ 56
39	Total	\$ 2,346	\$ 63	\$ -	\$ 3,457	\$ 67	\$ 774	\$ 452	\$ 7,160
	2019								
40	Deferred Taxes in December	\$ 2	\$ 1	\$ -	\$ 51	\$ -	\$ -	\$ -	\$ 55
41	Deferred Taxes in January	\$ 730	\$ -	\$ -	\$ 2,083	\$ 8	\$ 11	\$ 29	\$ 2,861
42	Deferred Taxes in February	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ 0
43	Deferred Taxes in March	\$ -	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ 0
44	Deferred Taxes in April	\$ 609	\$ 923	\$ -	\$ 165	\$ -	\$ -	\$ -	\$ 1,697
45	Deferred Taxes in May	\$ -	\$ 20	\$ -	\$ -	\$ -	\$ 1	\$ 3	\$ 23
46	Deferred Taxes in June	\$ -	\$ 20	\$ -	\$ -	\$ 2	\$ 1	\$ 3	\$ 26
47	Deferred Taxes in July	\$ 644	\$ 20	\$ -	\$ 157	\$ 6	\$ 0	\$ 1	\$ 828
48	Deferred Taxes in August	\$ -	\$ 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20
49	Deferred Taxes in September	\$ -	\$ 20	\$ -	\$ -	\$ 275	\$ -	\$ -	\$ 294
50	Deferred Taxes in October	\$ 575	\$ 20	\$ -	\$ 151	\$ 22	\$ 1	\$ 2	\$ 770
51	Deferred Taxes in November	\$ -	\$ 20	\$ -	\$ -	\$ -	\$ 4	\$ 10	\$ 33
52	Balance at November 30, 2019	\$ 4,907	\$ 1,124	\$ -	\$ 6,064	\$ 380	\$ 792	\$ 499	\$ 13,767
53	Average Balance of Accumulated Deferred Tax Asset (Liability) on actual capital additions in the next rate period (d)	\$ (3,575)	\$ (637)	\$ -	\$ (5,401)	\$ (124)	\$ (784)	\$ (479)	\$ (11,001)

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

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

Line No.	Description	FERC Account Number (Col A)	Annual System Incremental Amount (a) (dollars) (Col B)	Annual Amount (Thousands of dollars) NC Retail (c) (Col C)
1	Roxboro 4 O&M	500-514	\$ 1,362,286	\$ 836
2	Mayo 1 O&M	500-514	\$ 2,889,198	\$ 1,772
3	Brunswick Plant O&M	517-532	\$ 44,526,327	\$ 27,311
4	Harris 1 O&M	517-532	\$ 25,339,637	\$ 15,543
5	A&G Expenses	929	\$ 24,078,694	\$ 14,769
6	Payroll Taxes	408	\$ 3,306,149	\$ 2,028
7	General Plant Return	454	\$ 1,776,456	\$ 1,090
8	Dispatch Fee	456	\$ 30,907	\$ 19
9	Auxiliary Power	447	\$ 414,735	\$ 254
10	Site Representative	456	\$ 4,908	\$ 3
11	NCEMPA Revenue Included in Cost of Service for a Return on Coal Inventory	454	\$ 121,737	\$ 75
12	Property Taxes	408	\$ 5,937,484	\$ 3,642
13	Incremental Nuclear Decommissioning Costs	403		\$ 3,044 (b)
14	Total			\$ 70,385

## 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 2017 cost of service study of from Exhibit I -E 61.33723%

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

Line No.	Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col C)	Robinson (Col D)	Total (Col E)	
<u>Decommissioning recovered in existing base rates:</u>						
1	NC Retail Nuclear decommissioning expense included in base rates	\$ 8,276,237	\$ 2,497,488	\$ 6,386,945	\$ 2,429,615	\$ 19,590,285
2	NC retail allocation factor used in rate case - 2016 Cost of Service	60.6008%	60.6008%	60.6008%	60.6008%	
3	System Amount including NCEMPA's ownership (Line 7 / Line 8)	\$ 13,656,976	\$ 4,121,213	\$ 10,539,374	\$ 4,009,213	\$ 32,326,776
4	NCEMPA's ownership %	18.33%	18.33%	16.17%	0.00%	
5	Incremental decommissioning related to purchase from NCEMPA (Line 9 * Line 10)	\$ 2,503,324	\$ 755,418	\$ 1,704,217	\$ -	\$ 4,962,959
6	NC retail allocation factor - 2017 Cost of Service	61.3372%	61.3372%	61.3372%	61.3372%	
7	NC retail's incremental nuclear decommissioning expense (Line 11 x Line 12)	\$ 1,535,470	\$ 463,353	\$ 1,045,319	\$ -	\$ 3,044,142

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, 2017

EXHIBIT I-E

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	3,603,240	0.290220	Residential Class	29.79840%	48.5813%
2	NC RES-TOU	96,393	0.007764	SGS Class	4.03595%	6.5799%
3	NC SGS	496,966	0.040028	MGS Class	17.66733%	28.8036% **
4	NC SGS-CLR	4,120	0.000332	SI Class	0.08970%	0.1462%
5	NC MGS-TOU	1,521,650	0.122560	LGS Class	9.74082%	15.8808%
6	NC MGS	671,845	0.054113	TSS Class	0.00503%	0.0082%
7	NC SI	11,137	0.000897	ALS Class	0.00000%	0.0000%
8	NC LGS	185,176	0.014915	SLS Class	0.00000%	0.0000%
9	NC LGS-TOU	231,506	0.018647	SFLS Class	0.00000%	0.0000%
10	NC LGS-RTP	792,693	0.063847	Total	61.33723%	100.0000%
11	NC TSS	625	0.000050			
12	NC ALS	-	0.000000			
13	NC SLS	-	0.000000			
14	NC SFLS	-	0.000000			
15	Total NCR	7,615,350	0.613372			
16	NCEMC (Note 1)	1,788,480	0.144052			
17	Fayetteville	406,463	0.032738	MGS Class - billed on kWh basis	0.09%	0.0247% Note 2
18	FBEMC	76,609	0.006170	MGS Class - billed on kW basis	99.91%	28.7789% Note 2
19	Piedmont EMC	20,261	0.001632			28.8036%
20	Haywood EMC	12,758	0.001028			
21	Tri-Towns	-	0.000000			
22	Waynesville	-	0.000000			
23	Winterville	-	0.000000			
24	Total NCWHS	2,304,570	0.185620			
25	NCEMPA (Note 2)	1,264,334	0.101835			
26	Total NC	11,184,254	0.900827			
27	SC RES	478,057	0.038505			
28	SC RET	9,369	0.000755			
29	SC SGS	79,952	0.006440			
30	SC SGS-CLR	610	0.000049			
31	SC MGS-TOU	200,957	0.016186			
32	SC MGS	122,558	0.009871			
33	SC SI	2,789	0.000225			
34	SC LGS	100,401	0.008087			
35	SC LGS-TOU	29,604	0.002384			
36	SC LGS-CRTL-TOU	84,170	0.006779			
37	SC LGS-RTP	76,850	0.006190			
38	SC TSS	110	0.000009			
39	SC ALS	-	0.000000			
40	SC SLS	-	0.000000			
41	SC SFLS	-	0.000000			
42	Total SCR	1,185,427	0.095479			
43	SCWHS (Camden)	45,860	0.003694			
44	Total SC	1,231,288	0.099173			
45	Total System with NCEMPA retained capacity	12,415,542	1.000000			

\*\*Allocation of MGS Class between kW and kWh billed customers  
 MGS Class - billed on kWh basis 0.09% 0.0247% Note 2  
 MGS Class - billed on kW basis 99.91% 28.7789% Note 2  
28.8036%

NC Retail Allocation Factor After the Purchase		
Total NC Retail Summer CP Demand (Line 15)	7,615,350	61.33723%
Total System with NCEMPA retained capacity (Line 45)	12,415,542	

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

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 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 DATED FEBRUARY 23, 2018:					
Line No.	ITEM	CAPITALIZATION RATIO	APPROVED COST RATE	2017 WEIGHTED COST OF CAPITAL			CAPITALIZATION RATIO	APPROVED COST RATE	2018 WEIGHTED COST OF CAPITAL		
				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%	48.00%	4.05%	1.9440%	1.4872%	1.9440%
2	COMMON STOCK EQUITY	53.00%	10.20%	5.4060%	5.4060%	8.1900%	52.00%	9.90%	5.1480%	5.1480%	6.7300%
3	TOTAL	100.00%		<u>7.5539%</u>	<u>6.8234%</u>	<u>10.3379%</u>	100.00%		<u>7.0920%</u>	<u>6.6352%</u>	<u>8.6740%</u>
4	Discounted annual rate to convert monthly to annual compounding				<u>6.6189%</u>	<u>10.0300%</u>				<u>6.4416%</u>	<u>8.4200%</u>
5	Discounted monthly rate to convert monthly to annual compounding				<u>0.5516%</u>					<u>0.5368%</u>	
<u>CALCULATION OF COMPOSITE INCOME TAX RATES:</u>											
				2017 Statutory Rate	State Apportionment Factor	2017 Weighted Tax Rate			2018 Statutory Rate	State Apportionment Factor	2018 Weighted Tax Rate
6	FEDERAL INCOME TAX RATE			35.00%		<u>35.00%</u>			21.00%		<u>21.00%</u>
STATE INCOME TAX RATE:											
7	NC			3.000%	84.6380%	2.5391%			3.000%	84.6380%	2.5391%
8	SC			5.000%	12.6000%	<u>0.6300%</u>			5.000%	12.6000%	<u>0.6300%</u>
9	Weighted state income tax rate					<u>3.1691%</u>					<u>3.1691%</u>
10	Federal production tax deduction percentage					9.0000%					0.0000%
11	Total composite federal and state income tax rate					<u>34.01%</u>					<u>23.50%</u>
12	<u>NCUC REGULATORY FEE RATE</u>		<u>0.140%</u>					<u>0.140%</u>			

DUKE ENERGY PROGRESS, LLC  
 NCEMPA GENERATION ASSET PURCHASE  
 BILLING DETERMINANTS FOR THE TWELVE MONTH PERIOD ENDED NOVEMBER 30, 2018

	(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	11,985,346,550	
2	Residential Class	RES (EC)	kWh Energy Units	3,249,324,746	
3	Residential Class	R-TOU	kWh Energy Units	34,887,029	
4	Residential Class	R-TOU (EC)	kWh Energy Units	17,917,353	
5	Residential Class	R-TOUD	kWh Energy Units	263,970,957	
6	Residential Class	R-TOUD (EC)	kWh Energy Units	182,778,364	
7	Residential Class	R-TOUE	kWh Energy Units	-	
8	Residential Class	R-TOUE (EC)	kWh Energy Units	-	
9	Total Residential			(a) <u>15,734,225,000</u>	
10	SGS Class	SGS	kWh Energy Units	1,761,616,512	
11	SGS Class	SGS-TOU-CLR	kWh Energy Units	28,808,426	
12	SGS Class	SGS-TOUE	kWh Energy Units	3,126,062	
13	Total SGS			(a) <u>1,793,551,000</u>	
14	MGS Class	APH-TES	kW Demand Units		4,763
15	MGS Class	CH-TOUE	kWh Energy Units	7,649,442	
16	MGS Class	CSE	kWh Energy Units	1,201,521	
17	MGS Class	CSG	kWh Energy Units	24,543	
18	MGS Class	SGS-TES	kW Demand Units		39,691
19	MGS Class	SGS-TOU	kW Demand Units		19,253,498
20	MGS Class	MGS	kW Demand Units		12,282,944
21	Total MGS			(a) <u>8,875,507</u>	<u>31,580,896</u>
22	LGS Class	LGS	kW Demand Units		2,721,715
23	LGS Class	LGS-RTP	kW Demand Units		41,214
24	LGS Class	LGS-RTP-TOU	kW Demand Units		10,983,979
25	LGS Class	LGS-TOU	kW Demand Units		3,200,135
26	Total LGs			(a) <u>16,947,042</u>	
27	SI Class	SI	kWh Energy Units	(b) 52,470,176	
28	TSS Class	TFS	kWh Energy Units	171,845	
29	TSS Class	TSS	kWh Energy Units	4,716,652	
30	Total TSS			(b) <u>4,888,497</u>	
31	Total All Rates			<u>17,594,010,180</u>	<u>48,527,938</u>

NOTES:

KWh sales for MGS-kWh billed	8,875,507	0.09%
KWh sales for MGS-kW billed	10,332,752,188	99.91%
Total MGS Class KWH Sales for the Year were:	<u>10,341,627,695</u>	

Notes:

- (a) Source: 2018 Spring Sales Forecast
- (b) Source: Monthly CIM Query of Billing Determinants for the twelve month period ended March 31, 2018.

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

Line No.	Description	Demand Allocation Factors To Customer Classes (b) (Col. A)	Revenue Required NC Retail Amount (Thousands of Dollars) (Col. B)	Demand KW (c) (Col. C)	Energy KWH (c) (Col. D)	Rate Rider (Col. E)
1	True-up amount - Test year 2017		\$ (9,196) (a)			
2	Total revenue for calculation of joint agency asset rider		\$ (9,196)			
Allocation of monthly revenue to customer groups:						
Customers billed based on KWH						
3	Residential	48.5813%				
4	Small General Service	6.5799%				
4	Medium General Service -KWH	0.0247%				
5	Seasonal Intermittent	0.1462%				
6	Lighting	0.0000%				
7	Traffic Signal	0.0082%				
		<u>55.3404%</u>	\$ (5,089)		17,594,010,180	\$ (0.00029) per KWH
Customers billed based on KW						
8	Medium General Service -KW	28.7789%				
9	Large General Service	15.8808%				
		<u>44.6596%</u>	\$ (4,107)	48,527,938		\$ (0.08) per KW
10		<u>100.0000%</u>	\$ (9,196)			

Notes:

- (a) From Exhibit A-1-TU, Line 17, Column H
- (b) From Exhibit I-TU, Column D
- (c) From Exhibit K-TU, Line 31, Billing Determinants for the Twelve Months Ended November 30, 2018



EXHIBIT A-1 - TU

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 :

	Capitalization Ratio (c)	Cost Rate (d)	Composite Income Tax Rate (e)	After Tax Weighted Rate Rate of Return
1 Long-term debt	47.00%	4.57%	34.0100%	1.4174% (f)
2 Member's equity	53.00%	10.20%		5.4060% (f)
3 After tax overall return				6.8234% (f)
4 Discounted monthly after tax overall return				0.5516% (g)

	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
5 December 2015	\$ 4,936	\$ 1,763	\$ 3,173	\$ -	\$ -	\$ -	\$ -	\$ 3,173
6 January 2016	\$ 4,812	\$ 4,683	\$ 129	\$ 3,173	\$ 2,076	\$ 11	\$ 17	\$ 3,319
7 February	\$ 5,436	\$ 5,543	\$ (107)	\$ 3,319	\$ 2,171	\$ 12	\$ 18	\$ 3,231
8 March	\$ 8,239	\$ 5,397	\$ 2,843	\$ 3,231	\$ 2,113	\$ 12	\$ 18	\$ 6,091
9 April	\$ 4,617	\$ 4,607	\$ 10	\$ 6,091	\$ 3,984	\$ 22	\$ 34	\$ 6,135
10 May	\$ 3,931	\$ 4,603	\$ (671)	\$ 6,135	\$ 4,013	\$ 22	\$ 34	\$ 5,498
11 June	\$ 4,696	\$ 5,359	\$ (663)	\$ 5,498	\$ 3,596	\$ 20	\$ 30	\$ 4,865
12 July	\$ 4,348	\$ 6,071	\$ (1,723)	\$ 4,865	\$ 3,182	\$ 18	\$ 27	\$ 3,168
13 August	\$ 4,460	\$ 6,687	\$ (2,227)	\$ 3,168	\$ 2,073	\$ 11	\$ 17	\$ 959
14 September	\$ 5,152	\$ 6,097	\$ (945)	\$ 959	\$ 627	\$ 3	\$ 5	\$ 19
15 October	\$ 7,149	\$ 4,996	\$ 2,153	\$ 19	\$ 12	\$ 0	\$ 0	\$ 2,172
16 November	\$ 5,043	\$ 4,600	\$ 443	\$ 2,172	\$ 1,421	\$ 8	\$ 12	\$ 2,627
17 December 2016	\$ 5,772	\$ 5,522	\$ 249	\$ 2,627	\$ 1,719	\$ 9	\$ 14	\$ 2,891
18 Cumulative Reg Fee Adjustment (h)	\$ -	\$ 95	\$ (95)	\$ 2,891	\$ (62)	\$ (2)	\$ (3)	\$ 2,793
19 January 2017	\$ 4,739	\$ 7,026	\$ (2,287)	\$ 2,793	\$ 1,843	\$ 10	\$ 15	\$ 522
20 February	\$ 5,044	\$ 5,860	\$ (815)	\$ 522	\$ 344	\$ 2	\$ 3	\$ (291)
21 March	\$ 7,808	\$ 5,866	\$ 1,942	\$ (291)	\$ (192)	\$ (1)	\$ (2)	\$ 1,649
22 April	\$ 6,416	\$ 5,097	\$ 1,319	\$ 1,649	\$ 1,088	\$ 6	\$ 9	\$ 2,978
23 May	\$ 4,983	\$ 5,808	\$ (825)	\$ 2,978	\$ 1,965	\$ 11	\$ 16	\$ 2,170
24 June	\$ 5,552	\$ 6,108	\$ (556)	\$ 2,170	\$ 1,432	\$ 8	\$ 12	\$ 1,626
25 July	\$ 4,618	\$ 7,017	\$ (2,399)	\$ 1,626	\$ 1,073	\$ 6	\$ 9	\$ (765)
26 August	\$ 5,194	\$ 6,940	\$ (1,747)	\$ (765)	\$ (505)	\$ (3)	\$ (4)	\$ (2,516)
27 September	\$ 4,937	\$ 6,465	\$ (1,528)	\$ (2,516)	\$ (1,660)	\$ (9)	\$ (14)	\$ (4,057)
28 October	\$ 4,839	\$ 5,900	\$ (1,062)	\$ (4,057)	\$ (2,677)	\$ (15)	\$ (22)	\$ (5,141)
29 November	\$ 4,866	\$ 5,442	\$ (576)	\$ (5,141)	\$ (3,393)	\$ (19)	\$ (28)	\$ (5,745)
30 December (i)	\$ 5,301	\$ 8,720	\$ (3,419)	\$ (5,745)	\$ (4,395)	\$ (24)	\$ (32)	\$ (9,196)

Notes:

- (a) From Exhibit B-TU, Line 9
- (b) From CIM Joint Agency Asset Rider Revenue Report plus the applicable regulatory fee.
- (c) From Exhibit J-TU, Column B, Line 1 and Line 2
- (d) From Exhibit J-TU, Column C, Line 1 and Line 2
- (e) From Exhibit J-TU, Column I, Line 11
- (f) From Exhibit J-TU, Column H, Line 1 - Line 3
- (g) From Exhibit J-TU, Column H, Line 5
- (h) Adjustment to record regulatory fees associated with revenue billed for December 2015 - December 2016. Regulatory fees of 0.148% and 0.14% are applicable for December 2015 - June 2016, and July 2016 - December 2016, respectively.
- (i) The Net of Tax Deferral balance calculation was adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The composite income tax rate was reduced to 23.5% as of the Act.

EXHIBIT B - TU

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, 2017  
(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	Levelized recovery of pretax cost of certain acquisition costs at the purchase date	\$ 5,175	\$ 5,173	\$ 5,173	\$ 5,172	\$ 5,170	\$ 5,197	\$ 5,197	\$ 5,198	\$ 5,197	\$ 5,196	\$ 5,195	\$ 5,231	\$ 62,275 (a)		
2	Incremental pretax cost for acquisition costs not included in the levelization of costs	\$ 653	\$ 671	\$ 696	\$ 697	\$ 695	\$ 691	\$ 689	\$ 687	\$ 688	\$ 685	\$ 689	\$ 669	\$ 8,209 (b)		
3	Incremental pretax cost for financing and operating costs related to capital additions since the purchase date	\$ 366	\$ 378	\$ 403	\$ 427	\$ 456	\$ 480	\$ 521	\$ 584	\$ 612	\$ 619	\$ 647	\$ 710	\$ 6,202 (c)		
4	Incremental pretax cost for operating costs on acquired assets	\$ 5,167	\$ 5,444	\$ 8,153	\$ 6,740	\$ 5,284	\$ 5,804	\$ 4,833	\$ 5,347	\$ 5,062	\$ 4,961	\$ 4,956	\$ 5,313	\$ 67,065 (d)		
5	Pretax cost of service change from re-apportionment of system costs due to the NCEMPA asset purchase	\$ (7,222)	\$ (7,222)	\$ (7,222)	\$ (7,222)	\$ (7,222)	\$ (7,222)	\$ (7,222)	\$ (7,222)	\$ (7,222)	\$ (7,222)	\$ (7,222)	\$ (7,222)	\$ (86,659) (e)		
6	Pretax cost increment (decrement) for amortization of deferred costs	\$ 593	\$ 593	\$ 593	\$ 593	\$ 593	\$ 593	\$ 593	\$ 593	\$ 593	\$ 593	\$ 593	\$ 593	\$ 7,116 (f)		
7	Total pre-tax cost for joint agency asset rider	(Sum of Lines 1 - Line 6)		\$ 4,733	\$ 5,037	\$ 7,797	\$ 6,407	\$ 4,976	\$ 5,544	\$ 4,611	\$ 5,187	\$ 4,930	\$ 4,832	\$ 4,859	\$ 5,294	\$ 64,207
8	Regulatory fee	(Line 7 / (1 - (g)) x (g))		\$ 7	\$ 7	\$ 11	\$ 9	\$ 7	\$ 8	\$ 6	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 90 (g)
9	Total actual revenue for calculation of joint agency asset rider	(Line 7 + Line 8)		\$ 4,739	\$ 5,044	\$ 7,808	\$ 6,416	\$ 4,983	\$ 5,552	\$ 4,618	\$ 5,194	\$ 4,937	\$ 4,839	\$ 4,866	\$ 5,301	\$ 64,297

- 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 14
  - (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 - December      0.140%

EXHIBIT C - TU

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, 2017  
 (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	\$ 1,848	\$ 1,848	\$ 1,848	\$ 1,848	\$ 1,848	\$ 1,848	\$ 1,848	\$ 1,848	\$ 1,848	\$ 1,848	\$ 1,848	\$ 1,848	\$ 22,179 (a)
3	Change in Revenue Requirement - Actual vs. Estimated	\$ 25	\$ 24	\$ 23	\$ 23	\$ 23	\$ 51	\$ 50	\$ 50	\$ 49	\$ 49	\$ 48	\$ 64	\$ 479 (b)
3	Total Harris Nuclear Unit 1 (Line 2 + Line 3)	\$ 1,873	\$ 1,872	\$ 1,872	\$ 1,871	\$ 1,871	\$ 1,899	\$ 1,899	\$ 1,898	\$ 1,897	\$ 1,897	\$ 1,897	\$ 1,913	\$ 22,657
4	Revenue related to purchase of the Brunswick Nuclear Unit 1													
5	Levelized Revenue	\$ 586	\$ 586	\$ 586	\$ 586	\$ 586	\$ 586	\$ 586	\$ 586	\$ 586	\$ 586	\$ 586	\$ 586	\$ 7,026 (c)
6	Change in Revenue Requirement - Actual vs. Estimated	\$ 8	\$ 7	\$ 7	\$ 7	\$ 3	\$ 3	\$ 3	\$ 4	\$ 4	\$ 4	\$ 4	\$ 6	\$ 61 (d)
7	Total Brunswick Nuclear Unit 1 (Line 5 + Line 6)	\$ 593	\$ 593	\$ 593	\$ 592	\$ 589	\$ 588	\$ 588	\$ 590	\$ 590	\$ 590	\$ 589	\$ 592	\$ 7,087
8	Revenue related to purchase of the Brunswick Nuclear Unit 2													
9	Levelized Revenue	\$ 515	\$ 515	\$ 515	\$ 515	\$ 515	\$ 515	\$ 515	\$ 515	\$ 515	\$ 515	\$ 515	\$ 515	\$ 6,185 (e)
10	Change in Revenue Requirement - Actual vs. Estimated	\$ 11	\$ 10	\$ 10	\$ 10	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 11	\$ 12	\$ 15	\$ 140 (f)
11	Total Brunswick Nuclear Unit 2 (Line 9 + Line 10)	\$ 526	\$ 526	\$ 526	\$ 526	\$ 528	\$ 528	\$ 527	\$ 527	\$ 527	\$ 527	\$ 527	\$ 530	\$ 6,325
12	Revenue related to purchase of the Mayo Coal Unit													
13	Levelized Revenue	\$ 478	\$ 478	\$ 478	\$ 478	\$ 478	\$ 478	\$ 478	\$ 478	\$ 478	\$ 478	\$ 478	\$ 478	\$ 5,737 (g)
14	Change in Revenue Requirement - Actual vs. Estimated	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 4	\$ 4	\$ 4	\$ 4	\$ 5	\$ 55 (h)
15	Total Mayo Coal Unit (Line 13 + Line 14)	\$ 483	\$ 483	\$ 483	\$ 483	\$ 483	\$ 483	\$ 483	\$ 483	\$ 482	\$ 482	\$ 482	\$ 483	\$ 5,792
16	Revenue related to purchase of the Roxboro Coal Unit													
17	Levelized Revenue	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 899 (i)
18	Change in Revenue Requirement - Actual vs. Estimated	\$ (29)	\$ (28)	\$ (28)	\$ (28)	\$ (28)	\$ (28)	\$ (28)	\$ (28)	\$ (27)	\$ (27)	\$ (27)	\$ (27)	\$ (333) (j)
19	Total Roxboro Coal Unit (Line 17 + Line 18)	\$ 46	\$ 47	\$ 47	\$ 47	\$ 47	\$ 47	\$ 47	\$ 47	\$ 48	\$ 48	\$ 48	\$ 48	\$ 566
20	Revenue related to the Acquisition costs above net book value for the above plants													
21	Levelized Revenue	\$ 1,645	\$ 1,645	\$ 1,645	\$ 1,645	\$ 1,645	\$ 1,645	\$ 1,645	\$ 1,645	\$ 1,645	\$ 1,645	\$ 1,645	\$ 1,645	\$ 19,746 (k)
22	Change in Revenue Requirement - Actual vs. Estimated	\$ 8	\$ 8	\$ 8	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 21	\$ 101 (l)
23	Total Acquisition costs above net book value for above plants (Line 21 + Line 22)	\$ 1,653	\$ 1,653	\$ 1,653	\$ 1,653	\$ 1,653	\$ 1,653	\$ 1,653	\$ 1,653	\$ 1,652	\$ 1,652	\$ 1,652	\$ 1,667	\$ 19,847
24	Total monthly levelized revenue (Line 3 + Line 7 + Line 11 + Line 15 + Line 19 + Line 23)	\$ 5,175	\$ 5,173	\$ 5,173	\$ 5,172	\$ 5,170	\$ 5,197	\$ 5,197	\$ 5,198	\$ 5,197	\$ 5,196	\$ 5,195	\$ 5,231	\$ 62,275

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

EXHIBIT C-1-Estimate-TU

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)

ASSUMPTIONS:	ESTIMATE	REVISIONS FOR 2016	REVISIONS FOR 2017
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)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
DEPRECIATION RATE	1.5349% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	0.6395%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR		60.60076% (c)	60.60076% (c)

LEVELIZATION ESTIMATES AS FILED ON EXHIBIT C-1-E UNDER DOCKET E-2, SUB 1143

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)	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	\$ 4,302
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	\$ 14,683
2017	January	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 8,215	\$ 694	\$ 224,200	\$ 401	\$ 1,010	\$ 521	\$ 2,626					
	February	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 8,560	\$ 694	\$ 223,161	\$ 399	\$ 1,005	\$ 518	\$ 2,617					
	March	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 8,905	\$ 694	\$ 222,121	\$ 398	\$ 1,001	\$ 516	\$ 2,608					
	April	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 9,250	\$ 694	\$ 221,082	\$ 396	\$ 996	\$ 513	\$ 2,599					
	May	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 9,594	\$ 694	\$ 220,043	\$ 394	\$ 991	\$ 511	\$ 2,590					
	June	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 9,939	\$ 694	\$ 219,004	\$ 392	\$ 987	\$ 508	\$ 2,581					
	July	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 10,284	\$ 694	\$ 217,964	\$ 390	\$ 982	\$ 506	\$ 2,573					
	August	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 10,629	\$ 694	\$ 216,925	\$ 388	\$ 977	\$ 504	\$ 2,564					
	September	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 10,974	\$ 694	\$ 215,886	\$ 386	\$ 973	\$ 501	\$ 2,555					
	October	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 11,319	\$ 694	\$ 214,847	\$ 385	\$ 968	\$ 499	\$ 2,546					
	November	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 11,664	\$ 694	\$ 213,807	\$ 383	\$ 963	\$ 496	\$ 2,537					
	December	8.550%	\$ 1,708	\$ 1,014	\$ 345	\$ 12,008	\$ 694	\$ 212,768	\$ 381	\$ 959	\$ 494	\$ 2,528					
												\$ 30,924	\$ 29,004				
2018	\$ 215,924	7.700%	\$ 18,463	\$ 10,130	\$ 3,445	\$ 15,454	\$ 8,333	\$ 206,360	\$ 4,432	\$ 11,156	\$ 5,750	\$ 29,671	\$ 26,101				
2019	\$ 207,591	6.930%	\$ 16,616	\$ 8,283	\$ 2,817	\$ 18,271	\$ 8,333	\$ 194,896	\$ 4,186	\$ 10,536	\$ 5,430	\$ 28,485	\$ 23,503				
2020	\$ 199,258	6.230%	\$ 14,938	\$ 6,605	\$ 2,246	\$ 20,517	\$ 8,333	\$ 184,031	\$ 3,953	\$ 9,949	\$ 5,127	\$ 27,362	\$ 21,174				
2021	\$ 190,926	5.900%	\$ 14,147	\$ 5,814	\$ 1,977	\$ 22,494	\$ 8,333	\$ 173,586	\$ 3,728	\$ 9,384	\$ 4,836	\$ 26,282	\$ 19,076				
2022	\$ 182,593	5.900%	\$ 14,147	\$ 5,814	\$ 1,977	\$ 24,472	\$ 8,333	\$ 163,276	\$ 3,507	\$ 8,827	\$ 4,549	\$ 25,216	\$ 17,166				
2023	\$ 174,260	5.910%	\$ 14,171	\$ 5,838	\$ 1,985	\$ 26,457	\$ 8,333	\$ 152,962	\$ 3,285	\$ 8,269	\$ 4,262	\$ 24,149	\$ 15,419				
2024	\$ 165,927	5.900%	\$ 14,147	\$ 5,814	\$ 1,977	\$ 28,434	\$ 8,333	\$ 142,648	\$ 3,064	\$ 7,712	\$ 3,974	\$ 23,083	\$ 13,823				
2025	\$ 157,594	5.910%	\$ 14,171	\$ 5,838	\$ 1,985	\$ 30,420	\$ 8,333	\$ 132,334	\$ 2,842	\$ 7,154	\$ 3,687	\$ 22,016	\$ 12,366				
2026	\$ 149,262	5.900%	\$ 14,147	\$ 5,814	\$ 1,977	\$ 32,397	\$ 8,333	\$ 122,020	\$ 2,621	\$ 6,596	\$ 3,400	\$ 20,950	\$ 11,037				
2027	\$ 140,929	5.910%	\$ 14,171	\$ 5,838	\$ 1,985	\$ 34,382	\$ 8,333	\$ 111,705	\$ 2,399	\$ 6,039	\$ 3,112	\$ 19,883	\$ 9,825				
2028	\$ 132,596	5.900%	\$ 14,147	\$ 5,814	\$ 1,977	\$ 36,360	\$ 8,333	\$ 101,391	\$ 2,178	\$ 5,481	\$ 2,825	\$ 18,817	\$ 8,720				
2029	\$ 124,263	5.910%	\$ 14,171	\$ 5,838	\$ 1,985	\$ 38,345	\$ 8,333	\$ 91,077	\$ 1,956	\$ 4,924	\$ 2,538	\$ 17,750	\$ 7,715				
2030	\$ 115,930	2.950%	\$ 7,073	\$ (1,260)	\$ (428)	\$ 37,917	\$ 8,333	\$ 81,966	\$ 1,761	\$ 4,431	\$ 2,284	\$ 16,808	\$ 6,852				
2031	\$ 107,597	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 35,083	\$ 8,333	\$ 75,264	\$ 1,617	\$ 4,069	\$ 2,097	\$ 16,115	\$ 6,162				
2032	\$ 99,265	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 32,249	\$ 8,333	\$ 69,765	\$ 1,498	\$ 3,772	\$ 1,944	\$ 15,547	\$ 5,576				
2033	\$ 90,932	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 29,415	\$ 8,333	\$ 64,266	\$ 1,380	\$ 3,474	\$ 1,791	\$ 14,978	\$ 5,038				
2034	\$ 82,599	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 26,581	\$ 8,333	\$ 58,768	\$ 1,262	\$ 3,177	\$ 1,637	\$ 14,409	\$ 4,546				
2035	\$ 74,266	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 23,747	\$ 8,333	\$ 53,269	\$ 1,144	\$ 2,880	\$ 1,484	\$ 13,841	\$ 4,096				
2036	\$ 65,933	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 20,913	\$ 8,333	\$ 47,770	\$ 1,026	\$ 2,582	\$ 1,331	\$ 13,272	\$ 3,684				
2037	\$ 57,600	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 18,079	\$ 8,333	\$ 42,271	\$ 908	\$ 2,285	\$ 1,178	\$ 12,704	\$ 3,307				
2038	\$ 49,268	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 15,245	\$ 8,333	\$ 36,772	\$ 790	\$ 1,988	\$ 1,025	\$ 12,135	\$ 2,963				
2039	\$ 40,935	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 12,411	\$ 8,333	\$ 31,273	\$ 672	\$ 1,691	\$ 871	\$ 11,566	\$ 2,649				
2040	\$ 32,602	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 9,577	\$ 8,333	\$ 25,775	\$ 554	\$ 1,393	\$ 718	\$ 10,998	\$ 2,362				
2041	\$ 24,269	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 6,743	\$ 8,333	\$ 20,276	\$ 436	\$ 1,096	\$ 565	\$ 10,429	\$ 2,101				
2042	\$ 15,936	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 3,909	\$ 8,333	\$ 14,777	\$ 317	\$ 799	\$ 412	\$ 9,861	\$ 1,863				
2043	\$ 7,603	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ 1,075	\$ 8,333	\$ 9,278	\$ 199	\$ 502	\$ 259	\$ 9,292	\$ 1,647				
2044	\$ (729)	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ (1,759)	\$ 8,333	\$ 3,779	\$ 81	\$ 204	\$ 105	\$ 8,724	\$ 1,450				
2045	\$ (9,062)	0.000%	\$ -	\$ (8,333)	\$ (2,834)	\$ (4,593)	\$ 8,333	\$ (1,720)	\$ (37)	\$ (93)	\$ (48)	\$ 8,155	\$ 1,271				
2046	TEN MONTHS	0.000%	\$ -	\$ (6,944)	\$ (2,362)	\$ (6,955)	\$ 6,944	\$ (6,760)	\$ (145)	\$ (365)	\$ (188)	\$ 6,245	\$ 913				
TOTAL			\$ 239,709	\$ (20,975)		\$ 260,684		\$ 63,441	\$ 159,672	\$ 82,606	\$ 566,403	\$ 271,408					

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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.  
 (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2016 cost of service study

	2016 Ending Deferral	Future Revenue Streams 2017 Forward	Total
Net present value	\$ 14,683	\$ 271,408	\$ 286,091
Annual payment	\$ 1,138	\$ 21,041	\$ 22,179
Monthly payment	\$ 95	\$ 1,753	\$ 1,848

EXHIBIT C-1 Actual -TU

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	2016	2017
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 895,848 (a)		
LAND COST AT July 31, 2015	\$ 10,269 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 500,188 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$405,929		
RETIREMENT DATE	10/24/2046 (a)		
LEVELIZATION PERIOD IN MONTHS	375 (a)		
TAX LIFE	15 (a)		
COMPOSITE TAX RATE	35.16% (a)		
AFTER TAX COST OF CAPITAL	6.5956% (a)	34.59% (b)	34.01% (b)
DEPRECIATION RATE	1.5349% (a)	6.6071% (b)	6.6189% (b)
FIRST YEAR BOOK DEPRECIATION RATE	0.6395% (a)		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	60.60076% (c)	61.33723% (d)

BASED ON 2017 TEST YEAR ACTUALS

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
									INTEREST (Col I)	EQUITY (Col J)									
Beg Balance July 31, 2015	\$ 244,678																		
2015 August	\$ 243,986	5.000%	\$ 2,385	\$ 1,693	\$ 595	\$ 595	\$ 692	\$ 244,034	\$ 437	\$ 1,099	\$ 596	\$ 2,824		\$ 2,846	\$ (21)	\$ 1,917	\$ 907	\$ 912	
2015 September	\$ 243,294	5.000%	\$ 2,385	\$ 1,692	\$ 595	\$ 1,190	\$ 692	\$ 242,747	\$ 435	\$ 1,094	\$ 593	\$ 2,814		\$ 2,835	\$ (21)	\$ 1,917	\$ 897	\$ 1,819	
2015 October	\$ 242,601	5.000%	\$ 2,385	\$ 1,693	\$ 595	\$ 1,786	\$ 692	\$ 241,460	\$ 432	\$ 1,088	\$ 590	\$ 2,802		\$ 2,823	\$ (21)	\$ 1,917	\$ 885	\$ 2,718	
2015 November	\$ 241,841	5.000%	\$ 2,385	\$ 1,625	\$ 571	\$ 2,357	\$ 760	\$ 240,150	\$ 430	\$ 1,082	\$ 587	\$ 2,859		\$ 2,812	\$ 47	\$ 1,917	\$ 942	\$ 3,680	
2015 December	\$ 241,130	5.000%	\$ 2,385	\$ 1,674	\$ 588	\$ 2,945	\$ 711	\$ 238,835	\$ 427	\$ 1,076	\$ 583	\$ 2,798		\$ 2,800	\$ (2)	\$ 1,917	\$ 881	\$ 4,586	\$ 4,302
2016 January	\$ 240,417	9.500%	\$ 1,898	\$ 1,186	\$ 410	\$ 3,355	\$ 713	\$ 237,623	\$ 425	\$ 1,070	\$ 566	\$ 2,775		\$ 2,753	\$ 22	\$ 1,856	\$ 919	\$ 5,535	
2016 February	\$ 239,705	9.500%	\$ 1,898	\$ 1,185	\$ 410	\$ 3,765	\$ 713	\$ 236,501	\$ 423	\$ 1,065	\$ 563	\$ 2,765		\$ 2,743	\$ 22	\$ 1,856	\$ 909	\$ 6,480	
2016 March	\$ 238,992	9.500%	\$ 1,898	\$ 1,186	\$ 410	\$ 4,175	\$ 713	\$ 235,378	\$ 421	\$ 1,060	\$ 561	\$ 2,755		\$ 2,734	\$ 22	\$ 1,856	\$ 899	\$ 7,419	
2016 April	\$ 238,279	9.500%	\$ 1,898	\$ 1,185	\$ 410	\$ 4,585	\$ 713	\$ 234,255	\$ 419	\$ 1,055	\$ 558	\$ 2,746		\$ 2,724	\$ 22	\$ 1,856	\$ 890	\$ 8,355	
2016 May	\$ 237,568	9.500%	\$ 1,898	\$ 1,187	\$ 411	\$ 4,996	\$ 711	\$ 233,133	\$ 417	\$ 1,050	\$ 555	\$ 2,734		\$ 2,714	\$ 20	\$ 1,856	\$ 878	\$ 9,284	
2016 June	\$ 236,856	9.500%	\$ 1,898	\$ 1,187	\$ 411	\$ 5,407	\$ 711	\$ 232,011	\$ 415	\$ 1,045	\$ 553	\$ 2,725		\$ 2,705	\$ 20	\$ 1,856	\$ 869	\$ 10,208	
2016 July	\$ 236,145	9.500%	\$ 1,898	\$ 1,187	\$ 411	\$ 5,817	\$ 711	\$ 230,889	\$ 413	\$ 1,040	\$ 550	\$ 2,715		\$ 2,685	\$ 20	\$ 1,856	\$ 859	\$ 11,128	
2016 August	\$ 235,434	9.500%	\$ 1,898	\$ 1,187	\$ 411	\$ 6,228	\$ 711	\$ 229,767	\$ 411	\$ 1,035	\$ 547	\$ 2,705		\$ 2,666	\$ 20	\$ 1,856	\$ 849	\$ 12,043	
2016 September	\$ 234,723	9.500%	\$ 1,898	\$ 1,187	\$ 411	\$ 6,638	\$ 711	\$ 228,645	\$ 409	\$ 1,030	\$ 545	\$ 2,695		\$ 2,676	\$ 19	\$ 1,856	\$ 839	\$ 12,954	
2016 October	\$ 234,011	9.500%	\$ 1,898	\$ 1,187	\$ 411	\$ 7,049	\$ 711	\$ 227,523	\$ 407	\$ 1,025	\$ 542	\$ 2,686		\$ 2,666	\$ 19	\$ 1,856	\$ 830	\$ 13,859	
2016 November	\$ 233,300	9.500%	\$ 1,898	\$ 1,187	\$ 411	\$ 7,459	\$ 711	\$ 226,402	\$ 405	\$ 1,020	\$ 539	\$ 2,676		\$ 2,657	\$ 19	\$ 1,856	\$ 820	\$ 14,760	
2016 December	\$ 232,589	9.500%	\$ 1,898	\$ 1,187	\$ 411	\$ 7,870	\$ 711	\$ 225,280	\$ 403	\$ 1,015	\$ 537	\$ 2,666		\$ 2,647	\$ 19	\$ 1,856	\$ 810	\$ 15,655	\$ 14,683
2017 January	\$ 231,870	8.550%	\$ 1,729	\$ 1,010	\$ 344	\$ 8,213	\$ 719	\$ 224,188	\$ 401	\$ 1,010	\$ 521	\$ 2,651		\$ 2,626	\$ 25	\$ 1,848	\$ 803	\$ 16,549	
2017 February	\$ 231,151	8.550%	\$ 1,729	\$ 1,011	\$ 344	\$ 8,557	\$ 718	\$ 223,125	\$ 399	\$ 1,005	\$ 518	\$ 2,641		\$ 2,617	\$ 24	\$ 1,848	\$ 793	\$ 17,437	
2017 March	\$ 230,433	8.550%	\$ 1,729	\$ 1,011	\$ 344	\$ 8,901	\$ 718	\$ 222,063	\$ 397	\$ 1,000	\$ 516	\$ 2,632		\$ 2,608	\$ 23	\$ 1,848	\$ 784	\$ 18,321	
2017 April	\$ 229,715	8.550%	\$ 1,729	\$ 1,011	\$ 344	\$ 9,245	\$ 718	\$ 221,001	\$ 396	\$ 996	\$ 513	\$ 2,622		\$ 2,599	\$ 23	\$ 1,848	\$ 774	\$ 19,201	
2017 May	\$ 228,997	8.550%	\$ 1,729	\$ 1,011	\$ 344	\$ 9,589	\$ 718	\$ 219,939	\$ 394	\$ 991	\$ 511	\$ 2,613		\$ 2,590	\$ 23	\$ 1,848	\$ 765	\$ 20,076	
2017 June	\$ 228,251	8.550%	\$ 1,729	\$ 983	\$ 334	\$ 9,923	\$ 746	\$ 218,868	\$ 392	\$ 986	\$ 508	\$ 2,632		\$ 2,581	\$ 51	\$ 1,848	\$ 754	\$ 20,975	
2017 July	\$ 227,504	8.550%	\$ 1,729	\$ 983	\$ 334	\$ 10,257	\$ 746	\$ 217,787	\$ 390	\$ 981	\$ 506	\$ 2,623		\$ 2,573	\$ 50	\$ 1,848	\$ 745	\$ 21,870	
2017 August	\$ 226,758	8.550%	\$ 1,729	\$ 983	\$ 334	\$ 10,592	\$ 746	\$ 216,707	\$ 388	\$ 976	\$ 503	\$ 2,614		\$ 2,564	\$ 50	\$ 1,848	\$ 736	\$ 22,760	
2017 September	\$ 226,012	8.550%	\$ 1,729	\$ 984	\$ 334	\$ 10,926	\$ 746	\$ 215,627	\$ 386	\$ 971	\$ 501	\$ 2,604		\$ 2,555	\$ 49	\$ 1,848	\$ 727	\$ 23,645	
2017 October	\$ 225,267	8.550%	\$ 1,729	\$ 984	\$ 334	\$ 11,260	\$ 746	\$ 214,546	\$ 384	\$ 967	\$ 498	\$ 2,594		\$ 2,546	\$ 49	\$ 1,848	\$ 718	\$ 24,525	
2017 November	\$ 224,521	8.550%	\$ 1,729	\$ 984	\$ 334	\$ 11,595	\$ 746	\$ 213,466	\$ 382	\$ 962	\$ 496	\$ 2,585		\$ 2,537	\$ 48	\$ 1,848	\$ 709	\$ 25,402	
2017 December	\$ 223,776	8.550%	\$ 1,729	\$ 984	\$ 334	\$ 11,929	\$ 746												
Adjustment for Tax Cuts & Jobs Act (e)					\$ (3,810)	\$ 8,119		\$ 214,291	\$ 384	\$ 965	\$ 498	\$ 2,592		\$ 2,528	\$ 64	\$ 1,848	\$ 744	\$ 26,290	

Latest Levelized Payment Calculations

	2016		Future	
	Ending Deferral	Revenue Streams	2017 Forward	Total
Net present value	\$ 14,683	\$ 271,408	\$ 286,091	
Annual payment	\$ 1,138	\$ 21,041	\$ 22,179	
Monthly payment	\$ 95	\$ 1,753	\$ 1,848	

- 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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.
  - (c) From Exhibit I-TU: Demand Allocator to NC Retail from 2016 Cost of Service study as filed on Docket E-2, Sub 1143
  - (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2017 Cost of Service study
  - (e) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.

EXHIBIT C-2-Estimate-TU

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 2016	REVISIONS FOR 2017
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)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
DEPRECIATION RATE	2.5035% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	1.0431% (a)		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR		60.60076% (c)	60.60076% (c)

LEVELIZATION ESTIMATES AS FILED ON EXHIBIT C-2-E UNDER DOCKET E-2, SUB 1143

	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	\$ 1,371
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	\$ 4,637
2017	\$ 56,936	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,164	\$ 345	\$ 55,963	\$ 100	\$ 252	\$ 130	\$ 827					
February	\$ 56,591	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,201	\$ 345	\$ 55,581	\$ 99	\$ 250	\$ 129	\$ 824					
March	\$ 56,246	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,238	\$ 345	\$ 55,199	\$ 99	\$ 249	\$ 128	\$ 821					
April	\$ 55,901	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,274	\$ 345	\$ 54,817	\$ 98	\$ 247	\$ 127	\$ 818					
May	\$ 55,556	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,311	\$ 345	\$ 54,436	\$ 97	\$ 245	\$ 126	\$ 814					
June	\$ 55,210	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,348	\$ 345	\$ 54,054	\$ 97	\$ 244	\$ 126	\$ 811					
July	\$ 54,865	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,384	\$ 345	\$ 53,672	\$ 96	\$ 242	\$ 125	\$ 808					
August	\$ 54,520	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,421	\$ 345	\$ 53,290	\$ 95	\$ 240	\$ 124	\$ 804					
September	\$ 54,175	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,458	\$ 345	\$ 52,908	\$ 95	\$ 238	\$ 123	\$ 801					
October	\$ 53,830	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,494	\$ 345	\$ 52,526	\$ 94	\$ 237	\$ 122	\$ 798					
November	\$ 53,485	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,531	\$ 345	\$ 52,144	\$ 93	\$ 235	\$ 121	\$ 794					
December	\$ 53,139	8.550%	\$ 453	\$ 108	\$ 37	\$ 1,568	\$ 345	\$ 51,762	\$ 93	\$ 233	\$ 120	\$ 791					
												\$ 9,712	\$ 9,109				
2018	\$ 48,997	7.700%	\$ 4,896	\$ 754	\$ 256	\$ 1,824	\$ 4,142	\$ 49,372	\$ 1,060	\$ 2,669	\$ 1,376	\$ 9,247	\$ 8,135				
2019	\$ 44,855	6.930%	\$ 4,407	\$ 265	\$ 90	\$ 1,914	\$ 4,142	\$ 45,057	\$ 968	\$ 2,436	\$ 1,255	\$ 8,801	\$ 7,262				
2020	\$ 40,713	6.230%	\$ 3,962	\$ (181)	\$ (61)	\$ 1,853	\$ 4,142	\$ 40,901	\$ 879	\$ 2,211	\$ 1,140	\$ 8,371	\$ 6,478				
2021	\$ 36,571	5.900%	\$ 3,752	\$ (390)	\$ (133)	\$ 1,720	\$ 4,142	\$ 36,856	\$ 792	\$ 1,992	\$ 1,027	\$ 7,953	\$ 5,772				
2022	\$ 32,429	5.900%	\$ 3,752	\$ (390)	\$ (133)	\$ 1,587	\$ 4,142	\$ 32,846	\$ 706	\$ 1,776	\$ 915	\$ 7,538	\$ 5,132				
2023	\$ 28,287	5.910%	\$ 3,758	\$ (384)	\$ (131)	\$ 1,457	\$ 4,142	\$ 28,836	\$ 619	\$ 1,559	\$ 803	\$ 7,124	\$ 4,549				
2024	\$ 24,145	5.900%	\$ 3,752	\$ (390)	\$ (133)	\$ 1,324	\$ 4,142	\$ 24,825	\$ 533	\$ 1,342	\$ 692	\$ 6,709	\$ 4,018				
2025	\$ 20,003	5.910%	\$ 3,758	\$ (384)	\$ (131)	\$ 1,193	\$ 4,142	\$ 20,815	\$ 447	\$ 1,125	\$ 580	\$ 6,294	\$ 3,535				
2026	\$ 15,861	5.900%	\$ 3,752	\$ (390)	\$ (133)	\$ 1,061	\$ 4,142	\$ 16,805	\$ 361	\$ 908	\$ 468	\$ 5,880	\$ 3,098				
2027	\$ 11,718	5.910%	\$ 3,758	\$ (384)	\$ (131)	\$ 930	\$ 4,142	\$ 12,794	\$ 275	\$ 692	\$ 356	\$ 5,465	\$ 2,700				
2028	\$ 7,576	5.900%	\$ 3,752	\$ (390)	\$ (133)	\$ 797	\$ 4,142	\$ 8,784	\$ 189	\$ 475	\$ 245	\$ 5,050	\$ 2,341				
2029	\$ 3,434	5.910%	\$ 3,758	\$ (384)	\$ (131)	\$ 667	\$ 4,142	\$ 4,773	\$ 103	\$ 258	\$ 133	\$ 4,636	\$ 2,015				
2030	\$ (708)	2.950%	\$ 1,876	\$ (2,266)	\$ (771)	\$ (104)	\$ 4,142	\$ 1,082	\$ 23	\$ 58	\$ 30	\$ 4,254	\$ 1,734				
2031	\$ (4,850)	0.000%	\$ -	\$ (4,142)	\$ (1,409)	\$ (1,513)	\$ 4,142	\$ (1,970)	\$ (42)	\$ (107)	\$ (55)	\$ 3,938	\$ 1,506				
2032	\$ (8,992)	0.000%	\$ -	\$ (4,142)	\$ (1,409)	\$ (2,922)	\$ 4,142	\$ (4,704)	\$ (101)	\$ (254)	\$ (131)	\$ 3,656	\$ 1,311				
2033	\$ (13,134)	0.000%	\$ -	\$ (4,142)	\$ (1,409)	\$ (4,330)	\$ 4,142	\$ (7,437)	\$ (160)	\$ (402)	\$ (207)	\$ 3,373	\$ 1,135				
2034	\$ (17,276)	0.000%	\$ -	\$ (4,142)	\$ (1,409)	\$ (5,739)	\$ 4,142	\$ (10,170)	\$ (218)	\$ (550)	\$ (283)	\$ 3,091	\$ 975				
2035	\$ (21,418)	0.000%	\$ -	\$ (4,142)	\$ (1,409)	\$ (7,148)	\$ 4,142	\$ (12,904)	\$ (277)	\$ (698)	\$ (360)	\$ 2,808	\$ 831				
2036 NINE MONTHS	\$ (24,525)	0.000%	\$ -	\$ (3,107)	\$ (1,057)	\$ (8,204)	\$ 3,107	\$ (15,296)	\$ (329)	\$ (827)	\$ (426)	\$ 1,525	\$ 423				
TOTAL		100.000%	\$ 63,571	\$ (24,202)		\$ 87,773		\$ 8,798	\$ 22,142	\$ 11,492	\$ 130,205	\$ 72,058					

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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.  
(c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2016 cost of service study

	2016 Ending Deferral	Future Revenue Streams 2017 Forward	Total
Net present value	\$ 4,637	\$ 72,058	\$ 76,694
Annual payment	\$ 425	\$ 6,602	\$ 7,026
Monthly payment	\$ 35	\$ 550	\$ 586

EXHIBIT C-2 Actual -TU

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	2016	2017
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)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
DEPRECIATION RATE	2.5035% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	1.0431%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	60.60076% (c)	61.33723% (d)

BASED ON 2017 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)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
									INTEREST (Col I)	EQUITY (Col J)									
Beg Balance July 31, 2015	\$ 63,248																		
2015 August	\$ 62,898	5.000%	\$ 632	\$ 282	\$ 99	\$ 99	\$ 350	\$ 63,023	\$ 113	\$ 284	\$ 154	\$ 901	\$ 901	\$ (0)	\$ 607	\$ 294	\$ 295		
September	\$ 62,550	5.000%	\$ 632	\$ 285	\$ 100	\$ 200	\$ 347	\$ 62,575	\$ 112	\$ 282	\$ 153	\$ 894	\$ 897	\$ (3)	\$ 607	\$ 287	\$ 586		
October	\$ 62,202	5.000%	\$ 632	\$ 284	\$ 100	\$ 299	\$ 349	\$ 62,127	\$ 111	\$ 280	\$ 152	\$ 892	\$ 893	\$ (1)	\$ 607	\$ 285	\$ 875		
November	\$ 61,847	5.000%	\$ 632	\$ 277	\$ 98	\$ 397	\$ 355	\$ 61,676	\$ 110	\$ 278	\$ 151	\$ 894	\$ 889	\$ 5	\$ 607	\$ 287	\$ 1,169		
December	\$ 61,489	5.000%	\$ 632	\$ 275	\$ 97	\$ 494	\$ 357	\$ 61,223	\$ 110	\$ 276	\$ 150	\$ 892	\$ 885	\$ 7	\$ 607	\$ 285	\$ 1,462	\$ 1,371	
2016 January	\$ 61,136	9.500%	\$ 503	\$ 150	\$ 52	\$ 546	\$ 353	\$ 60,793	\$ 109	\$ 274	\$ 145	\$ 880	\$ 871	\$ 10	\$ 587	\$ 293	\$ 1,765		
February	\$ 60,784	9.500%	\$ 503	\$ 151	\$ 52	\$ 598	\$ 352	\$ 60,388	\$ 108	\$ 272	\$ 144	\$ 876	\$ 867	\$ 9	\$ 587	\$ 289	\$ 2,065		
March	\$ 60,432	9.500%	\$ 503	\$ 151	\$ 52	\$ 650	\$ 352	\$ 59,984	\$ 107	\$ 270	\$ 143	\$ 873	\$ 864	\$ 9	\$ 587	\$ 286	\$ 2,364		
April	\$ 60,079	9.500%	\$ 503	\$ 151	\$ 52	\$ 702	\$ 352	\$ 59,579	\$ 107	\$ 268	\$ 142	\$ 869	\$ 861	\$ 9	\$ 587	\$ 282	\$ 2,661		
May	\$ 59,729	9.500%	\$ 503	\$ 153	\$ 53	\$ 755	\$ 351	\$ 59,175	\$ 106	\$ 267	\$ 141	\$ 864	\$ 857	\$ 7	\$ 587	\$ 277	\$ 2,954		
June	\$ 59,378	9.500%	\$ 503	\$ 153	\$ 53	\$ 808	\$ 350	\$ 58,772	\$ 105	\$ 265	\$ 140	\$ 860	\$ 854	\$ 7	\$ 587	\$ 273	\$ 3,244		
July	\$ 59,028	9.500%	\$ 503	\$ 153	\$ 53	\$ 861	\$ 350	\$ 58,369	\$ 104	\$ 263	\$ 139	\$ 856	\$ 850	\$ 6	\$ 587	\$ 269	\$ 3,533		
August	\$ 58,679	9.500%	\$ 503	\$ 154	\$ 53	\$ 914	\$ 350	\$ 57,966	\$ 104	\$ 261	\$ 138	\$ 853	\$ 847	\$ 6	\$ 587	\$ 265	\$ 3,819		
September	\$ 58,329	9.500%	\$ 503	\$ 154	\$ 53	\$ 968	\$ 350	\$ 57,563	\$ 103	\$ 259	\$ 137	\$ 849	\$ 843	\$ 6	\$ 587	\$ 262	\$ 4,104		
October	\$ 57,979	9.500%	\$ 503	\$ 154	\$ 53	\$ 1,021	\$ 350	\$ 57,160	\$ 102	\$ 258	\$ 136	\$ 846	\$ 840	\$ 6	\$ 587	\$ 259	\$ 4,386		
November	\$ 57,630	9.500%	\$ 503	\$ 154	\$ 53	\$ 1,074	\$ 349	\$ 56,757	\$ 102	\$ 256	\$ 135	\$ 842	\$ 836	\$ 5	\$ 587	\$ 254	\$ 4,666		
December	\$ 57,282	9.500%	\$ 503	\$ 155	\$ 54	\$ 1,128	\$ 349	\$ 56,355	\$ 101	\$ 254	\$ 134	\$ 838	\$ 833	\$ 5	\$ 587	\$ 250	\$ 4,944	\$ 4,637	
2017 January	\$ 56,929	8.550%	\$ 459	\$ 106	\$ 36	\$ 1,164	\$ 353	\$ 55,960	\$ 100	\$ 252	\$ 130	\$ 835	\$ 827	\$ 8	\$ 586	\$ 249	\$ 5,222		
February	\$ 56,576	8.550%	\$ 459	\$ 106	\$ 36	\$ 1,200	\$ 353	\$ 55,571	\$ 99	\$ 250	\$ 129	\$ 832	\$ 824	\$ 7	\$ 586	\$ 246	\$ 5,498		
March	\$ 56,223	8.550%	\$ 459	\$ 106	\$ 36	\$ 1,236	\$ 353	\$ 55,182	\$ 99	\$ 249	\$ 128	\$ 828	\$ 821	\$ 7	\$ 586	\$ 243	\$ 5,773		
April	\$ 55,871	8.550%	\$ 459	\$ 106	\$ 36	\$ 1,272	\$ 352	\$ 54,794	\$ 98	\$ 247	\$ 127	\$ 824	\$ 818	\$ 7	\$ 586	\$ 239	\$ 6,045		
May	\$ 55,522	8.550%	\$ 459	\$ 110	\$ 37	\$ 1,309	\$ 349	\$ 54,406	\$ 97	\$ 245	\$ 126	\$ 818	\$ 814	\$ 3	\$ 586	\$ 232	\$ 6,311		
June	\$ 55,174	8.550%	\$ 459	\$ 110	\$ 38	\$ 1,347	\$ 348	\$ 54,020	\$ 97	\$ 243	\$ 125	\$ 814	\$ 811	\$ 3	\$ 586	\$ 228	\$ 6,575		
July	\$ 54,826	8.550%	\$ 459	\$ 110	\$ 38	\$ 1,384	\$ 348	\$ 53,635	\$ 96	\$ 242	\$ 125	\$ 810	\$ 808	\$ 3	\$ 586	\$ 225	\$ 6,838		
August	\$ 54,476	8.550%	\$ 459	\$ 109	\$ 37	\$ 1,421	\$ 350	\$ 53,248	\$ 95	\$ 240	\$ 124	\$ 809	\$ 804	\$ 4	\$ 586	\$ 223	\$ 7,100		
September	\$ 54,126	8.550%	\$ 459	\$ 109	\$ 37	\$ 1,458	\$ 350	\$ 52,861	\$ 95	\$ 238	\$ 123	\$ 805	\$ 801	\$ 4	\$ 586	\$ 220	\$ 7,360		
October	\$ 53,776	8.550%	\$ 459	\$ 109	\$ 37	\$ 1,495	\$ 350	\$ 52,475	\$ 94	\$ 236	\$ 122	\$ 802	\$ 798	\$ 4	\$ 586	\$ 216	\$ 7,618		
November	\$ 53,427	8.550%	\$ 459	\$ 109	\$ 37	\$ 1,532	\$ 350	\$ 52,088	\$ 93	\$ 235	\$ 121	\$ 798	\$ 794	\$ 4	\$ 586	\$ 213	\$ 7,874		
December	\$ 53,077	8.550%	\$ 459	\$ 109	\$ 37	\$ 1,569	\$ 350												
Adjustment for Tax Cuts & Jobs Act (e)					\$ (503)	\$ 1,066		\$ 51,953	\$ 93	\$ 234	\$ 121	\$ 797	\$ 791	\$ 6	\$ 586	\$ 212	\$ 8,131		

Latest Levelized Payment Calculations

	2016		Future	
	Ending	Revenue	Streams	Total
	Deferral	2017 Forward		
Net present value	\$ 4,637	\$ 72,058	\$ 76,694	
Annual payment	\$ 425	\$ 6,602	\$ 7,026	
Monthly payment	\$ 35	\$ 550	\$ 586	

- 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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.
  - (c) From Exhibit I-TU: Demand Allocator to NC Retail from 2016 Cost of Service study as filed on Docket E-2, Sub 1143
  - (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2017 Cost of Service study
  - (e) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.

EXHIBIT C-3-Estimate-TU

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 2016	REVISIONS FOR 2017
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)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
DEPRECIATION RATE	2.0153% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	0.8397%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR		60.60076% (c)	60.60076% (c)

LEVELIZATION ESTIMATES AS FILED ON EXHIBIT C-3-E UNDER DOCKET E-2, SUB 1143

	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			NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
									INTEREST (Col I)	EQUITY (Col J)	TAXES (Col K)						
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	\$ 990
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	\$ 3,286
2017																	
January	\$ 54,350	8.550%	\$ 417	\$ 194	\$ 66	\$ 1,636	\$ 223	\$ 52,858	\$ 95	\$ 238	\$ 123	\$ 678					
February	\$ 54,127	8.550%	\$ 417	\$ 194	\$ 66	\$ 1,702	\$ 223	\$ 52,569	\$ 94	\$ 237	\$ 122	\$ 676					
March	\$ 53,905	8.550%	\$ 417	\$ 194	\$ 66	\$ 1,768	\$ 223	\$ 52,281	\$ 94	\$ 236	\$ 121	\$ 673					
April	\$ 53,682	8.550%	\$ 417	\$ 194	\$ 66	\$ 1,834	\$ 223	\$ 51,992	\$ 93	\$ 234	\$ 121	\$ 671					
May	\$ 53,459	8.550%	\$ 417	\$ 194	\$ 66	\$ 1,900	\$ 223	\$ 51,704	\$ 93	\$ 233	\$ 120	\$ 668					
June	\$ 53,237	8.550%	\$ 417	\$ 194	\$ 66	\$ 1,966	\$ 223	\$ 51,415	\$ 92	\$ 232	\$ 119	\$ 666					
July	\$ 53,014	8.550%	\$ 417	\$ 194	\$ 66	\$ 2,032	\$ 223	\$ 51,126	\$ 92	\$ 230	\$ 119	\$ 663					
August	\$ 52,791	8.550%	\$ 417	\$ 194	\$ 66	\$ 2,098	\$ 223	\$ 50,838	\$ 91	\$ 229	\$ 118	\$ 661					
September	\$ 52,569	8.550%	\$ 417	\$ 194	\$ 66	\$ 2,164	\$ 223	\$ 50,549	\$ 90	\$ 228	\$ 117	\$ 658					
October	\$ 52,346	8.550%	\$ 417	\$ 194	\$ 66	\$ 2,230	\$ 223	\$ 50,261	\$ 90	\$ 226	\$ 117	\$ 656					
November	\$ 52,123	8.550%	\$ 417	\$ 194	\$ 66	\$ 2,296	\$ 223	\$ 49,972	\$ 89	\$ 225	\$ 116	\$ 653					
December	\$ 51,901	8.550%	\$ 417	\$ 194	\$ 66	\$ 2,362	\$ 223	\$ 49,683	\$ 89	\$ 224	\$ 115	\$ 651					
												\$ 7,973	\$ 7,478				
2018	\$ 49,229	7.700%	\$ 4,502	\$ 1,830	\$ 622	\$ 2,984	\$ 2,672	\$ 47,892	\$ 1,029	\$ 2,589	\$ 1,334	\$ 7,624	\$ 6,707				
2019	\$ 46,557	6.930%	\$ 4,052	\$ 1,380	\$ 469	\$ 3,453	\$ 2,672	\$ 44,674	\$ 960	\$ 2,415	\$ 1,245	\$ 7,291	\$ 6,016				
2020	\$ 43,885	6.230%	\$ 3,642	\$ 970	\$ 330	\$ 3,783	\$ 2,672	\$ 41,602	\$ 894	\$ 2,249	\$ 1,159	\$ 6,974	\$ 5,397				
2021	\$ 41,213	5.900%	\$ 3,449	\$ 777	\$ 264	\$ 4,048	\$ 2,672	\$ 38,633	\$ 830	\$ 2,089	\$ 1,076	\$ 6,667	\$ 4,839				
2022	\$ 38,540	5.900%	\$ 3,449	\$ 777	\$ 264	\$ 4,312	\$ 2,672	\$ 35,697	\$ 767	\$ 1,930	\$ 995	\$ 6,363	\$ 4,332				
2023	\$ 35,868	5.910%	\$ 3,455	\$ 783	\$ 266	\$ 4,578	\$ 2,672	\$ 32,759	\$ 704	\$ 1,771	\$ 913	\$ 6,059	\$ 3,869				
2024	\$ 33,196	5.900%	\$ 3,449	\$ 777	\$ 264	\$ 4,843	\$ 2,672	\$ 29,822	\$ 641	\$ 1,612	\$ 831	\$ 5,756	\$ 3,447				
2025	\$ 30,524	5.910%	\$ 3,455	\$ 783	\$ 266	\$ 5,109	\$ 2,672	\$ 26,884	\$ 577	\$ 1,453	\$ 749	\$ 5,452	\$ 3,062				
2026	\$ 27,852	5.900%	\$ 3,449	\$ 777	\$ 264	\$ 5,374	\$ 2,672	\$ 23,947	\$ 514	\$ 1,295	\$ 667	\$ 5,148	\$ 2,712				
2027	\$ 25,180	5.910%	\$ 3,455	\$ 783	\$ 266	\$ 5,640	\$ 2,672	\$ 21,009	\$ 451	\$ 1,136	\$ 585	\$ 4,844	\$ 2,394				
2028	\$ 22,508	5.900%	\$ 3,449	\$ 777	\$ 264	\$ 5,904	\$ 2,672	\$ 18,072	\$ 388	\$ 977	\$ 504	\$ 4,541	\$ 2,104				
2029	\$ 19,836	5.910%	\$ 3,455	\$ 783	\$ 266	\$ 6,171	\$ 2,672	\$ 15,135	\$ 325	\$ 818	\$ 422	\$ 4,237	\$ 1,842				
2030	\$ 17,164	2.950%	\$ 1,725	\$ (947)	\$ (322)	\$ 5,849	\$ 2,672	\$ 12,490	\$ 268	\$ 675	\$ 348	\$ 3,964	\$ 1,616				
2031	\$ 14,492	0.000%	\$ -	\$ (2,672)	\$ (909)	\$ 4,940	\$ 2,672	\$ 10,434	\$ 224	\$ 564	\$ 291	\$ 3,751	\$ 1,434				
2032	\$ 11,820	0.000%	\$ -	\$ (2,672)	\$ (909)	\$ 4,031	\$ 2,672	\$ 8,671	\$ 186	\$ 469	\$ 242	\$ 3,569	\$ 1,280				
2033	\$ 9,148	0.000%	\$ -	\$ (2,672)	\$ (909)	\$ 3,122	\$ 2,672	\$ 6,907	\$ 148	\$ 373	\$ 192	\$ 3,386	\$ 1,139				
2034 TWELVE MONTHS	\$ 6,476	0.000%	\$ -	\$ (2,672)	\$ (909)	\$ 2,213	\$ 2,672	\$ 5,144	\$ 110	\$ 278	\$ 143	\$ 3,204	\$ 1,011				
TOTAL		100.000%	\$ 58,450	\$ 6,402	\$ 2,213	\$ 52,047			\$ 11,812	\$ 29,729	\$ 15,397	\$ 113,270	\$ 60,678				

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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.  
 (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2016 cost of service study

	2016 Ending Deferral	Future Revenue Streams 2017 Forward	Total
Net present value	\$ 3,286	\$ 60,678	\$ 63,964
Annual payment	\$ 318	\$ 5,867	\$ 6,185
Monthly payment	\$ 26	\$ 489	\$ 515



EXHIBIT C-3 Actual -TU

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	2016	2017
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)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
DEPRECIATION RATE	2.0153% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	0.8397%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	60.60076% (c)	61.33723% (d)

BASED ON 2017 TEST YEAR ACTUALS

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
									INTEREST (Col I)	EQUITY (Col J)									
Beg Balance July 31, 2015	\$ 58,523																		
2015 August	\$ 58,291	5.000%	\$ 582	\$ 350	\$ 123	\$ 123	\$ 232	\$ 58,346	\$ 104	\$ 263	\$ 143	\$ 741	\$ 737	\$ 4	\$ 530	\$ 211	\$ 213		
September	\$ 58,059	5.000%	\$ 582	\$ 349	\$ 123	\$ 246	\$ 233	\$ 57,991	\$ 104	\$ 261	\$ 142	\$ 740	\$ 734	\$ 6	\$ 530	\$ 210	\$ 424		
October	\$ 57,826	5.000%	\$ 582	\$ 349	\$ 123	\$ 368	\$ 232	\$ 57,635	\$ 103	\$ 260	\$ 141	\$ 736	\$ 731	\$ 5	\$ 530	\$ 206	\$ 634		
November	\$ 57,590	5.000%	\$ 582	\$ 345	\$ 121	\$ 490	\$ 237	\$ 57,279	\$ 103	\$ 258	\$ 140	\$ 737	\$ 728	\$ 9	\$ 530	\$ 207	\$ 845		
December	\$ 57,353	5.000%	\$ 582	\$ 345	\$ 121	\$ 611	\$ 237	\$ 56,921	\$ 102	\$ 256	\$ 139	\$ 734	\$ 725	\$ 9	\$ 530	\$ 204	\$ 1,056	\$ 990	
2016 January	\$ 57,120	9.500%	\$ 463	\$ 230	\$ 80	\$ 690	\$ 233	\$ 56,586	\$ 101	\$ 255	\$ 135	\$ 724	\$ 713	\$ 11	\$ 517	\$ 207	\$ 1,269		
February	\$ 56,888	9.500%	\$ 463	\$ 231	\$ 80	\$ 770	\$ 232	\$ 56,274	\$ 101	\$ 254	\$ 134	\$ 720	\$ 710	\$ 11	\$ 517	\$ 204	\$ 1,481		
March	\$ 56,655	9.500%	\$ 463	\$ 230	\$ 80	\$ 850	\$ 232	\$ 55,962	\$ 100	\$ 252	\$ 133	\$ 718	\$ 707	\$ 11	\$ 517	\$ 201	\$ 1,691		
April	\$ 56,423	9.500%	\$ 463	\$ 231	\$ 80	\$ 930	\$ 232	\$ 55,649	\$ 100	\$ 251	\$ 133	\$ 715	\$ 705	\$ 11	\$ 517	\$ 198	\$ 1,900		
May	\$ 56,191	9.500%	\$ 463	\$ 231	\$ 80	\$ 1,009	\$ 232	\$ 55,337	\$ 99	\$ 249	\$ 132	\$ 712	\$ 702	\$ 10	\$ 517	\$ 195	\$ 2,107		
June	\$ 55,959	9.500%	\$ 463	\$ 231	\$ 80	\$ 1,090	\$ 231	\$ 55,026	\$ 98	\$ 248	\$ 131	\$ 709	\$ 699	\$ 10	\$ 517	\$ 192	\$ 2,311		
July	\$ 55,728	9.500%	\$ 463	\$ 232	\$ 80	\$ 1,170	\$ 231	\$ 54,714	\$ 98	\$ 246	\$ 130	\$ 706	\$ 697	\$ 9	\$ 517	\$ 189	\$ 2,514		
August	\$ 55,497	9.500%	\$ 463	\$ 232	\$ 80	\$ 1,250	\$ 231	\$ 54,403	\$ 97	\$ 245	\$ 130	\$ 703	\$ 694	\$ 9	\$ 517	\$ 186	\$ 2,715		
September	\$ 55,266	9.500%	\$ 463	\$ 232	\$ 80	\$ 1,330	\$ 231	\$ 54,092	\$ 97	\$ 244	\$ 129	\$ 700	\$ 691	\$ 9	\$ 517	\$ 183	\$ 2,915		
October	\$ 55,035	9.500%	\$ 463	\$ 232	\$ 80	\$ 1,410	\$ 231	\$ 53,780	\$ 96	\$ 242	\$ 128	\$ 698	\$ 689	\$ 9	\$ 517	\$ 181	\$ 3,113		
November	\$ 54,804	9.500%	\$ 463	\$ 232	\$ 80	\$ 1,490	\$ 231	\$ 53,469	\$ 96	\$ 241	\$ 127	\$ 695	\$ 686	\$ 9	\$ 517	\$ 178	\$ 3,309		
December	\$ 54,573	9.500%	\$ 463	\$ 232	\$ 80	\$ 1,570	\$ 231	\$ 53,158	\$ 95	\$ 239	\$ 127	\$ 692	\$ 684	\$ 9	\$ 517	\$ 175	\$ 3,503	\$ 3,286	
2017 January	\$ 54,339	8.550%	\$ 422	\$ 188	\$ 64	\$ 1,634	\$ 234	\$ 52,854	\$ 95	\$ 238	\$ 123	\$ 689	\$ 678	\$ 11	\$ 515	\$ 174	\$ 3,697		
February	\$ 54,106	8.550%	\$ 422	\$ 188	\$ 64	\$ 1,698	\$ 233	\$ 52,556	\$ 94	\$ 237	\$ 122	\$ 686	\$ 676	\$ 10	\$ 515	\$ 171	\$ 3,889		
March	\$ 53,873	8.550%	\$ 422	\$ 188	\$ 64	\$ 1,763	\$ 233	\$ 52,259	\$ 94	\$ 235	\$ 121	\$ 684	\$ 673	\$ 10	\$ 515	\$ 168	\$ 4,080		
April	\$ 53,639	8.550%	\$ 422	\$ 188	\$ 64	\$ 1,827	\$ 233	\$ 51,962	\$ 93	\$ 234	\$ 121	\$ 681	\$ 671	\$ 10	\$ 515	\$ 166	\$ 4,269		
May	\$ 53,404	8.550%	\$ 422	\$ 186	\$ 63	\$ 1,890	\$ 235	\$ 51,664	\$ 92	\$ 233	\$ 120	\$ 681	\$ 668	\$ 12	\$ 515	\$ 165	\$ 4,458		
June	\$ 53,169	8.550%	\$ 422	\$ 186	\$ 63	\$ 1,953	\$ 235	\$ 51,365	\$ 92	\$ 231	\$ 119	\$ 678	\$ 666	\$ 12	\$ 515	\$ 162	\$ 4,646		
July	\$ 52,934	8.550%	\$ 422	\$ 186	\$ 63	\$ 2,017	\$ 235	\$ 51,066	\$ 91	\$ 230	\$ 119	\$ 675	\$ 663	\$ 12	\$ 515	\$ 160	\$ 4,832		
August	\$ 52,699	8.550%	\$ 422	\$ 187	\$ 63	\$ 2,080	\$ 235	\$ 50,768	\$ 91	\$ 229	\$ 118	\$ 672	\$ 661	\$ 12	\$ 515	\$ 157	\$ 5,017		
September	\$ 52,464	8.550%	\$ 422	\$ 187	\$ 63	\$ 2,144	\$ 235	\$ 50,469	\$ 90	\$ 227	\$ 117	\$ 670	\$ 658	\$ 12	\$ 515	\$ 154	\$ 5,200		
October	\$ 52,229	8.550%	\$ 422	\$ 187	\$ 63	\$ 2,207	\$ 235	\$ 50,171	\$ 90	\$ 226	\$ 116	\$ 667	\$ 656	\$ 11	\$ 515	\$ 152	\$ 5,381		
November	\$ 51,994	8.550%	\$ 422	\$ 187	\$ 63	\$ 2,271	\$ 235	\$ 49,872	\$ 89	\$ 225	\$ 116	\$ 665	\$ 653	\$ 12	\$ 515	\$ 149	\$ 5,561		
December	\$ 51,759	8.550%	\$ 422	\$ 187	\$ 63	\$ 2,334	\$ 235												
Adjustment for Tax Cuts & Jobs Act (e)					\$ (746)	\$ 1,588		\$ 49,947	\$ 89	\$ 225	\$ 116	\$ 665	\$ 651	\$ 15	\$ 515	\$ 150	\$ 5,743		

Latest Levelized Payment Calculations			
	2016	Future	
	Ending	Revenue	Streams
	Deferral	2017 Forward	Total
Net present value	\$ 3,286	\$ 60,678	\$ 63,964
Annual payment	\$ 318	\$ 5,867	\$ 6,185
Monthly payment	\$ 26	\$ 489	\$ 515

- 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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.
  - (c) From Exhibit I-TU: Demand Allocator to NC Retail from 2016 Cost of Service study as filed on Docket E-2, Sub 1143
  - (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2017 Cost of Service study
  - (e) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.

EXHIBIT C-4-Estimate-TU

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 2016	REVISIONS FOR 2017
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)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
DEPRECIATION RATE	3.0024% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	1.2510%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR		60.60076% (c)	60.60076% (c)

LEVELIZATION ESTIMATES AS FILED ON EXHIBIT C-4-E UNDER DOCKET E-2, SUB 1143

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
									INTEREST (Col I)	EQUITY (Col J)							
Beg Balance July 31, 2015	\$ 49,060																
2015	\$ 47,696	3.750%	\$ 1,765	\$ 401	\$ 141	\$ 141	\$ 1,365	\$ 48,307	\$ 432	\$ 1,088	\$ 590	\$ 3,475		\$ 2,495	\$ 980	\$ 996	\$ 935
2016	\$ 44,412	7.219%	\$ 3,416	\$ 133	\$ 46	\$ 187	\$ 3,283	\$ 45,890	\$ 986	\$ 2,481	\$ 1,312	\$ 8,062		\$ 5,755	\$ 2,306	\$ 3,457	\$ 3,242
2017																	
January	\$ 44,141	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 184	\$ 271	\$ 44,091	\$ 79	\$ 199	\$ 102	\$ 651					
February	\$ 43,871	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 182	\$ 271	\$ 43,823	\$ 78	\$ 197	\$ 102	\$ 648					
March	\$ 43,600	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 179	\$ 271	\$ 43,555	\$ 78	\$ 196	\$ 101	\$ 646					
April	\$ 43,329	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 177	\$ 271	\$ 43,286	\$ 77	\$ 195	\$ 101	\$ 644					
May	\$ 43,058	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 174	\$ 271	\$ 43,018	\$ 77	\$ 194	\$ 100	\$ 642					
June	\$ 42,787	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 172	\$ 271	\$ 42,750	\$ 77	\$ 193	\$ 99	\$ 639					
July	\$ 42,516	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 169	\$ 271	\$ 42,481	\$ 76	\$ 191	\$ 99	\$ 637					
August	\$ 42,245	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 166	\$ 271	\$ 42,213	\$ 76	\$ 190	\$ 98	\$ 635					
September	\$ 41,975	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 164	\$ 271	\$ 41,945	\$ 75	\$ 189	\$ 97	\$ 632					
October	\$ 41,704	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 161	\$ 271	\$ 41,677	\$ 75	\$ 188	\$ 97	\$ 630					
November	\$ 41,433	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 159	\$ 271	\$ 41,408	\$ 74	\$ 187	\$ 96	\$ 628					
December	\$ 41,162	6.677%	\$ 263	\$ (8)	\$ (3)	\$ 156	\$ 271	\$ 41,140	\$ 74	\$ 185	\$ 96	\$ 625					
												\$ 7,657	\$ 7,181				
2018	\$ 37,912	6.177%	\$ 2,923	\$ (327)	\$ (111)	\$ 45	\$ 3,250	\$ 39,436	\$ 847	\$ 2,132	\$ 1,099	\$ 7,328	\$ 6,446				
2019	\$ 34,661	5.713%	\$ 2,704	\$ (547)	\$ (186)	\$ (141)	\$ 3,250	\$ 36,335	\$ 780	\$ 1,964	\$ 1,012	\$ 7,007	\$ 5,782				
2020	\$ 31,411	5.285%	\$ 2,501	\$ (749)	\$ (255)	\$ (396)	\$ 3,250	\$ 33,305	\$ 715	\$ 1,800	\$ 928	\$ 6,694	\$ 5,180				
2021	\$ 28,161	4.888%	\$ 2,313	\$ (937)	\$ (319)	\$ (714)	\$ 3,250	\$ 30,341	\$ 652	\$ 1,640	\$ 845	\$ 6,388	\$ 4,636				
2022	\$ 24,911	4.522%	\$ 2,140	\$ (1,110)	\$ (378)	\$ (1,092)	\$ 3,250	\$ 27,439	\$ 589	\$ 1,483	\$ 764	\$ 6,087	\$ 4,144				
2023	\$ 21,660	4.462%	\$ 2,112	\$ (1,139)	\$ (387)	\$ (1,479)	\$ 3,250	\$ 24,571	\$ 528	\$ 1,328	\$ 685	\$ 5,791	\$ 3,698				
2024	\$ 18,410	4.461%	\$ 2,111	\$ (1,139)	\$ (387)	\$ (1,867)	\$ 3,250	\$ 21,708	\$ 466	\$ 1,174	\$ 605	\$ 5,495	\$ 3,291				
2025	\$ 15,160	4.462%	\$ 2,112	\$ (1,139)	\$ (387)	\$ (2,254)	\$ 3,250	\$ 18,845	\$ 405	\$ 1,019	\$ 525	\$ 5,199	\$ 2,920				
2026	\$ 11,909	4.461%	\$ 2,111	\$ (1,139)	\$ (387)	\$ (2,641)	\$ 3,250	\$ 15,982	\$ 343	\$ 864	\$ 445	\$ 4,903	\$ 2,583				
2027	\$ 8,659	4.462%	\$ 2,112	\$ (1,139)	\$ (387)	\$ (3,029)	\$ 3,250	\$ 13,119	\$ 282	\$ 709	\$ 366	\$ 4,607	\$ 2,276				
2028	\$ 5,409	4.461%	\$ 2,111	\$ (1,139)	\$ (387)	\$ (3,416)	\$ 3,250	\$ 10,256	\$ 220	\$ 554	\$ 286	\$ 4,311	\$ 1,998				
2029	\$ 2,159	4.462%	\$ 2,112	\$ (1,139)	\$ (387)	\$ (3,803)	\$ 3,250	\$ 7,393	\$ 159	\$ 400	\$ 206	\$ 4,015	\$ 1,745				
2030	\$ (1,092)	4.461%	\$ 2,111	\$ (1,139)	\$ (387)	\$ (4,191)	\$ 3,250	\$ 4,530	\$ 97	\$ 245	\$ 126	\$ 3,719	\$ 1,516				
2031	\$ (4,342)	4.462%	\$ 2,112	\$ (1,139)	\$ (387)	\$ (4,578)	\$ 3,250	\$ 1,667	\$ 36	\$ 90	\$ 46	\$ 3,423	\$ 1,309				
2032	\$ (7,592)	4.461%	\$ 2,111	\$ (1,139)	\$ (387)	\$ (4,965)	\$ 3,250	\$ (1,195)	\$ (26)	\$ (65)	\$ (33)	\$ 3,127	\$ 1,121				
2033	\$ (10,843)	4.462%	\$ 2,112	\$ (1,139)	\$ (387)	\$ (5,353)	\$ 3,250	\$ (4,058)	\$ (87)	\$ (219)	\$ (113)	\$ 2,831	\$ 952				
2034	\$ (14,093)	4.461%	\$ 2,111	\$ (1,139)	\$ (387)	\$ (5,740)	\$ 3,250	\$ (6,921)	\$ (149)	\$ (374)	\$ (193)	\$ 2,535	\$ 800				
2035 SIX MONTHS	\$ (15,718)	2.231%	\$ 1,056	\$ (569)	\$ (194)	\$ (5,934)	\$ 1,625	\$ (9,069)	\$ (195)	\$ (490)	\$ (253)	\$ 687	\$ 203				
TOTAL		100.000%	\$ 47,315	\$ (17,463)	\$ (5,934)	\$	\$ 64,778	\$	\$ 7,997	\$ 20,127	\$ 10,436	\$ 103,339	\$ 57,782				

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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.  
 (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2016 cost of service study

	2016 Ending Deferral	Future Revenue Streams 2017 Forward	Total
Net present value	\$ 3,242	\$ 57,782	\$ 61,024
Annual payment	\$ 305	\$ 5,432	\$ 5,737
Monthly payment	\$ 25	\$ 453	\$ 478

EXHIBIT C-4 Actual -TU

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	2016	2017
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)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
DEPRECIATION RATE	3.0024% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	1.2510%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	60.60076% (c)	61.33723% (d)

BASED ON 2017 TEST YEAR ACTUALS

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
									INTEREST (Col I)	EQUITY (Col J)									
Beg Balance July 31, 2015	\$ 49,060																		
2015 August	\$ 48,790	3.750%	\$ 353	\$ 83	\$ 29	\$ 29	\$ 270	\$ 48,911	\$ 88	\$ 220	\$ 119	\$ 697	\$ 702	\$ (5)	\$ 499	\$ 198	\$ 199		
September	\$ 48,523	3.750%	\$ 353	\$ 86	\$ 30	\$ 59	\$ 267	\$ 48,612	\$ 87	\$ 219	\$ 119	\$ 692	\$ 700	\$ (8)	\$ 499	\$ 193	\$ 395		
October	\$ 48,254	3.750%	\$ 353	\$ 84	\$ 30	\$ 89	\$ 269	\$ 48,314	\$ 86	\$ 218	\$ 118	\$ 691	\$ 697	\$ (6)	\$ 499	\$ 192	\$ 590		
November	\$ 47,968	3.750%	\$ 353	\$ 67	\$ 24	\$ 113	\$ 286	\$ 48,010	\$ 86	\$ 216	\$ 117	\$ 705	\$ 694	\$ 11	\$ 499	\$ 206	\$ 800		
December	\$ 47,696	3.750%	\$ 353	\$ 80	\$ 28	\$ 141	\$ 273	\$ 47,705	\$ 85	\$ 215	\$ 117	\$ 690	\$ 692	\$ (2)	\$ 499	\$ 191	\$ 996	\$ 935	
2016 January	\$ 47,421	7.219%	\$ 285	\$ 10	\$ 4	\$ 144	\$ 274	\$ 47,416	\$ 85	\$ 214	\$ 113	\$ 686	\$ 681	\$ 5	\$ 480	\$ 206	\$ 1,209		
February	\$ 47,147	7.219%	\$ 285	\$ 10	\$ 4	\$ 148	\$ 274	\$ 47,138	\$ 84	\$ 212	\$ 112	\$ 683	\$ 678	\$ 5	\$ 480	\$ 204	\$ 1,421		
March	\$ 46,872	7.219%	\$ 285	\$ 10	\$ 4	\$ 152	\$ 274	\$ 46,860	\$ 84	\$ 211	\$ 112	\$ 681	\$ 676	\$ 5	\$ 480	\$ 201	\$ 1,631		
April	\$ 46,598	7.219%	\$ 285	\$ 10	\$ 4	\$ 155	\$ 274	\$ 46,582	\$ 83	\$ 210	\$ 111	\$ 679	\$ 674	\$ 5	\$ 480	\$ 199	\$ 1,840		
May	\$ 46,324	7.219%	\$ 285	\$ 11	\$ 4	\$ 159	\$ 274	\$ 46,304	\$ 83	\$ 209	\$ 110	\$ 675	\$ 671	\$ 4	\$ 480	\$ 196	\$ 2,047		
June	\$ 46,051	7.219%	\$ 285	\$ 11	\$ 4	\$ 163	\$ 274	\$ 46,027	\$ 82	\$ 207	\$ 110	\$ 673	\$ 669	\$ 4	\$ 480	\$ 193	\$ 2,253		
July	\$ 45,777	7.219%	\$ 285	\$ 11	\$ 4	\$ 167	\$ 274	\$ 45,749	\$ 82	\$ 206	\$ 109	\$ 671	\$ 667	\$ 4	\$ 480	\$ 191	\$ 2,457		
August	\$ 45,504	7.219%	\$ 285	\$ 11	\$ 4	\$ 170	\$ 274	\$ 45,472	\$ 81	\$ 205	\$ 108	\$ 668	\$ 664	\$ 4	\$ 480	\$ 189	\$ 2,661		
September	\$ 45,230	7.219%	\$ 285	\$ 11	\$ 4	\$ 174	\$ 274	\$ 45,194	\$ 81	\$ 204	\$ 108	\$ 666	\$ 662	\$ 4	\$ 480	\$ 186	\$ 2,862		
October	\$ 44,957	7.219%	\$ 285	\$ 12	\$ 4	\$ 178	\$ 273	\$ 44,917	\$ 80	\$ 202	\$ 107	\$ 662	\$ 659	\$ 3	\$ 480	\$ 183	\$ 3,062		
November	\$ 44,685	7.219%	\$ 285	\$ 12	\$ 4	\$ 183	\$ 273	\$ 44,640	\$ 80	\$ 201	\$ 106	\$ 660	\$ 657	\$ 3	\$ 480	\$ 180	\$ 3,260		
December	\$ 44,412	7.219%	\$ 285	\$ 12	\$ 4	\$ 187	\$ 272	\$ 44,364	\$ 79	\$ 200	\$ 106	\$ 657	\$ 655	\$ 3	\$ 480	\$ 178	\$ 3,457	\$ 3,242	
2017 January	\$ 44,137	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 184	\$ 276	\$ 44,089	\$ 79	\$ 199	\$ 102	\$ 656	\$ 651	\$ 5	\$ 478	\$ 178	\$ 3,654		
February	\$ 43,861	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 181	\$ 276	\$ 43,816	\$ 78	\$ 197	\$ 102	\$ 653	\$ 648	\$ 5	\$ 478	\$ 175	\$ 3,851		
March	\$ 43,585	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 177	\$ 276	\$ 43,544	\$ 78	\$ 196	\$ 101	\$ 651	\$ 646	\$ 5	\$ 478	\$ 173	\$ 4,046		
April	\$ 43,309	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 174	\$ 276	\$ 43,271	\$ 77	\$ 195	\$ 100	\$ 649	\$ 644	\$ 5	\$ 478	\$ 171	\$ 4,240		
May	\$ 43,033	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 171	\$ 276	\$ 42,999	\$ 77	\$ 194	\$ 100	\$ 646	\$ 642	\$ 5	\$ 478	\$ 168	\$ 4,432		
June	\$ 42,758	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 168	\$ 276	\$ 42,726	\$ 76	\$ 192	\$ 99	\$ 644	\$ 639	\$ 5	\$ 478	\$ 166	\$ 4,623		
July	\$ 42,482	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 165	\$ 276	\$ 42,454	\$ 76	\$ 191	\$ 99	\$ 641	\$ 637	\$ 5	\$ 478	\$ 163	\$ 4,813		
August	\$ 42,207	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 162	\$ 276	\$ 42,181	\$ 76	\$ 190	\$ 98	\$ 639	\$ 635	\$ 4	\$ 478	\$ 161	\$ 5,002		
September	\$ 41,931	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 159	\$ 276	\$ 41,908	\$ 75	\$ 189	\$ 97	\$ 637	\$ 632	\$ 4	\$ 478	\$ 159	\$ 5,189		
October	\$ 41,655	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 156	\$ 276	\$ 41,636	\$ 75	\$ 188	\$ 97	\$ 634	\$ 630	\$ 4	\$ 478	\$ 156	\$ 5,375		
November	\$ 41,380	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 153	\$ 276	\$ 41,363	\$ 74	\$ 186	\$ 96	\$ 632	\$ 628	\$ 4	\$ 478	\$ 154	\$ 5,559		
December	\$ 41,104	6.677%	\$ 267	\$ (9)	\$ (3)	\$ 150	\$ 276												
Adjustment for Tax Cuts & Jobs Act (e)					\$ (50)	\$ 100		\$ 41,116	\$ 74	\$ 185	\$ 95	\$ 630	\$ 625	\$ 5	\$ 478	\$ 152	\$ 5,742		

	Latest Levelized Payment Calculations		
	2016		Future
	Ending Deferral	Revenue Streams 2017 Forward	Total
Net present value	\$ 3,242	\$ 57,782	\$ 61,024
Annual payment	\$ 305	\$ 5,432	\$ 5,737
Monthly payment	\$ 25	\$ 453	\$ 478

- 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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.
  - (c) From Exhibit I-TU: Demand Allocator to NC Retail from 2016 Cost of Service study as filed on Docket E-2, Sub 1143
  - (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2017 Cost of Service study
  - (e) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.

EXHIBIT C-5-Estimate-TU

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

ASSUMPTIONS:	2015	REVISIONS FOR 2016	REVISIONS FOR 2017
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)		
LEVELIZATION PERIOD IN MONTHS	239 (a)		
TAX LIFE	20 (a)		
COMPOSITE TAX RATE	35.16% (a)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
DEPRECIATION RATE	1.8678% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	0.7783%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR		60.60076% (c)	60.60076% (c)

LEVELIZATION ESTIMATES AS FILED ON EXHIBIT C-5-E UNDER DOCKET E-2, SUB 1143

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		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)	DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
									INTEREST (Col I)	EQUITY (Col J)							
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	\$ 69	
2016	\$ 5,604	7.219%	\$ 455	\$ (19)	\$ (7)	\$ 7	\$ 475	\$ 5,831	\$ 125	\$ 315	\$ 167	\$ 1,082	\$ 908	\$ 174	\$ 258	\$ 242	
2017																	
January	\$ 5,535	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (5)	\$ 69	\$ 5,569	\$ 10	\$ 25	\$ 13	\$ 117					
February	\$ 5,466	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (16)	\$ 69	\$ 5,511	\$ 10	\$ 25	\$ 13	\$ 116					
March	\$ 5,398	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (28)	\$ 69	\$ 5,454	\$ 10	\$ 25	\$ 13	\$ 116					
April	\$ 5,329	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (39)	\$ 69	\$ 5,397	\$ 10	\$ 24	\$ 13	\$ 115					
May	\$ 5,260	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (51)	\$ 69	\$ 5,339	\$ 10	\$ 24	\$ 12	\$ 115					
June	\$ 5,191	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (62)	\$ 69	\$ 5,282	\$ 9	\$ 24	\$ 12	\$ 114					
July	\$ 5,122	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (74)	\$ 69	\$ 5,225	\$ 9	\$ 24	\$ 12	\$ 114					
August	\$ 5,054	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (85)	\$ 69	\$ 5,167	\$ 9	\$ 23	\$ 12	\$ 113					
September	\$ 4,985	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (96)	\$ 69	\$ 5,110	\$ 9	\$ 23	\$ 12	\$ 113					
October	\$ 4,916	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (108)	\$ 69	\$ 5,052	\$ 9	\$ 23	\$ 12	\$ 112					
November	\$ 4,847	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (119)	\$ 69	\$ 4,995	\$ 9	\$ 23	\$ 12	\$ 112					
December	\$ 4,778	6.677%	\$ 35	\$ (34)	\$ (11)	\$ (131)	\$ 69	\$ 4,938	\$ 9	\$ 22	\$ 11	\$ 111					
												\$ 1,369	\$ 1,284				
2018	\$ 3,953	6.177%	\$ 390	\$ (436)	\$ (148)	\$ (279)	\$ 826	\$ 4,570	\$ 98	\$ 247	\$ 127	\$ 1,298	\$ 1,142				
2019	\$ 3,127	5.713%	\$ 360	\$ (465)	\$ (158)	\$ (437)	\$ 826	\$ 3,898	\$ 84	\$ 211	\$ 109	\$ 1,229	\$ 1,014				
2020	\$ 2,301	5.285%	\$ 333	\$ (492)	\$ (167)	\$ (605)	\$ 826	\$ 3,235	\$ 69	\$ 175	\$ 90	\$ 1,160	\$ 898				
2021	\$ 1,475	4.888%	\$ 308	\$ (517)	\$ (176)	\$ (781)	\$ 826	\$ 2,581	\$ 55	\$ 140	\$ 72	\$ 1,093	\$ 793				
2022	\$ 650	4.522%	\$ 285	\$ (540)	\$ (184)	\$ (965)	\$ 826	\$ 1,935	\$ 42	\$ 105	\$ 54	\$ 1,026	\$ 698				
2023	\$ (176)	4.462%	\$ 282	\$ (544)	\$ (185)	\$ (1,150)	\$ 826	\$ 1,294	\$ 28	\$ 70	\$ 36	\$ 960	\$ 613				
2024	\$ (1,002)	4.461%	\$ 281	\$ (544)	\$ (185)	\$ (1,335)	\$ 826	\$ 653	\$ 14	\$ 35	\$ 18	\$ 893	\$ 535				
2025	\$ (1,827)	4.462%	\$ 282	\$ (544)	\$ (185)	\$ (1,520)	\$ 826	\$ 13	\$ 0	\$ 1	\$ 0	\$ 827	\$ 465				
2026	\$ (2,653)	4.461%	\$ 281	\$ (544)	\$ (185)	\$ (1,705)	\$ 826	\$ (628)	\$ (13)	\$ (34)	\$ (18)	\$ 761	\$ 401				
2027	\$ (3,479)	4.462%	\$ 282	\$ (544)	\$ (185)	\$ (1,890)	\$ 826	\$ (1,269)	\$ (27)	\$ (69)	\$ (35)	\$ 695	\$ 343				
2028	\$ (4,305)	4.461%	\$ 281	\$ (544)	\$ (185)	\$ (2,075)	\$ 826	\$ (1,909)	\$ (41)	\$ (103)	\$ (53)	\$ 628	\$ 291				
2029	\$ (5,130)	4.462%	\$ 282	\$ (544)	\$ (185)	\$ (2,260)	\$ 826	\$ (2,550)	\$ (55)	\$ (138)	\$ (71)	\$ 562	\$ 244				
2030	\$ (5,956)	4.461%	\$ 281	\$ (544)	\$ (185)	\$ (2,445)	\$ 826	\$ (3,190)	\$ (69)	\$ (172)	\$ (89)	\$ 496	\$ 202				
2031	\$ (6,782)	4.462%	\$ 282	\$ (544)	\$ (185)	\$ (2,630)	\$ 826	\$ (3,831)	\$ (82)	\$ (207)	\$ (107)	\$ 430	\$ 164				
2032	\$ (7,607)	4.461%	\$ 281	\$ (544)	\$ (185)	\$ (2,816)	\$ 826	\$ (4,472)	\$ (96)	\$ (242)	\$ (125)	\$ 363	\$ 130				
2033	\$ (8,433)	4.462%	\$ 282	\$ (544)	\$ (185)	\$ (3,001)	\$ 826	\$ (5,112)	\$ (110)	\$ (276)	\$ (142)	\$ 297	\$ 100				
2034	\$ (9,259)	4.461%	\$ 281	\$ (544)	\$ (185)	\$ (3,186)	\$ 826	\$ (5,753)	\$ (124)	\$ (311)	\$ (160)	\$ 231	\$ 73				
2035 SIX MONTHS	\$ (9,672)	2.231%	\$ 141	\$ (272)	\$ (93)	\$ (3,278)	\$ 413	\$ (6,233)	\$ (134)	\$ (337)	\$ (174)	\$ (232)	\$ (69)				
TOTAL		100.000%	\$ 6,308	\$ (9,640)			\$ 15,948		\$ (67)	\$ (168)	\$ (79)	\$ 15,634	\$ 9,322				

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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.  
 (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2016 cost of service study

	2016 Ending Deferral	Future Revenue Streams 2017 Forward	Total
Net present value	\$ 242	\$ 9,322	\$ 9,564
Annual payment	\$ 23	\$ 876	\$ 899
Monthly payment	\$ 2	\$ 73	\$ 75

EXHIBIT C-5 Actual -TU

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	2016	2017
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)		
LEVELIZATION PERIOD IN MONTHS	239 (a)		
TAX LIFE	20 (a)		
COMPOSITE TAX RATE	35.16% (a)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
DEPRECIATION RATE	1.8678% (a)		
FIRST YEAR BOOK DEPRECIATION RATE	0.7783%		
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	60.60076% (c)	61.33723% (d)

BASED ON 2017 TEST YEAR ACTUALS

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
									INTEREST (Col I)	EQUITY (Col J)									
Beg Balance July 31, 2015	\$ 6,276																		
2015 August	\$ 6,237	3.750%	\$ 47	\$ 8	\$ 3	\$ 3	\$ 39	\$ 6,255	\$ 11	\$ 28	\$ 15	\$ 94	\$ 124	\$ (30)	\$ 79	\$ 15	\$ 15		
September	\$ 6,197	3.750%	\$ 47	\$ 8	\$ 3	\$ 5	\$ 39	\$ 6,213	\$ 11	\$ 28	\$ 15	\$ 94	\$ 123	\$ (30)	\$ 79	\$ 15	\$ 30		
October	\$ 6,158	3.750%	\$ 47	\$ 8	\$ 3	\$ 8	\$ 39	\$ 6,171	\$ 11	\$ 28	\$ 15	\$ 93	\$ 123	\$ (30)	\$ 79	\$ 14	\$ 45		
November	\$ 6,118	3.750%	\$ 47	\$ 7	\$ 3	\$ 11	\$ 40	\$ 6,129	\$ 11	\$ 28	\$ 15	\$ 93	\$ 122	\$ (29)	\$ 79	\$ 14	\$ 59		
December	\$ 6,079	3.750%	\$ 47	\$ 8	\$ 3	\$ 13	\$ 39	\$ 6,086	\$ 11	\$ 27	\$ 15	\$ 92	\$ 122	\$ (29)	\$ 79	\$ 13	\$ 73	\$ 69	
2016 January	\$ 6,040	7.219%	\$ 38	\$ (1)	\$ (0)	\$ 13	\$ 39	\$ 6,046	\$ 11	\$ 27	\$ 14	\$ 92	\$ 121	\$ (29)	\$ 76	\$ 16	\$ 90		
February	\$ 6,000	7.219%	\$ 38	\$ (1)	\$ (0)	\$ 13	\$ 39	\$ 6,007	\$ 11	\$ 27	\$ 14	\$ 91	\$ 120	\$ (29)	\$ 76	\$ 16	\$ 106		
March	\$ 5,961	7.219%	\$ 38	\$ (1)	\$ (0)	\$ 12	\$ 39	\$ 5,968	\$ 11	\$ 27	\$ 14	\$ 91	\$ 120	\$ (29)	\$ 76	\$ 15	\$ 122		
April	\$ 5,922	7.219%	\$ 38	\$ (1)	\$ (0)	\$ 12	\$ 39	\$ 5,930	\$ 11	\$ 27	\$ 14	\$ 91	\$ 119	\$ (29)	\$ 76	\$ 15	\$ 137		
May	\$ 5,882	7.219%	\$ 38	\$ (2)	\$ (1)	\$ 11	\$ 40	\$ 5,891	\$ 11	\$ 27	\$ 14	\$ 91	\$ 119	\$ (28)	\$ 76	\$ 15	\$ 153		
June	\$ 5,843	7.219%	\$ 38	\$ (2)	\$ (1)	\$ 10	\$ 40	\$ 5,852	\$ 10	\$ 26	\$ 14	\$ 91	\$ 118	\$ (28)	\$ 76	\$ 15	\$ 169		
July	\$ 5,803	7.219%	\$ 38	\$ (2)	\$ (1)	\$ 10	\$ 40	\$ 5,813	\$ 10	\$ 26	\$ 14	\$ 90	\$ 118	\$ (28)	\$ 76	\$ 15	\$ 185		
August	\$ 5,763	7.219%	\$ 38	\$ (2)	\$ (1)	\$ 9	\$ 40	\$ 5,773	\$ 10	\$ 26	\$ 14	\$ 90	\$ 117	\$ (27)	\$ 76	\$ 14	\$ 200		
September	\$ 5,723	7.219%	\$ 38	\$ (2)	\$ (1)	\$ 9	\$ 40	\$ 5,734	\$ 10	\$ 26	\$ 14	\$ 90	\$ 117	\$ (27)	\$ 76	\$ 14	\$ 215		
October	\$ 5,683	7.219%	\$ 38	\$ (2)	\$ (1)	\$ 8	\$ 40	\$ 5,695	\$ 10	\$ 26	\$ 14	\$ 89	\$ 116	\$ (27)	\$ 76	\$ 13	\$ 230		
November	\$ 5,644	7.219%	\$ 38	\$ (2)	\$ (1)	\$ 7	\$ 40	\$ 5,656	\$ 10	\$ 25	\$ 13	\$ 89	\$ 116	\$ (27)	\$ 76	\$ 13	\$ 244		
December	\$ 5,604	7.219%	\$ 38	\$ (2)	\$ (1)	\$ 7	\$ 40	\$ 5,617	\$ 10	\$ 25	\$ 13	\$ 88	\$ 115	\$ (27)	\$ 76	\$ 13	\$ 258	\$ 242	
2017 January	\$ 5,564	6.677%	\$ 36	\$ (5)	\$ (2)	\$ 5	\$ 40	\$ 5,578	\$ 10	\$ 25	\$ 13	\$ 88	\$ 117	\$ (29)	\$ 75	\$ 13	\$ 273		
February	\$ 5,524	6.677%	\$ 36	\$ (5)	\$ (2)	\$ 4	\$ 40	\$ 5,539	\$ 10	\$ 25	\$ 13	\$ 88	\$ 116	\$ (28)	\$ 75	\$ 13	\$ 288		
March	\$ 5,484	6.677%	\$ 36	\$ (5)	\$ (2)	\$ 2	\$ 40	\$ 5,501	\$ 10	\$ 25	\$ 13	\$ 88	\$ 116	\$ (28)	\$ 75	\$ 13	\$ 302		
April	\$ 5,443	6.677%	\$ 36	\$ (5)	\$ (2)	\$ 0	\$ 40	\$ 5,462	\$ 10	\$ 25	\$ 13	\$ 87	\$ 115	\$ (28)	\$ 75	\$ 12	\$ 316		
May	\$ 5,403	6.677%	\$ 36	\$ (5)	\$ (2)	\$ (1)	\$ 40	\$ 5,424	\$ 10	\$ 24	\$ 13	\$ 87	\$ 115	\$ (28)	\$ 75	\$ 12	\$ 330		
June	\$ 5,363	6.677%	\$ 36	\$ (5)	\$ (2)	\$ (3)	\$ 40	\$ 5,385	\$ 10	\$ 24	\$ 13	\$ 87	\$ 114	\$ (28)	\$ 75	\$ 12	\$ 343		
July	\$ 5,323	6.677%	\$ 36	\$ (5)	\$ (2)	\$ (4)	\$ 40	\$ 5,346	\$ 10	\$ 24	\$ 12	\$ 86	\$ 114	\$ (28)	\$ 75	\$ 11	\$ 357		
August	\$ 5,283	6.677%	\$ 36	\$ (5)	\$ (2)	\$ (6)	\$ 40	\$ 5,308	\$ 10	\$ 24	\$ 12	\$ 86	\$ 113	\$ (28)	\$ 75	\$ 11	\$ 369		
September	\$ 5,243	6.677%	\$ 36	\$ (5)	\$ (2)	\$ (7)	\$ 40	\$ 5,269	\$ 9	\$ 24	\$ 12	\$ 85	\$ 113	\$ (27)	\$ 75	\$ 11	\$ 382		
October	\$ 5,203	6.677%	\$ 36	\$ (5)	\$ (2)	\$ (9)	\$ 40	\$ 5,231	\$ 9	\$ 24	\$ 12	\$ 85	\$ 112	\$ (27)	\$ 75	\$ 10	\$ 394		
November	\$ 5,163	6.677%	\$ 36	\$ (5)	\$ (2)	\$ (11)	\$ 40	\$ 5,192	\$ 9	\$ 23	\$ 12	\$ 85	\$ 112	\$ (27)	\$ 75	\$ 10	\$ 407		
December	\$ 5,122	6.677%	\$ 36	\$ (5)	\$ (2)	\$ (12)	\$ 40												
Adjustment for Tax Cuts & Jobs Act (e)					\$ 4	\$ (9)	\$	\$ 5,152	\$ 9	\$ 23	\$ 12	\$ 84	\$ 111	\$ (27)	\$ 75	\$ 10	\$ 418		

	Latest Levelized Payment Calculations		
	2016	Future	
	Ending	2017 Forward	Total
Net present value	\$ 242	\$ 9,322	\$ 9,564
Annual payment	\$ 23	\$ 876	\$ 899
Monthly payment	\$ 2	\$ 73	\$ 75

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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.  
 (c) From Exhibit I-TU: Demand Allocator to NC Retail from 2016 Cost of Service study as filed on Docket E-2, Sub 1143  
 (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2017 Cost of Service study  
 (e) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.

EXHIBIT C-6-Estimate-TU

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 2016	REVISIONS FOR 2017
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)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
AMORTIZATION RATE	3.6474% (a)		
FIRST YEAR AMORTIZATION RATE	1.5198%		
WEIGHTED INTEREST RATE	2.1479% (a)		
WEIGHTED NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR		60.60076% (c)	60.60076% (c)

LEVELIZATION ESTIMATES AS FILED ON EXHIBIT C-6-E UNDER DOCKET E-2, SUB 1143

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK AMORTIZATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O)	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	\$ 3,614	
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	\$ 12,261	
2017																	
January	\$ 199,266	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 7,166	\$ 644	\$ 192,570	\$ 345	\$ 868	\$ 447	\$ 2,304					
February	\$ 198,622	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 7,461	\$ 644	\$ 191,631	\$ 343	\$ 863	\$ 445	\$ 2,296					
March	\$ 197,978	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 7,755	\$ 644	\$ 190,692	\$ 341	\$ 859	\$ 443	\$ 2,287					
April	\$ 197,333	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 8,050	\$ 644	\$ 189,753	\$ 340	\$ 855	\$ 441	\$ 2,279					
May	\$ 196,689	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 8,344	\$ 644	\$ 188,814	\$ 338	\$ 851	\$ 438	\$ 2,271					
June	\$ 196,045	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 8,639	\$ 644	\$ 187,876	\$ 336	\$ 846	\$ 436	\$ 2,263					
July	\$ 195,401	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 8,933	\$ 644	\$ 186,937	\$ 335	\$ 842	\$ 434	\$ 2,255					
August	\$ 194,756	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 9,228	\$ 644	\$ 185,998	\$ 333	\$ 838	\$ 432	\$ 2,247					
September	\$ 194,112	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 9,522	\$ 644	\$ 185,059	\$ 331	\$ 834	\$ 430	\$ 2,239					
October	\$ 193,468	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 9,817	\$ 644	\$ 184,120	\$ 330	\$ 829	\$ 427	\$ 2,231					
November	\$ 192,823	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 10,111	\$ 644	\$ 183,181	\$ 328	\$ 825	\$ 425	\$ 2,223					
December	\$ 192,179	8.550%	\$ 1,510	\$ 866	\$ 295	\$ 10,406	\$ 644	\$ 182,242	\$ 326	\$ 821	\$ 423	\$ 2,215					
												\$ 27,110	\$ 25,427				
2018	\$ 184,447	7.700%	\$ 16,323	\$ 8,591	\$ 2,922	\$ 13,328	\$ 7,732	\$ 176,446	\$ 3,790	\$ 9,539	\$ 4,916	\$ 25,976	\$ 22,851				
2019	\$ 176,715	6.930%	\$ 14,690	\$ 6,959	\$ 2,367	\$ 15,694	\$ 7,732	\$ 166,070	\$ 3,567	\$ 8,978	\$ 4,627	\$ 24,904	\$ 20,548				
2020	\$ 168,983	6.230%	\$ 13,207	\$ 5,475	\$ 1,862	\$ 17,556	\$ 7,732	\$ 156,224	\$ 3,356	\$ 8,445	\$ 4,353	\$ 23,886	\$ 18,484				
2021	\$ 161,252	5.900%	\$ 12,507	\$ 4,775	\$ 1,624	\$ 19,180	\$ 7,732	\$ 146,749	\$ 3,152	\$ 7,933	\$ 4,089	\$ 22,906	\$ 16,625				
2022	\$ 153,520	5.900%	\$ 12,507	\$ 4,775	\$ 1,624	\$ 20,804	\$ 7,732	\$ 137,393	\$ 2,951	\$ 7,427	\$ 3,828	\$ 21,938	\$ 14,935				
2023	\$ 145,788	5.910%	\$ 12,528	\$ 4,796	\$ 1,631	\$ 22,436	\$ 7,732	\$ 128,034	\$ 2,750	\$ 6,922	\$ 3,567	\$ 20,971	\$ 13,390				
2024	\$ 138,056	5.900%	\$ 12,507	\$ 4,775	\$ 1,624	\$ 24,060	\$ 7,732	\$ 118,674	\$ 2,549	\$ 6,416	\$ 3,306	\$ 20,003	\$ 11,979				
2025	\$ 130,324	5.910%	\$ 12,528	\$ 4,796	\$ 1,631	\$ 25,691	\$ 7,732	\$ 109,315	\$ 2,348	\$ 5,910	\$ 3,046	\$ 19,035	\$ 10,692				
2026	\$ 122,592	5.900%	\$ 12,507	\$ 4,775	\$ 1,624	\$ 27,315	\$ 7,732	\$ 99,955	\$ 2,147	\$ 5,404	\$ 2,785	\$ 18,067	\$ 9,518				
2027	\$ 114,860	5.910%	\$ 12,528	\$ 4,796	\$ 1,631	\$ 28,946	\$ 7,732	\$ 90,596	\$ 1,946	\$ 4,898	\$ 2,524	\$ 17,100	\$ 8,449				
2028	\$ 107,129	5.900%	\$ 12,507	\$ 4,775	\$ 1,624	\$ 30,570	\$ 7,732	\$ 81,236	\$ 1,745	\$ 4,392	\$ 2,263	\$ 16,132	\$ 7,476				
2029	\$ 99,397	5.910%	\$ 12,528	\$ 4,796	\$ 1,631	\$ 32,201	\$ 7,732	\$ 71,877	\$ 1,544	\$ 3,886	\$ 2,003	\$ 15,164	\$ 6,591				
2030	\$ 91,665	2.950%	\$ 6,253	\$ (1,478)	\$ (503)	\$ 31,699	\$ 7,732	\$ 63,581	\$ 1,366	\$ 3,437	\$ 1,771	\$ 14,306	\$ 5,832				
2031	\$ 83,933	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 29,069	\$ 7,732	\$ 57,415	\$ 1,233	\$ 3,104	\$ 1,600	\$ 13,669	\$ 5,227				
2032	\$ 76,201	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 26,439	\$ 7,732	\$ 52,313	\$ 1,124	\$ 2,828	\$ 1,458	\$ 13,141	\$ 4,713				
2033	\$ 68,469	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 23,810	\$ 7,732	\$ 47,211	\$ 1,014	\$ 2,552	\$ 1,315	\$ 12,614	\$ 4,243				
2034	\$ 60,737	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 21,180	\$ 7,732	\$ 42,108	\$ 904	\$ 2,276	\$ 1,173	\$ 12,086	\$ 3,813				
2035	\$ 53,006	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 18,551	\$ 7,732	\$ 37,006	\$ 795	\$ 2,001	\$ 1,031	\$ 11,558	\$ 3,420				
2036	\$ 45,274	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 15,921	\$ 7,732	\$ 31,904	\$ 685	\$ 1,725	\$ 889	\$ 11,031	\$ 3,061				
2037	\$ 37,542	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 13,291	\$ 7,732	\$ 26,802	\$ 576	\$ 1,449	\$ 747	\$ 10,503	\$ 2,734				
2038	\$ 29,810	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 10,662	\$ 7,732	\$ 21,699	\$ 466	\$ 1,173	\$ 605	\$ 9,976	\$ 2,435				
2039	\$ 22,078	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 8,032	\$ 7,732	\$ 16,597	\$ 356	\$ 897	\$ 462	\$ 9,448	\$ 2,163				
2040	\$ 14,346	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 5,403	\$ 7,732	\$ 11,495	\$ 247	\$ 621	\$ 320	\$ 8,920	\$ 1,916				
2041	\$ 6,614	0.000%	\$ -	\$ (7,732)	\$ (2,630)	\$ 2,773	\$ 7,732	\$ 6,393	\$ 137	\$ 346	\$ 178	\$ 8,393	\$ 1,691				
2042	\$ (1,118)	0.000%	\$ -	\$ (7,733)	\$ (2,630)	\$ 143	\$ 7,733	\$ 1,290	\$ 28	\$ 70	\$ 36	\$ 7,866	\$ 1,486				
		100.000%	\$ 211,926	\$ (40)			\$ 211,965		\$ 50,937	\$ 128,203	\$ 66,344	\$ 457,449	\$ 229,700				

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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.  
 (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2016 cost of service study

	2016 Ending Deferral	Future Revenue Streams 2017 Forward	Total
Net present value	\$ 12,261	\$ 229,700	\$ 241,961
Annual payment	\$ 1,001	\$ 18,745	\$ 19,746
Monthly payment	\$ 83	\$ 1,562	\$ 1,645

EXHIBIT C-6 Actual -TU

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	2016	2017
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)	34.59% (b)	34.01% (b)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6071% (b)	6.6189% (b)
AMORTIZATION RATE	3.6474% (a)		
FIRST YEAR AMORTIZATION RATE	1.5198% (a)		
WEIGHTED INTEREST RATE	2.1479% (a)		
WEIGHTED NET OF TAX EQUITY RATE	5.4060% (a)		
NC RETAIL ALLOCATION FACTOR	60.27603% (a)	60.60076% (c)	61.33723% (d)

BASED ON 2017 TEST YEAR ACTUALS

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK AMORTIZATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
									INTEREST (Col I)	EQUITY (Col J)									
Beg Balance July 31, 2015	\$ 210,847																		
2015 August	\$ 210,211	5.000%	\$ 2,108	\$ 1,472	\$ 518	\$ 518	\$ 636	\$ 210,270	\$ 376	\$ 947	\$ 514	\$ 2,474	\$ 2,498	\$ (24)	\$ 1,700	\$ 774	\$ 778		
September	\$ 209,565	5.000%	\$ 2,108	\$ 1,463	\$ 514	\$ 1,032	\$ 645	\$ 209,113	\$ 374	\$ 942	\$ 511	\$ 2,473	\$ 2,488	\$ (15)	\$ 1,700	\$ 773	\$ 1,559		
October	\$ 208,924	5.000%	\$ 2,108	\$ 1,468	\$ 516	\$ 1,548	\$ 641	\$ 207,955	\$ 372	\$ 937	\$ 508	\$ 2,458	\$ 2,478	\$ (20)	\$ 1,700	\$ 758	\$ 2,330		
November	\$ 208,284	5.000%	\$ 2,108	\$ 1,468	\$ 516	\$ 2,064	\$ 641	\$ 206,798	\$ 370	\$ 932	\$ 505	\$ 2,448	\$ 2,467	\$ (20)	\$ 1,700	\$ 748	\$ 3,094		
December	\$ 207,643	5.000%	\$ 2,108	\$ 1,468	\$ 516	\$ 2,580	\$ 641	\$ 205,641	\$ 368	\$ 926	\$ 502	\$ 2,438	\$ 2,457	\$ (19)	\$ 1,700	\$ 738	\$ 3,853	\$ 3,614	
2016 January	\$ 206,998	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 2,938	\$ 644	\$ 204,562	\$ 366	\$ 922	\$ 487	\$ 2,419	\$ 2,416	\$ 3	\$ 1,652	\$ 767	\$ 4,646		
February	\$ 206,354	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 3,295	\$ 644	\$ 203,560	\$ 364	\$ 917	\$ 485	\$ 2,411	\$ 2,407	\$ 3	\$ 1,652	\$ 759	\$ 5,434		
March	\$ 205,710	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 3,653	\$ 644	\$ 202,558	\$ 363	\$ 913	\$ 483	\$ 2,402	\$ 2,399	\$ 3	\$ 1,652	\$ 750	\$ 6,218		
April	\$ 205,065	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 4,011	\$ 644	\$ 201,556	\$ 361	\$ 908	\$ 480	\$ 2,393	\$ 2,390	\$ 3	\$ 1,652	\$ 741	\$ 6,998		
May	\$ 204,421	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 4,368	\$ 644	\$ 200,554	\$ 359	\$ 904	\$ 478	\$ 2,385	\$ 2,381	\$ 3	\$ 1,652	\$ 733	\$ 7,773		
June	\$ 203,777	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 4,726	\$ 644	\$ 199,552	\$ 357	\$ 899	\$ 475	\$ 2,376	\$ 2,373	\$ 3	\$ 1,652	\$ 724	\$ 8,544		
July	\$ 203,132	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 5,083	\$ 644	\$ 198,550	\$ 355	\$ 894	\$ 473	\$ 2,367	\$ 2,364	\$ 3	\$ 1,652	\$ 715	\$ 9,310		
August	\$ 202,488	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 5,441	\$ 644	\$ 197,548	\$ 354	\$ 890	\$ 471	\$ 2,358	\$ 2,355	\$ 3	\$ 1,652	\$ 706	\$ 10,072		
September	\$ 201,844	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 5,799	\$ 644	\$ 196,546	\$ 352	\$ 885	\$ 468	\$ 2,350	\$ 2,347	\$ 3	\$ 1,652	\$ 698	\$ 10,829		
October	\$ 201,199	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 6,156	\$ 644	\$ 195,544	\$ 350	\$ 881	\$ 466	\$ 2,341	\$ 2,338	\$ 3	\$ 1,652	\$ 689	\$ 11,581		
November	\$ 200,555	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 6,514	\$ 644	\$ 194,542	\$ 348	\$ 876	\$ 463	\$ 2,332	\$ 2,329	\$ 3	\$ 1,652	\$ 680	\$ 12,329		
December	\$ 199,911	9.500%	\$ 1,678	\$ 1,034	\$ 358	\$ 6,871	\$ 644	\$ 193,540	\$ 346	\$ 872	\$ 461	\$ 2,324	\$ 2,321	\$ 3	\$ 1,652	\$ 672	\$ 13,072	\$ 12,261	
2017 January	\$ 199,259	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 7,170	\$ 652	\$ 192,564	\$ 345	\$ 868	\$ 447	\$ 2,311	\$ 2,304	\$ 8	\$ 1,645	\$ 666	\$ 13,814		
February	\$ 198,606	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 7,468	\$ 652	\$ 191,614	\$ 343	\$ 863	\$ 445	\$ 2,303	\$ 2,296	\$ 8	\$ 1,645	\$ 658	\$ 14,552		
March	\$ 197,954	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 7,766	\$ 652	\$ 190,664	\$ 341	\$ 859	\$ 443	\$ 2,295	\$ 2,287	\$ 8	\$ 1,645	\$ 650	\$ 14,543		
April	\$ 197,302	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 8,064	\$ 652	\$ 189,713	\$ 340	\$ 855	\$ 440	\$ 2,287	\$ 2,279	\$ 7	\$ 1,645	\$ 641	\$ 15,277		
May	\$ 196,650	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 8,362	\$ 652	\$ 188,763	\$ 338	\$ 850	\$ 438	\$ 2,279	\$ 2,271	\$ 7	\$ 1,645	\$ 633	\$ 15,260		
June	\$ 195,998	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 8,660	\$ 652	\$ 187,813	\$ 336	\$ 846	\$ 436	\$ 2,270	\$ 2,263	\$ 7	\$ 1,645	\$ 625	\$ 15,990		
July	\$ 195,346	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 8,958	\$ 652	\$ 186,862	\$ 334	\$ 842	\$ 434	\$ 2,262	\$ 2,255	\$ 7	\$ 1,645	\$ 617	\$ 15,965		
August	\$ 194,694	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 9,256	\$ 652	\$ 185,912	\$ 333	\$ 838	\$ 432	\$ 2,254	\$ 2,247	\$ 7	\$ 1,645	\$ 609	\$ 16,690		
September	\$ 194,041	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 9,555	\$ 652	\$ 184,962	\$ 331	\$ 833	\$ 429	\$ 2,246	\$ 2,239	\$ 7	\$ 1,645	\$ 600	\$ 16,657		
October	\$ 193,389	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 9,853	\$ 652	\$ 184,012	\$ 329	\$ 829	\$ 427	\$ 2,238	\$ 2,231	\$ 7	\$ 1,645	\$ 592	\$ 17,377		
November	\$ 192,737	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 10,151	\$ 652	\$ 183,061	\$ 328	\$ 825	\$ 425	\$ 2,230	\$ 2,223	\$ 7	\$ 1,645	\$ 584	\$ 17,336		
December	\$ 192,085	8.550%	\$ 1,529	\$ 877	\$ 298	\$ 10,449	\$ 652												
Adjustment for Tax Cuts & Jobs Act (e)					\$ (3,337)	\$ 7,112		\$ 183,780	\$ 329	\$ 828	\$ 427	\$ 2,236	\$ 2,215	\$ 21	\$ 1,645	\$ 590	\$ 18,067		

Latest Levelized Payment Calculations			
	2016		Future
	Deferral	Revenue	Streams
		2017 Forward	Total
Net present value	\$ 12,261	\$ 229,700	\$ 241,961
Annual payment	\$ 1,001	\$ 18,745	\$ 19,746
Monthly payment	\$ 83	\$ 1,562	\$ 1,645

- 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, 2016 and January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J - Cost of Capital.
  - (c) From Exhibit I-TU: Demand Allocator to NC Retail from 2016 Cost of Service study as filed on Docket E-2, Sub 1143
  - (d) From Exhibit I-TU: Demand Allocator to NC Retail from 2017 Cost of Service study
  - (e) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.

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	<u>\$ 1,639,247</u>
<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	<u>\$ 14,185</u>
<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	<u>\$ 83,425</u>
<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	<u>\$ (953,678)</u>
<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	<u>\$ 61,780</u>
<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	<u>\$ 844,959</u>
38	Materials and Supplies Inventory	<u>\$ 55,815</u>
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)	<u>\$ 1,250,575</u>
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	<u>\$ 1,250,575</u>
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	<u>\$ 287,077</u>



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

Line No.	Plant	Retirement Date (Col A)	Calculation of Remaining Life (months) (Col B)
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
3	Mayo Plant	6/20/2035	238.67
4	Brunswick Unit 1	9/8/2036	253.27
5	Brunswick Unit 2	12/27/2034	232.90
6	Harris Plant	10/24/2046	374.80

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 (Col A)	Applicable to: Brunswick Nuclear & Harris Nuclear (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%

DUKE ENERGY PROGRESS  
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	2.2340%	0.2695%	2.5035%
2	Brunswick 2	1.7831%	0.2322%	2.0153%
3	Harris	1.3834%	0.1515%	1.5349%
4	Mayo	2.8431%	0.1593%	3.0024%
5	Roxboro 4	1.6390%	0.2288%	1.8678%

EXHIBIT D - TU

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 (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	\$ 53,284	\$ 54,134	\$ 55,661	\$ 56,213	\$ 56,169	\$ 55,794	\$ 55,199	\$ 54,459	\$ 53,628	\$ 52,734	\$ 51,789	\$ 50,799	\$ 50,799 (a)
2	\$ (2,451)	\$ (2,436)	\$ (2,448)	\$ (2,483)	\$ (2,492)	\$ (2,490)	\$ (2,477)	\$ (2,457)	\$ (2,436)	\$ (2,414)	\$ (2,391)	\$ (2,315)	\$ (2,315) (b)
3	\$ 62,386	\$ 62,430	\$ 62,293	\$ 62,076	\$ 61,916	\$ 61,739	\$ 61,622	\$ 61,511	\$ 61,452	\$ 61,401	\$ 61,375	\$ 61,336	\$ 61,336 (c)
4	\$ 851	\$ 851	\$ 851	\$ 851	\$ 851	\$ 851	\$ 851	\$ 913	\$ 1,019	\$ 1,116	\$ 1,315	\$ 1,487	\$ 1,487 (d)
5	Total average system investment for the rate period (Line 1 + Line 2 + Line 3 + Line 4)												\$ 111,308
6	Allocated to NC retail (Line 5 x 61.33723%)												\$ 68,273 (e)
7	0.8232%	1.6531%	2.4899%	3.3336%	4.1842%	5.0418%	5.9065%	6.7783%	7.6573%	8.5435%	9.4370%	10.3379%	10.3379% (f)
8	\$ 576	\$ 1,166	\$ 1,777	\$ 2,385	\$ 2,989	\$ 3,584	\$ 4,173	\$ 4,757	\$ 5,339	\$ 5,913	\$ 6,488	\$ 7,058	\$ 7,058
9	\$ 77	\$ 158	\$ 243	\$ 331	\$ 423	\$ 519	\$ 618	\$ 721	\$ 828	\$ 939	\$ 1,053	\$ 1,151	\$ 1,151 (g)
10	Total Year to Date NC retail revenues required for financing costs (Line 8 + Line 9)												\$ 8,209
11	\$ 653	\$ 671	\$ 696	\$ 697	\$ 695	\$ 691	\$ 689	\$ 687	\$ 688	\$ 685	\$ 689	\$ 669	

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 2017 cost of service study of: 61.33723%
- (f) From Exhibit J-TU: Cost of Capital, discounted before tax rate, Column I, Line 3 10.3379%
- (g) From Exhibit D-3: Deferred tax asset, Column L

## EXHIBIT D-1A -TU

DUKE ENERGY PROGRESS  
 NCEMPA GENERATION ASSET PURCHASE  
 ACTUAL NET NUCLEAR FUEL BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2017  
 (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 2017							
1	2016	December	\$ 21,002	\$ 10,939	\$ 16,560	\$ 48,501	(a)
2	2017	January	\$ 20,141	\$ 22,141	\$ 15,784	\$ 58,066	\$ 53,284
3	2017	February	\$ 19,367	\$ 21,396	\$ 15,071	\$ 55,834	\$ 54,134
4	2017	March	\$ 18,538	\$ 27,421	\$ 14,284	\$ 60,243	\$ 55,661
5	2017	April	\$ 17,809	\$ 27,094	\$ 13,518	\$ 58,422	\$ 56,213
6	2017	May	\$ 16,967	\$ 26,253	\$ 12,727	\$ 55,947	\$ 56,169
7	2017	June	\$ 16,146	\$ 25,435	\$ 11,962	\$ 53,543	\$ 55,794
8	2017	July	\$ 15,286	\$ 24,580	\$ 11,171	\$ 51,036	\$ 55,199
9	2017	August	\$ 14,436	\$ 23,727	\$ 10,382	\$ 48,544	\$ 54,459
10	2017	September	\$ 13,608	\$ 22,910	\$ 9,626	\$ 46,144	\$ 53,628
11	2017	October	\$ 12,756	\$ 22,058	\$ 8,983	\$ 43,797	\$ 52,734
12	2017	November	\$ 11,940	\$ 21,230	\$ 8,218	\$ 41,387	\$ 51,789
13	2017	December	\$ 11,113	\$ 20,382	\$ 7,428	\$ 38,923	\$ 50,799
14		Balance as of December 31, 2017	\$ 11,113	\$ 20,382	\$ 7,428	\$ 38,923	

## Notes:

(a) Based on ending balances as of December 31, 2016 as filed with the Commission on Exhibit D-1A-TU under Docket E-2, Sub 1143.

EXHIBIT D-1B -TU

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

Line No.	ADIT Expense (Income) Associated with Nuclear Fuel				
	Brunswick 1 (Col A) (a)	Brunswick 2 (Col B) (b)	Harris (Col C) (c)	Total (Col D) (d)	
Current Test Year: Calendar 2017					
1					
2	2017 January	\$ (139)	\$ 189	\$ (141)	\$ (91)
3	2017 February	\$ (110)	\$ 229	\$ (120)	\$ (1)
4	2017 March	\$ (129)	\$ 351	\$ (145)	\$ 78
5	2017 April	\$ (94)	\$ 371	\$ (138)	\$ 139
6	2017 May	\$ (133)	\$ 196	\$ (146)	\$ (83)
7	2017 June	\$ (126)	\$ 204	\$ (137)	\$ (59)
8	2017 July	\$ (139)	\$ 191	\$ (146)	\$ (94)
9	2017 August	\$ (136)	\$ 192	\$ (146)	\$ (89)
10	2017 September	\$ (128)	\$ 205	\$ (134)	\$ (58)
11	2017 October	\$ (136)	\$ 192	\$ (96)	\$ (40)
12	2017 November	\$ (124)	\$ 200	\$ (137)	\$ (61)
13	2017 December	\$ (128)	\$ 194	\$ (146)	\$ (80)
14	2017 Adjustment for Tax Cuts & Jobs Act (g)	\$ (150)	\$ (721)	\$ 208	\$ (662)
15	Total deferred tax expense	\$ (1,672)	\$ 1,994	\$ (1,423)	\$ (1,100)

	ADIT Asset (Liability) Balance Associated with Nuclear Fuel				Year to Date Average (Col I)
	Brunswick 1 (Col E)	Brunswick 2 (Col F)	Harris (Col G)	Total (Col H)	
Beginning Balance, January 1, 2017	\$ (1,947)	\$ 379	\$ (929)	\$ (2,497)	(f)
	\$ (1,808)	\$ 190	\$ (788)	\$ (2,406)	\$ (2,451)
	\$ (1,698)	\$ (39)	\$ (668)	\$ (2,405)	\$ (2,436)
	\$ (1,569)	\$ (390)	\$ (524)	\$ (2,483)	\$ (2,448)
	\$ (1,475)	\$ (761)	\$ (386)	\$ (2,622)	\$ (2,483)
	\$ (1,342)	\$ (957)	\$ (240)	\$ (2,539)	\$ (2,492)
	\$ (1,216)	\$ (1,161)	\$ (103)	\$ (2,480)	\$ (2,490)
	\$ (1,077)	\$ (1,352)	\$ 43	\$ (2,386)	\$ (2,477)
	\$ (941)	\$ (1,545)	\$ 189	\$ (2,297)	\$ (2,457)
	\$ (813)	\$ (1,749)	\$ 323	\$ (2,239)	\$ (2,436)
	\$ (677)	\$ (1,941)	\$ 419	\$ (2,200)	\$ (2,414)
	\$ (553)	\$ (2,142)	\$ 556	\$ (2,139)	\$ (2,391)
	\$ (425)	\$ (2,336)	\$ 702		
	\$ (275)	\$ (1,615)	\$ 494	\$ (1,397)	\$ (2,315)
Accumulated Deferred Tax Asset (Liability) as of December 31, 2017	\$ (275)	\$ (1,615)	\$ 494	\$ (1,397)	

Notes:

- (a) Calculated as Column A from Exhibit D-1C-TU times the composite tax rate (e)
- (b) Calculated as Column B from Exhibit D-1C-TU times the composite tax rate (e)
- (c) Calculated as Column C from Exhibit D-1C-TU times the composite tax rate (e)
- (d) Calculated as Column D from Exhibit D-1C-TU times the composite tax rate (e)
- (e) Composite tax rate from Exhibit J-TU, Column I, Line 11 34.01%
- (f) Based on ending balances as of December 31, 2016 as filed with the Commission on Exhibit D-1B-TU under Docket E-2, Sub 1143.
- (g) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.

EXHIBIT D-1C -TU

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 (Col A) = E - I	Brunswick 2 (Col B) = F - J	Harris (Col C) = G - K	Total (Col D) = H - L	Brunswick 1 (Col E)	Brunswick 2 (Col F)	Harris (Col G)	Total (Col H)	Brunswick 1 (Col I)	Brunswick 2 (Col J)	Harris (Col K)	Total (Col L)		
Current Test Year: Calendar 2017														
1	2017	January	\$ (410)	\$ 556	\$ (415)	\$ (268)	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 861	\$ 861	\$ 776	\$ 2,498
2	2017	February	\$ (323)	\$ 673	\$ (352)	\$ (2)	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 774	\$ 745	\$ 713	\$ 2,232
3	2017	March	\$ (378)	\$ 1,033	\$ (425)	\$ 229	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 829	\$ 385	\$ 786	\$ 2,001
4	2017	April	\$ (277)	\$ 1,092	\$ (405)	\$ 409	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 729	\$ 326	\$ 766	\$ 1,821
5	2017	May	\$ (391)	\$ 577	\$ (430)	\$ (244)	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 842	\$ 841	\$ 791	\$ 2,474
6	2017	June	\$ (370)	\$ 599	\$ (404)	\$ (174)	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 821	\$ 818	\$ 765	\$ 2,405
7	2017	July	\$ (409)	\$ 562	\$ (429)	\$ (276)	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 861	\$ 855	\$ 790	\$ 2,506
8	2017	August	\$ (399)	\$ 565	\$ (428)	\$ (262)	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 850	\$ 853	\$ 790	\$ 2,493
9	2017	September	\$ (376)	\$ 601	\$ (395)	\$ (170)	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 827	\$ 816	\$ 756	\$ 2,400
10	2017	October	\$ (401)	\$ 565	\$ (281)	\$ (117)	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 852	\$ 852	\$ 643	\$ 2,347
11	2017	November	\$ (365)	\$ 590	\$ (404)	\$ (179)	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 816	\$ 828	\$ 765	\$ 2,410
12	2017	December	\$ (376)	\$ 570	\$ (428)	\$ (234)	\$ 451	\$ 1,418	\$ 361	\$ 2,230	\$ 827	\$ 848	\$ 790	\$ 2,464
13	Total for the Test Period		\$ (4,475)	\$ 7,983	\$ (4,796)	\$ (1,288)	\$ 5,413	\$ 17,013	\$ 4,336	\$ 26,762	\$ 9,889	\$ 9,030	\$ 9,132	\$ 28,051

EXHIBIT D-2 -TU

DUKE ENERGY PROGRESS  
NCEMPA GENERATION ASSET PURCHASE  
ACTUAL MATERIALS AND SUPPLIES BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2017  
(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 2017							
1	2016 December	\$ 37,291	\$ 20,610	\$ 2,566	\$ 1,710	\$ 62,177	(c)
2	2017 January	\$ 37,421	\$ 20,872	\$ 2,582	\$ 1,719	\$ 62,595	\$ 62,386
3	2017 February	\$ 37,161	\$ 21,052	\$ 2,589	\$ 1,716	\$ 62,518	\$ 62,430
4	2017 March	\$ 36,444	\$ 21,130	\$ 2,595	\$ 1,712	\$ 61,880	\$ 62,293
5	2017 April	\$ 35,933	\$ 21,053	\$ 2,591	\$ 1,634	\$ 61,212	\$ 62,076
6	2017 May	\$ 35,832	\$ 21,076	\$ 2,581	\$ 1,627	\$ 61,116	\$ 61,916
7	2017 June	\$ 35,394	\$ 21,112	\$ 2,555	\$ 1,615	\$ 60,677	\$ 61,739
8	2017 July	\$ 35,512	\$ 21,145	\$ 2,533	\$ 1,615	\$ 60,805	\$ 61,622
9	2017 August	\$ 35,453	\$ 21,070	\$ 2,495	\$ 1,604	\$ 60,622	\$ 61,511
10	2017 September	\$ 35,704	\$ 21,121	\$ 2,490	\$ 1,604	\$ 60,919	\$ 61,452
11	2017 October	\$ 35,681	\$ 21,136	\$ 2,484	\$ 1,591	\$ 60,892	\$ 61,401
12	2017 November	\$ 35,975	\$ 21,066	\$ 2,484	\$ 1,568	\$ 61,094	\$ 61,375
13	2017 December	\$ 35,582	\$ 21,274	\$ 2,441	\$ 1,566	\$ 60,864	\$ 61,336
14	Balance as of December 31, 2017	\$ 35,582	\$ 21,274	\$ 2,441	\$ 1,566	\$ 60,864	

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, 2016 as filed with the Commission on Exhibit D-2-TU under Docket E-2, Sub 1143.



EXHIBIT D-3 -TU

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
ASSUMPTIONS:			
DECOMMISSIONING FUNDS TRANSFERRED	\$ 287,077 (a)		
TAX LIFE USED FOR ACQUIRED NCEMPA ASSETS	15 (b)		
COMPOSITE TAX RATE	35.16% (c)	34.59% (d)	34.01% (e)
AFTER TAX COST OF CAPITAL	6.5956% (c)	6.6071% (d)	6.6189% (f)
WEIGHTED ANNUAL INTEREST RATE	2.1479% (c)		
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (c)		
NC RETAIL ALLOCATION FACTOR	60.27603% (c)	60.60076% (d)	61.33723% (g)

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		INCOME TAXES (Col J)	NC RETAIL REVENUE (Col K)	YEAR TO DATE NC RETAIL REVENUE (Col L)
								INTEREST (Col H)	EQUITY (Col I)			
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 January	\$ -	8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 9,185	\$ 8,972	\$ 16	\$ 40	\$ 21	\$ 77	\$ 77
February		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 9,612	\$ 9,399	\$ 17	\$ 42	\$ 22	\$ 81	\$ 158
March		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 10,039	\$ 9,826	\$ 18	\$ 44	\$ 23	\$ 85	\$ 243
April		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 10,466	\$ 10,252	\$ 18	\$ 46	\$ 24	\$ 88	\$ 331
May		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 10,892	\$ 10,679	\$ 19	\$ 48	\$ 25	\$ 92	\$ 423
June		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 11,319	\$ 11,106	\$ 20	\$ 50	\$ 26	\$ 96	\$ 519
July		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 11,746	\$ 11,532	\$ 21	\$ 52	\$ 27	\$ 99	\$ 618
August		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 12,172	\$ 11,959	\$ 21	\$ 54	\$ 28	\$ 103	\$ 721
September		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 12,599	\$ 12,386	\$ 22	\$ 56	\$ 29	\$ 107	\$ 828
October		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 13,026	\$ 12,812	\$ 23	\$ 58	\$ 30	\$ 110	\$ 939
November		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 13,452	\$ 13,239	\$ 24	\$ 60	\$ 31	\$ 114	\$ 1,053
December		8.550%	\$ 1,255	\$ 1,255	\$ 427	\$ 13,879						
Adjustment for Tax Cuts & Jobs Act (h)					\$ (4,424)	\$ 9,455	\$ 11,454	\$ 21	\$ 52	\$ 27	\$ 99	\$ 1,151
2017		8.550%	\$ 15,055	\$ 15,055	\$ 696	\$ 9,455	\$ 10,979	\$ 239	\$ 602	\$ 310	\$ 1,151	

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

Notes:

- (a) From Exhibit C-7-TU
- (b) From Exhibit C-9-TU
- (c) From Exhibit D-3-TU as filed with the Commission under Docket E-2, Sub 1110
- (d) From Exhibit D-3-TU as filed with the Commission under Docket E-2, Sub 1143
- (e) From Exhibit J-TU, Column I, Line 11.
- (f) From Exhibit J-TU, Column H, Line 4
- (g) From Exhibit I-TU
- (h) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%.  
The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.

## EXHIBIT D-4 -TU

DUKE ENERGY PROGRESS  
NCEMPA GENERATION ASSET PURCHASE  
ACTUAL DRY CASK STORAGE BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2017  
(Thousands of Dollars)

Line No.		Brunswick Common (Col A) (a)	Total (Col B)	Year to Date Average (Col C)
Current Test Year: Calendar 2017				
1	2016 December	\$ 851	\$ 851	(b)
2	2017 January	\$ 851	\$ 851	\$ 851
3	2017 February	\$ 851	\$ 851	\$ 851
4	2017 March	\$ 851	\$ 851	\$ 851
5	2017 April	\$ 851	\$ 851	\$ 851
6	2017 May	\$ 851	\$ 851	\$ 851
7	2017 June	\$ 851	\$ 851	\$ 851
8	2017 July	\$ 851	\$ 851	\$ 851
9	2017 August	\$ 1,411	\$ 1,411	\$ 913
10	2017 September	\$ 1,971	\$ 1,971	\$ 1,019
11	2017 October	\$ 2,087	\$ 2,087	\$ 1,116
12	2017 November	\$ 3,499	\$ 3,499	\$ 1,315
13	2017 December	\$ 3,554	\$ 3,554	\$ 1,487
14	Balance as of December 31, 2017	<u>\$ 3,554</u>	<u>\$ 3,554</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.
- (b) Based on ending balances as of December 31, 2016 as filed with the Commission on Exhibit D-2-TU under Docket E-2, Sub 1143.

EXHIBIT E-TU

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

Line No.		For the Month												Year to Date Total Amount (Col M)
		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)	
1	Actual capital additions to plant in service since the purchase date allocated to purchase from NCEMPA	\$ 75,858	\$ 76,904	\$ 78,896	\$ 80,905	\$ 83,116	\$ 85,315	\$ 87,929	\$ 91,433	\$ 94,728	\$ 97,419	\$ 100,070	\$ 102,571	\$ 102,571 (a)
2	Actual accumulated depreciation on actual capital additions to plant in service since the purchase date allocated to purchase from NCEMPA	\$ (961)	\$ (1,026)	\$ (1,092)	\$ (1,161)	\$ (1,231)	\$ (1,305)	\$ (1,381)	\$ (1,459)	\$ (1,540)	\$ (1,625)	\$ (1,713)	\$ (1,802)	\$ (1,802) (b)
3	Accumulated deferred income tax asset / (liability) related to capital additions to plant in service	\$ (17,382)	\$ (18,024)	\$ (18,381)	\$ (18,807)	\$ (19,206)	\$ (19,622)	\$ (20,030)	\$ (20,516)	\$ (21,160)	\$ (21,766)	\$ (22,272)	\$ (22,117)	\$ (22,117) (c)
4	Total average net plant in service on capital additions for the test period (Line 1 + Line 2 + Line 3)	\$ 57,515	\$ 57,854	\$ 59,423	\$ 60,938	\$ 62,679	\$ 64,388	\$ 66,519	\$ 69,459	\$ 72,028	\$ 74,027	\$ 76,086	\$ 78,651	\$ 78,651
5	Allocation to NC retail (Line 4 x Line 11)	\$ 35,278	\$ 35,486	\$ 36,449	\$ 37,377	\$ 38,445	\$ 39,494	\$ 40,801	\$ 42,604	\$ 44,180	\$ 45,406	\$ 46,669	\$ 48,243	\$ 48,243
6	Rate base pre-tax cost of capital - discounted year to date rate	0.8232%	1.65314%	2.48993%	3.33360%	4.18422%	5.04185%	5.90653%	6.77833%	7.65731%	8.54353%	9.43704%	10.33790%	10.3379% (d)
7	Total year to date NC retail revenues required for cost of capital on above investments (Line 5 x Line 6)	\$ 290	\$ 587	\$ 908	\$ 1,246	\$ 1,609	\$ 1,991	\$ 2,410	\$ 2,888	\$ 3,383	\$ 3,879	\$ 4,404	\$ 4,987	\$ 4,987
Incremental operating expenses related to capital additions:														
8	Depreciation expense on actual capital additions for the test year - year to date	\$ 124	\$ 257	\$ 391	\$ 535	\$ 687	\$ 846	\$ 1,013	\$ 1,185	\$ 1,375	\$ 1,575	\$ 1,774	\$ 1,980	\$ 1,980 (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)	\$ 124	\$ 257	\$ 391	\$ 535	\$ 687	\$ 846	\$ 1,013	\$ 1,185	\$ 1,375	\$ 1,575	\$ 1,774	\$ 1,980	\$ 1,980
11	NC Retail allocation factor	61.33723%	61.33723%	61.33723%	61.33723%	61.33723%	61.33723%	61.33723%	61.33723%	61.33723%	61.33723%	61.33723%	61.33723%	61.33723% (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)	\$ 76	\$ 158	\$ 240	\$ 328	\$ 421	\$ 519	\$ 621	\$ 727	\$ 844	\$ 966	\$ 1,088	\$ 1,215	\$ 1,215
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)	\$ 366	\$ 744	\$ 1,148	\$ 1,574	\$ 2,030	\$ 2,510	\$ 3,031	\$ 3,615	\$ 4,227	\$ 4,845	\$ 5,492	\$ 6,202	\$ 6,202
14	Current Month NC retail revenues required for financial and operating expenses related to capital additions since the acquisition date	\$ 366	\$ 378	\$ 403	\$ 427	\$ 456	\$ 480	\$ 521	\$ 584	\$ 612	\$ 619	\$ 647	\$ 710	

Notes:

- (a) From Exhibit E-1-TU: Actual Capital year to date average balances, Column O, Line 2 - Line 13
- (b) From Exhibit E-2-TU: Actual Depreciation Expense year to date average balances, Column P, Line 2 - Line 13
- (c) From Exhibit E-3-TU: Deferred Taxes on Capital Additions year to date average balances, Column D, Line 2 - Line 13
- (d) From Exhibit J-TU: Cost of Capital, Column I
- (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 2017 cost of service study 61.33723%

EXHIBIT E-1 -TU

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							CUMULATIVE CAPITAL ADDITIONS							Year to Date Average (Col O)	
	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)	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)		
Current Test Year: Calendar 2017																
1								Beginning Balance as of January 1, 2017	\$ 24,007	\$ 13,753	\$ 29,472	\$ 1,982	\$ 860	\$ 3,360	\$ 73,435	(b)
2	2017 January	\$ 1,750	\$ 2,288	\$ 712	\$ 68	\$ 30	\$ (1)	\$ 25,757	\$ 16,041	\$ 30,185	\$ 2,050	\$ 889	\$ 3,359	\$ 78,281	\$ 75,858	
3	2017 February	\$ (12)	\$ 18	\$ 483	\$ 157	\$ 42	\$ 28	\$ 25,745	\$ 16,059	\$ 30,668	\$ 2,206	\$ 932	\$ 3,387	\$ 78,997	\$ 76,904	
4	2017 March	\$ 4,830	\$ 674	\$ 334	\$ 31	\$ (1)	\$ 7	\$ 30,575	\$ 16,732	\$ 31,002	\$ 2,238	\$ 931	\$ 3,394	\$ 84,873	\$ 78,896	
5	2017 April	\$ (1,261)	\$ 5,091	\$ 227	\$ (10)	\$ 21	\$ 2	\$ 29,314	\$ 21,823	\$ 31,229	\$ 2,228	\$ 952	\$ 3,396	\$ 88,942	\$ 80,905	
6	2017 May	\$ 406	\$ 3,623	\$ 402	\$ 460	\$ 340	\$ (1)	\$ 29,720	\$ 25,446	\$ 31,632	\$ 2,689	\$ 1,291	\$ 3,394	\$ 94,172	\$ 83,116	
7	2017 June	\$ 1,694	\$ 2,199	\$ 110	\$ 191	\$ 117	\$ 25	\$ 31,414	\$ 27,644	\$ 31,741	\$ 2,880	\$ 1,408	\$ 3,420	\$ 98,507	\$ 85,315	
8	2017 July	\$ 640	\$ 120	\$ 4,540	\$ 34	\$ 2,247	\$ 138	\$ 32,055	\$ 27,764	\$ 36,281	\$ 2,914	\$ 3,655	\$ 3,558	\$ 106,227	\$ 87,929	
9	2017 August	\$ 6,173	\$ 753	\$ 5,811	\$ 125	\$ 107	\$ 272	\$ 38,228	\$ 28,517	\$ 42,092	\$ 3,039	\$ 3,763	\$ 3,830	\$ 119,468	\$ 91,433	
10	2017 September	\$ 3,227	\$ 1,315	\$ 267	\$ 62	\$ 66	\$ (25)	\$ 41,455	\$ 29,833	\$ 42,359	\$ 3,101	\$ 3,828	\$ 3,805	\$ 124,380	\$ 94,728	
11	2017 October	\$ (602)	\$ 143	\$ 299	\$ 8	\$ (3)	\$ 99	\$ 40,853	\$ 29,975	\$ 42,658	\$ 3,108	\$ 3,825	\$ 3,904	\$ 124,324	\$ 97,419	
12	2017 November	\$ 3,536	\$ (39)	\$ 1,174	\$ 94	\$ 114	\$ 35	\$ 44,389	\$ 29,936	\$ 43,832	\$ 3,202	\$ 3,939	\$ 3,939	\$ 129,238	\$ 100,070	
13	2017 December	\$ 703	\$ 744	\$ 1,107	\$ 133	\$ 179	\$ 476	\$ 45,092	\$ 30,680	\$ 44,939	\$ 3,335	\$ 4,118	\$ 4,415	\$ 132,579	\$ 102,571	
14	Total capital additions	\$ 21,085	\$ 16,927	\$ 15,466	\$ 1,353	\$ 3,258	\$ 1,055	\$ 45,092	\$ 30,680	\$ 44,939	\$ 3,335	\$ 4,118	\$ 4,415	\$ 132,579		

Notes:  
 (a) Capital additions for Brunswick Common are included with Brunswick 1.  
 (b) Based on ending balances as of December 31, 2016 as filed with the Commission on Exhibit E-1-TU under Docket E-2, Sub 1143.

EXHIBIT E-2 -TU

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)

Line No.	DEPRECIATION EXPENSE ON ACTUAL CAPITAL ADDITIONS BY MONTH								Year to Date Total (Col H)	
	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 2017										
1										
2	2017	January	\$ 49	\$ 24	\$ 36	\$ 5	\$ 1	\$ 9	124	\$ 124
3	2017	February	\$ 52	\$ 29	\$ 37	\$ 6	\$ 1	\$ 9	133	\$ 257
4	2017	March	\$ 52	\$ 29	\$ 37	\$ 6	\$ 1	\$ 9	134	\$ 391
5	2017	April	\$ 61	\$ 30	\$ 38	\$ 6	\$ 1	\$ 9	144	\$ 535
6	2017	May	\$ 65	\$ 33	\$ 38	\$ 6	\$ 1	\$ 9	152	\$ 687
7	2017	June	\$ 66	\$ 37	\$ 39	\$ 7	\$ 1	\$ 9	159	\$ 846
8	2017	July	\$ 69	\$ 42	\$ 39	\$ 8	\$ 1	\$ 9	167	\$ 1,013
9	2017	August	\$ 69	\$ 42	\$ 43	\$ 8	\$ 2	\$ 9	172	\$ 1,185
10	2017	September	\$ 80	\$ 43	\$ 48	\$ 8	\$ 2	\$ 10	190	\$ 1,375
11	2017	October	\$ 87	\$ 45	\$ 48	\$ 8	\$ 2	\$ 10	200	\$ 1,575
12	2017	November	\$ 86	\$ 45	\$ 48	\$ 8	\$ 2	\$ 10	199	\$ 1,774
13	2017	December	\$ 93	\$ 44	\$ 49	\$ 8	\$ 2	\$ 10	206	\$ 1,980
14	Total Depreciation Expense		\$ 830	\$ 444	\$ 498	\$ 83	\$ 15	\$ 110	\$ 1,980	

Line No.	ACCUMULATED DEPRECIATION								Year to Date Average (Col P)
	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)		
Beginning Balance as of January 1, 2017									
	\$ (405)	\$ (265)	\$ (151)	\$ (35)	\$ (1)	\$ (42)	\$ (899)		(b)
2	\$ (454)	\$ (289)	\$ (187)	\$ (40)	\$ (1)	\$ (51)	\$ (1,023)	\$ (961)	
3	\$ (507)	\$ (318)	\$ (224)	\$ (46)	\$ (2)	\$ (60)	\$ (1,156)	\$ (1,026)	
4	\$ (559)	\$ (348)	\$ (261)	\$ (52)	\$ (3)	\$ (68)	\$ (1,290)	\$ (1,092)	
5	\$ (620)	\$ (378)	\$ (298)	\$ (58)	\$ (3)	\$ (77)	\$ (1,434)	\$ (1,161)	
6	\$ (685)	\$ (411)	\$ (336)	\$ (64)	\$ (4)	\$ (86)	\$ (1,586)	\$ (1,231)	
7	\$ (752)	\$ (448)	\$ (375)	\$ (71)	\$ (5)	\$ (95)	\$ (1,745)	\$ (1,305)	
8	\$ (820)	\$ (490)	\$ (414)	\$ (79)	\$ (6)	\$ (104)	\$ (1,912)	\$ (1,381)	
9	\$ (889)	\$ (532)	\$ (457)	\$ (86)	\$ (8)	\$ (113)	\$ (2,084)	\$ (1,459)	
10	\$ (970)	\$ (575)	\$ (504)	\$ (94)	\$ (10)	\$ (122)	\$ (2,275)	\$ (1,540)	
11	\$ (1,057)	\$ (620)	\$ (552)	\$ (102)	\$ (12)	\$ (132)	\$ (2,474)	\$ (1,625)	
12	\$ (1,143)	\$ (665)	\$ (600)	\$ (110)	\$ (14)	\$ (142)	\$ (2,673)	\$ (1,713)	
13	\$ (1,236)	\$ (709)	\$ (649)	\$ (118)	\$ (16)	\$ (151)	\$ (2,879)	\$ (1,802)	
Accumulated Depreciation as of December 31, 2017									
	\$ (1,236)	\$ (709)	\$ (649)	\$ (118)	\$ (16)	\$ (151)	\$ (2,879)		

Notes:  
(a) Capital additions for Brunswick Common are included with Brunswick 1.  
(b) Based on ending balances as of December 31, 2016 as filed with the Commission on Exhibit E-2-TU under Docket E-2, Sub 1143.

## EXHIBIT E-3 -TU

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)
		2017 (a) (Col A)	2016 (b) (Col B)	2015 (c) (Col C)		
	Deferred Tax Asset / (Liability) Balance					
1	Deferred Taxes December 31, 2016	\$ -	\$ (12,072)	\$ (4,254)	\$ (16,325)	
2	Deferred Taxes - January 2017	\$ -	\$ (14,184)	\$ (4,254)	\$ (18,438)	\$ (17,382)
3	Deferred Taxes - February	\$ (871)	\$ (14,184)	\$ (4,254)	\$ (19,309)	\$ (18,024)
4	Deferred Taxes - March	\$ (1,014)	\$ (14,184)	\$ (4,254)	\$ (19,452)	\$ (18,381)
5	Deferred Taxes - April	\$ (2,075)	\$ (14,184)	\$ (4,254)	\$ (20,513)	\$ (18,807)
6	Deferred Taxes - May	\$ (2,763)	\$ (14,184)	\$ (4,254)	\$ (21,201)	\$ (19,206)
7	Deferred Taxes - June	\$ (3,681)	\$ (14,184)	\$ (4,254)	\$ (22,118)	\$ (19,622)
8	Deferred Taxes - July	\$ (4,442)	\$ (14,184)	\$ (4,254)	\$ (22,880)	\$ (20,030)
9	Deferred Taxes - August	\$ (5,967)	\$ (14,184)	\$ (4,254)	\$ (24,405)	\$ (20,516)
10	Deferred Taxes - September	\$ (8,517)	\$ (14,184)	\$ (4,254)	\$ (26,955)	\$ (21,160)
11	Deferred Taxes - October	\$ (9,396)	\$ (14,184)	\$ (4,254)	\$ (27,834)	\$ (21,766)
12	Deferred Taxes - November	\$ (9,394)	\$ (14,184)	\$ (4,254)	\$ (27,831)	\$ (22,272)
13	Deferred Taxes - December 2017	\$ (7,127)	\$ (10,131)	\$ (3,002)	\$ (20,261)	\$ (22,117)

## Notes:

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

EXHIBIT E-4 -TU

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 - 2017 - with 35% Federal tax rate (a)	18%	17%	21%	18%	18%	18%	
2	Deferred Tax Percentage - 2017 - with 21% Federal tax rate (a)(d)	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, 2016	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Deferred Taxes as of January 2017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	Deferred Taxes as of February (Line 1 x Line 2)	\$ (315)	\$ (389)	\$ (150)	\$ (12)	\$ (5)	\$ 0	\$ (871) (c)
18	Deferred Taxes as of March (Line 1 x Line 3)	\$ (313)	\$ (392)	\$ (251)	\$ (40)	\$ (13)	\$ (5)	\$ (1,014) (c)
19	Deferred Taxes as of April (Line 1 x Line 4)	\$ (1,182)	\$ (506)	\$ (321)	\$ (46)	\$ (13)	\$ (6)	\$ (2,075) (c)
20	Deferred Taxes as of May (Line 1 x Line 5)	\$ (955)	\$ (1,372)	\$ (369)	\$ (44)	\$ (17)	\$ (6)	\$ (2,763) (c)
21	Deferred Taxes as of June (Line 1 x Line 6)	\$ (1,028)	\$ (1,988)	\$ (453)	\$ (127)	\$ (78)	\$ (6)	\$ (3,681) (c)
22	Deferred Taxes as of July (Line 1 x Line 7)	\$ (1,333)	\$ (2,362)	\$ (476)	\$ (162)	\$ (99)	\$ (11)	\$ (4,442) (c)
23	Deferred Taxes as of August (Line 1 x Line 8)	\$ (1,448)	\$ (2,382)	\$ (1,430)	\$ (168)	\$ (503)	\$ (36)	\$ (5,967) (c)
24	Deferred Taxes as of September (Line 1 x Line 9)	\$ (2,560)	\$ (2,510)	\$ (2,650)	\$ (190)	\$ (522)	\$ (85)	\$ (8,517) (c)
25	Deferred Taxes as of October (Line 1 x Line 10)	\$ (3,141)	\$ (2,734)	\$ (2,706)	\$ (201)	\$ (534)	\$ (80)	\$ (9,396) (c)
26	Deferred Taxes as of November (Line 1 x Line 11)	\$ (3,032)	\$ (2,758)	\$ (2,769)	\$ (203)	\$ (534)	\$ (98)	\$ (9,394) (c)
27	Deferred Taxes as of December 2017 (Line 1 x Line 12)	\$ (3,669)	\$ (2,751)	\$ (3,016)	\$ (220)	\$ (554)	\$ (104)	\$ (10,314) (c)
28	Adjustment for Tax Cuts & Jobs Act (d)	\$ 1,223	\$ 809	\$ 862	\$ 73	\$ 185	\$ 35	\$ 3,186
28	Deferred Tax Balance at December 31, 2017	\$ (2,446)	\$ (1,942)	\$ (2,154)	\$ (146)	\$ (370)	\$ (69)	\$ (7,127)

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.
- (d) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.

EXHIBIT E-5 -TU

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 - 2017 - with 35% Federal tax rate (a)	34%	19%	22%	19%	19%	19%	
2	Deferred Tax Percentage - 2017 - with 21% Federal tax rate (a)(d)	24%	13%	16%	14%	14%	14%	
Capital Additions								
3	Gross Capital Additions as of January	\$ 645	\$ 575	\$ 616	\$ 142	\$ 26	\$ 72	\$ 2,075 (b)
4	Gross Capital Additions as of February (cumulative)	\$ 899	\$ 739	\$ 495	\$ 151	\$ 27	\$ 81	\$ 2,391 (b)
5	Gross Capital Additions as of March (cumulative)	\$ 9,002	\$ 959	\$ 1,628	\$ 180	\$ 31	\$ 213	\$ 12,012 (b)
6	Gross Capital Additions as of April (cumulative)	\$ 10,806	\$ 957	\$ 2,315	\$ 501	\$ 133	\$ 287	\$ 14,999 (b)
7	Gross Capital Additions as of May (cumulative)	\$ 14,562	\$ 1,759	\$ 2,563	\$ 569	\$ 135	\$ 1,545	\$ 21,132 (b)
8	Gross Capital Additions as of June (cumulative)	\$ 15,309	\$ 1,783	\$ 3,768	\$ 586	\$ 132	\$ 1,528	\$ 23,104 (b)
9	Gross Capital Additions as of July (cumulative)	\$ 16,396	\$ 3,990	\$ 3,875	\$ 681	\$ 131	\$ 1,530	\$ 26,603 (b)
10	Gross Capital Additions as of August (cumulative)	\$ 17,220	\$ 4,371	\$ 4,114	\$ 748	\$ 189	\$ 1,571	\$ 28,213 (b)
11	Gross Capital Additions as of September (cumulative)	\$ 18,016	\$ 4,886	\$ 5,603	\$ 893	\$ 232	\$ 1,590	\$ 31,220 (b)
12	Gross Capital Additions as of October (cumulative)	\$ 18,583	\$ 5,419	\$ 7,705	\$ 1,176	\$ 233	\$ 1,631	\$ 34,746 (b)
13	Gross Capital Additions as of November (cumulative)	\$ 18,856	\$ 5,468	\$ 18,057	\$ 1,323	\$ 275	\$ 1,819	\$ 45,798 (b)
14	Gross Capital Additions as of December (cumulative)	\$ 20,158	\$ 5,835	\$ 23,516	\$ 1,657	\$ 789	\$ 3,070	\$ 55,025 (b)
15	Balance at December 31, 2016	\$ 20,158	\$ 5,835	\$ 23,516	\$ 1,657	\$ 789	\$ 3,070	\$ 55,025
Deferred Tax Asset / (Liability) Balance								
16	Deferred Taxes as of December 31, 2016 (Line 1 x Line 12)	\$ (6,411)	\$ (1,039)	\$ (3,973)	\$ (251)	\$ (52)	\$ (346)	\$ (12,072) (c)
17	Deferred Taxes as of January 2017 (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
18	Deferred Taxes as of February (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
19	Deferred Taxes as of March (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
20	Deferred Taxes as of April (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
21	Deferred Taxes as of May (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
22	Deferred Taxes as of June (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
23	Deferred Taxes as of July (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
24	Deferred Taxes as of August (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
25	Deferred Taxes as of September (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
26	Deferred Taxes as of October (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
27	Deferred Taxes as of November (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
28	Deferred Taxes as of December 2017 (Line 1 x Line 13)	\$ (6,854)	\$ (1,109)	\$ (5,174)	\$ (315)	\$ (150)	\$ (583)	\$ (14,184) (c)
29	Adjustment for Tax Cuts & Jobs Act (d)	\$ 2,016	\$ 350	\$ 1,411	\$ 83	\$ 39	\$ 154	\$ 4,053
29	Deferred Tax Balance at December 31, 2017	\$ (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.
- (d) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.



EXHIBIT E-6 -TU

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 - 2017 - with 35% Federal tax rate (a)	34%	19%	22%	19%	19%	19%	
2	Deferred Tax Percentage - 2017 - with 21% Federal tax rate (a)(d)	24%	13%	16%	14%	14%	14%	
Capital Additions								
3	Gross Capital Additions as of August 31, 2015	\$ (1,165)	\$ (194)	\$ 171	\$ 29	\$ 6	\$ (1)	\$ (1,154) (b)
4	Gross Capital Additions as of September 30, 2015 (cumulative)	\$ (1,147)	\$ 253	\$ 237	\$ 57	\$ 5	\$ (1)	\$ (598) (b)
5	Gross Capital Additions as of October 31, 2015 (cumulative)	\$ (902)	\$ 196	\$ 361	\$ 45	\$ 13	\$ 28	\$ (258) (b)
6	Gross Capital Additions as of November 30, 2015 (cumulative)	\$ 2,658	\$ 7,905	\$ 3,617	\$ 123	\$ 25	\$ 256	\$ 14,584 (b)
7	Gross Capital Additions as of December 31, 2015 (cumulative)	\$ 3,849	\$ 7,918	\$ 5,956	\$ 325	\$ 71	\$ 290	\$ 18,409 (b)
8	Balance at December 31, 2015	\$ 3,849	\$ 7,918	\$ 5,956	\$ 325	\$ 71	\$ 290	\$ 18,409
Deferred Tax Asset / (Liability) Balance								
9	Deferred Taxes as of December 2016 (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
10	Deferred Taxes as of January 2017 (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
11	Deferred Taxes as of February (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
12	Deferred Taxes as of March (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
13	Deferred Taxes as of April (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
14	Deferred Taxes as of May (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
15	Deferred Taxes as of June (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
16	Deferred Taxes as of July (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
17	Deferred Taxes as of August (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
18	Deferred Taxes as of September (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
19	Deferred Taxes as of October (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
20	Deferred Taxes as of November (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
21	Deferred Taxes as of December 2017 (Line 1 x Line 7)	\$ (1,309)	\$ (1,504)	\$ (1,310)	\$ (62)	\$ (14)	\$ (55)	\$ (4,254) (c)
22	Adjustment for Tax Cuts & Jobs Act (d)	\$ 385	\$ 475	\$ 357	\$ 16	\$ 4	\$ 14	\$ 1,252
23	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.
  - (d) Deferred tax balances were adjusted to reflect the passage of the Tax Cuts and Jobs Act of 2017 which reduced the federal income rate to 21%. The adjustment reflects excess deferred taxes which will be returned to ratepayers of the Company outside of this rider.

EXHIBIT F-TU

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 2017

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	\$ 86,583	\$ 101,120	\$ 145,190	\$ 109,877	\$ 138,752	\$ 294,375	\$ 132,196	\$ 105,068	\$ 115,798	\$ 104,637	\$ 94,435	\$ 138,529	\$ 1,566,558	(c)
2	Mayo 1 O&M	500-514	\$ 148,150	\$ 212,479	\$ 256,294	\$ 232,880	\$ 194,142	\$ 218,710	\$ 231,230	\$ 281,990	\$ 230,675	\$ 222,613	\$ 179,840	\$ 425,804	\$ 2,834,809	(c)
3	Brunswick Plant O&M	517-532	\$ 3,404,927	\$ 3,731,288	\$ 7,719,117	\$ 6,030,506	\$ 3,166,183	\$ 2,994,413	\$ 3,192,867	\$ 2,739,722	\$ 2,971,676	\$ 2,628,968	\$ 2,396,977	\$ 3,549,684	\$ 44,526,327	(c)
4	Harris 1 O&M	517-532	\$ 1,772,977	\$ 1,640,905	\$ 2,107,312	\$ 1,512,649	\$ 1,689,672	\$ 2,319,577	\$ 1,414,278	\$ 1,864,168	\$ 2,047,876	\$ 1,846,055	\$ 1,982,547	\$ 1,956,250	\$ 22,154,265	(c)
5	A&G Expenses	929	\$ 1,752,261	\$ 1,955,251	\$ 1,893,175	\$ 1,844,825	\$ 2,162,214	\$ 2,383,588	\$ 1,695,480	\$ 2,592,446	\$ 1,963,145	\$ 2,109,895	\$ 2,256,950	\$ 1,469,464	\$ 24,078,694	(c)
6	Payroll Taxes	408	\$ 304,242	\$ 281,226	\$ 204,508	\$ 293,490	\$ 320,840	\$ 306,136	\$ 268,714	\$ 254,109	\$ 331,604	\$ 260,629	\$ 269,514	\$ 211,136	\$ 3,306,149	(c)
7	General Plant Return	454	\$ 187,073	\$ 187,073	\$ 187,073	\$ 187,073	\$ 187,073	\$ 187,073	\$ 187,073	\$ 187,073	\$ (164,242)	\$ 148,038	\$ 148,038	\$ 148,038	\$ 1,776,456	(c)
8	Dispatch Fee	456	\$ 2,694	\$ 2,614	\$ 2,913	\$ 2,810	\$ 2,841	\$ 2,770	\$ 1,127	\$ 2,588	\$ 2,726	\$ 2,585	\$ 2,664	\$ 2,576	\$ 30,907	(c)
9	Auxiliary Power	447	\$ 34,779	\$ 36,186	\$ 44,367	\$ 51,760	\$ 31,332	\$ 23,481	\$ 13,193	\$ 18,263	\$ 37,331	\$ 48,275	\$ 38,584	\$ 37,183	\$ 414,735	(c)
10	Site Representative	456	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 4,908	(c)
11	Property taxes	408	\$ 502,933	\$ 502,933	\$ 502,933	\$ 502,933	\$ 502,933	\$ 502,933	\$ 502,933	\$ 437,789	\$ 494,790	\$ 494,790	\$ 494,790	\$ 494,790	\$ 5,937,484	(d)
12	NCEMPA revenue included in cost of service for a return on coal inventory	454	\$ 11,343	\$ 8,079	\$ 14,202	\$ 4,278	\$ 2,134	\$ 13,758	\$ 25,315	\$ 18,114	\$ 6,301	\$ 5,418	\$ -	\$ 12,795	\$ 121,737	(c)
13	Incremental nuclear decommissioning costs	403	\$ 215,371	\$ 215,371	\$ 215,371	\$ 215,371	\$ 215,371	\$ 215,371	\$ 215,371	\$ 215,371	\$ 215,371	\$ 215,371	\$ 215,371	\$ 215,371	\$ 2,584,452	(b)
13	Total		\$ 8,423,742	\$ 8,874,935	\$ 13,292,864	\$ 10,988,862	\$ 8,613,896	\$ 9,462,593	\$ 7,880,186	\$ 8,717,110	\$ 8,253,459	\$ 8,087,684	\$ 8,080,119	\$ 8,662,030	\$ 109,337,481	
14	Allocated to NC Retail (thousands of dollars) (a)		\$ 5,167	\$ 5,444	\$ 8,153	\$ 6,740	\$ 5,284	\$ 5,804	\$ 4,833	\$ 5,347	\$ 5,062	\$ 4,961	\$ 4,956	\$ 5,313	\$ 67,065	

- Notes:
- (a) From Exhibit I-TU: Demand Allocator to NC Retail from 2017 cost of service study of 61.33723%
  - (b) From Exhibit F-1-TU, Line 14
  - (c) System amounts on lines 1-10 are the amounts that would have been billed to NCEMPA from January - December 2017.
  - (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

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

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col C)	Robinson (Col D)	Total (Col E)
<u>Decommissioning recovered in existing base rates:</u>						
1	NC Retail Nuclear decommissioning expense included in base rates 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 - 2017 Cost of Service	61.3372%	61.3372%	61.3372%	61.3372%	
13	NC retail's incremental nuclear decommissioning expense (Line 11 x Line 12)	\$ 983,849	\$ 97,621	\$ 503,761	\$ -	\$ 1,585,231
14	Monthly system incremental nuclear decommissioning expense (line 11 divided by 12)	\$ 133,667	\$ 13,263	\$ 68,441	\$ -	\$ 215,371

## Notes:

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

EXHIBIT G -TU

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)

<u>Line No.</u>		<u>NC Retail</u>	
		<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)	\$ (29,180) (b)
3	Total annual reduction on NC retail revenues from change in allocation factors		<u>\$ (86,659)</u>
4	Monthly reduction in NC retail revenues from change in allocation factors		<u>\$ (7,222) (c)</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 I, Line 3. 10.3379%
- (c) Assumes reduction happens pro rata throughout the year.

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)
		System	NC Retail	SC Retail	Wholesale
<b><u>Total Impact of Including NCEMPA's Additional Load &amp; Energy Only</u></b>					
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
<b>Less:</b>					
<b><u>Impacts in the Fuel Clause</u></b>					
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				
<b><u>Impact of Including NCEMPA's Additional Load &amp; Energy Only: Excluding Fuel Clause Impacts</u></b>					
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, 2017 - DECEMBER 31, 2017  
 (Thousands of Dollars)

Amortization Schedule

Line  
 No.

Calculation of monthly rate of return :		2015 (a)		2016 (b)		2017 (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
1	Long-term debt	47.00%	1.3927%	34.5900%	1.4049%	34.01%	1.4174%
2	Member's equity	53.00%	5.4060%		5.4060%		5.4060%
3	After tax overall return		6.7987%		6.8109%		6.8234%
4	Discounted monthly after tax overall return		0.5496%		0.5506%		0.5516%
5	Amortization Period in Months		36				

	Net of Tax Beginning Deferred Balance (Col A)	Under (Over) Collection of Revenue (Col B)	Net of Tax Over (Under) Deferral (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	\$ 6,335
9	October	\$ 6,335	\$ 4,872	\$ 3,159	\$ -	\$ 6,335	\$ 9,529
10	November	\$ 9,529	\$ 4,872	\$ 3,159	\$ -	\$ 9,529	\$ 12,741
11	December	\$ 12,741	\$ -	\$ -	\$ 391	\$ 12,741	\$ 12,420
12	January 2016	\$ 12,420	\$ -	\$ -	\$ 391	\$ 12,420	\$ 12,097
13	February	\$ 12,097	\$ -	\$ -	\$ 391	\$ 12,097	\$ 11,773
14	March	\$ 11,773	\$ -	\$ -	\$ 391	\$ 11,773	\$ 11,446
15	April	\$ 11,446	\$ -	\$ -	\$ 391	\$ 11,446	\$ 11,118
16	May	\$ 11,118	\$ -	\$ -	\$ 391	\$ 11,118	\$ 10,789
17	June	\$ 10,789	\$ -	\$ -	\$ 391	\$ 10,789	\$ 10,457
18	July	\$ 10,457	\$ -	\$ -	\$ 391	\$ 10,457	\$ 10,124
19	August	\$ 10,124	\$ -	\$ -	\$ 391	\$ 10,124	\$ 9,788
20	September	\$ 9,788	\$ -	\$ -	\$ 391	\$ 9,788	\$ 9,451
21	October	\$ 9,451	\$ -	\$ -	\$ 391	\$ 9,451	\$ 9,112
22	November	\$ 9,112	\$ -	\$ -	\$ 391	\$ 9,112	\$ 8,771
23	December	\$ 8,771	\$ -	\$ -	\$ 391	\$ 8,771	\$ 8,429
24	January 2017	\$ 8,429	\$ -	\$ -	\$ 391	\$ 8,429	\$ 8,084
25	February	\$ 8,084	\$ -	\$ -	\$ 391	\$ 8,084	\$ 7,738
26	March	\$ 7,738	\$ -	\$ -	\$ 391	\$ 7,738	\$ 7,389
27	April	\$ 7,389	\$ -	\$ -	\$ 391	\$ 7,389	\$ 7,039
28	May	\$ 7,039	\$ -	\$ -	\$ 391	\$ 7,039	\$ 6,687
29	June	\$ 6,687	\$ -	\$ -	\$ 391	\$ 6,687	\$ 6,333
30	July	\$ 6,333	\$ -	\$ -	\$ 391	\$ 6,333	\$ 5,977
31	August	\$ 5,977	\$ -	\$ -	\$ 391	\$ 5,977	\$ 5,619
32	September	\$ 5,619	\$ -	\$ -	\$ 391	\$ 5,619	\$ 5,259
33	October	\$ 5,259	\$ -	\$ -	\$ 391	\$ 5,259	\$ 4,897
34	November	\$ 4,897	\$ -	\$ -	\$ 391	\$ 4,897	\$ 4,533
35	December	\$ 4,533	\$ -	\$ -	\$ 391	\$ 4,533	\$ 4,167
36	January 2018	\$ 4,167	\$ -	\$ -	\$ 391	\$ 4,167	\$ 3,799
37	February	\$ 3,799	\$ -	\$ -	\$ 391	\$ 3,799	\$ 3,429
38	March	\$ 3,429	\$ -	\$ -	\$ 391	\$ 3,429	\$ 3,057
39	April	\$ 3,057	\$ -	\$ -	\$ 391	\$ 3,057	\$ 2,683
40	May	\$ 2,683	\$ -	\$ -	\$ 391	\$ 2,683	\$ 2,306
41	June	\$ 2,306	\$ -	\$ -	\$ 391	\$ 2,306	\$ 1,928
42	July	\$ 1,928	\$ -	\$ -	\$ 391	\$ 1,928	\$ 1,548
43	August	\$ 1,548	\$ -	\$ -	\$ 391	\$ 1,548	\$ 1,165
44	September	\$ 1,165	\$ -	\$ -	\$ 391	\$ 1,165	\$ 781
45	October	\$ 781	\$ -	\$ -	\$ 391	\$ 781	\$ 394
46	November	\$ 394	\$ -	\$ -	\$ 391	\$ 394	\$ 5
47	Total	\$ -	\$ 19,488	\$ 12,636	\$ 14,076	\$ -	\$ 1,445
48	Monthly pre-tax amount to be included in Power Agency Asset Rider to amortize deferred balance			\$ 593			
49	Annual pre-tax amount			\$ 7,116			

Notes:

- (a) From Exhibit J-TU, Cost of Capital as filed under Docket E-2, Sub 1110  
 (b) 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, 2017

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	3,603,240	0.290220	Residential Class	29.79840%	48.5813%
2	NC RES-TOU	96,393	0.007764	SGS Class	4.03595%	6.5799%
3	NC SGS	496,966	0.040028	MGS Class	17.66733%	28.8036% **
4	NC SGS-CLR	4,120	0.000332	SI Class	0.08970%	0.1462%
5	NC MGS-TOU	1,521,650	0.122560	LGS Class	9.74082%	15.8808%
6	NC MGS	671,845	0.054113	TSS Class	0.00503%	0.0082%
7	NC SI	11,137	0.000897	ALS Class	0.00000%	0.0000%
8	NC LGS	185,176	0.014915	SLS Class	0.00000%	0.0000%
9	NC LGS-TOU	231,506	0.018647	SFLS Class	0.00000%	0.0000%
10	NC LGS-RTP	792,693	0.063847	Total - prior to purchase from NCEMPA	61.33723%	100.0000%
11	NC TSS	625	0.000050			
12	NC ALS	-	0.000000			
13	NC SLS	-	0.000000			
14	NC SFLS	-	0.000000			
15	Total NCR	7,615,350	0.613372			
16	NCEMC (Note 1)	1,788,480	0.144052	**Allocation of MGS Class between kW and kWh billed customers		
17	Fayetteville	406,463	0.032738	MGS Class - billed on kWh basis	0.09%	0.0247% Note 2
18	FBEMC	76,609	0.006170	MGS Class - billed on kW basis	99.91%	28.7789% Note 2
19	Piedmont EMC	20,261	0.001632			28.8036%
20	Haywood EMC	12,758	0.001028			
21	Tri-Towns	-	0.000000			
22	Waynesville	-	0.000000			
23	Winterville	-	0.000000			
24	Total NCWHS	2,304,570	0.185620			
25	NCEMPA	1,264,334	0.101835			
26	Total NC	11,184,254	0.900827			
27	SC RES	478,057	0.038505			
28	SC RET	9,369	0.000755			
29	SC SGS	79,952	0.006440			
30	SC SGS-CLR	610	0.000049			
31	SC MGS-TOU	200,957	0.016186			
32	SC MGS	122,558	0.009871			
33	SC SI	2,789	0.000225			
34	SC LGS	100,401	0.008087			
35	SC LGS-TOU	29,604	0.002384			
36	SC LGS-CRTL-TOU	84,170	0.006779			
37	SC LGS-RTP	76,850	0.006190			
38	SC TSS	110	0.000009			
39	SC ALS	-	0.000000			
40	SC SLS	-	0.000000			
41	SC SFLS	-	0.000000			
42	Total SCR	1,185,427	0.095479			
43	SCWHS (Camden)	45,860	0.003694			
44	Total SC	1,231,288	0.099173			
45	Total System with NCEMPA retained capacity	12,415,542	1.000000			

NC Retail Allocation Factor After the Purchase		
Total NC Retail Summer CP Demand (Line 15)	7,615,350	61.33723%
Total System with NCEMPA retained capacity (Line 47)	12,415,542	

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 K -TU

DUKE ENERGY PROGRESS  
 NCEMPA GENERATION ASSET PURCHASE  
 BILLING DETERMINANTS FOR THE TWELVE MONTH PERIOD ENDED NOVEMBER 30, 2019

	(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	11,985,346,550	
2	Residential Class	RES (EC)	kWh Energy Units	3,249,324,746	
3	Residential Class	R-TOU	kWh Energy Units	34,887,029	
4	Residential Class	R-TOU (EC)	kWh Energy Units	17,917,353	
5	Residential Class	R-TOUD	kWh Energy Units	263,970,957	
6	Residential Class	R-TOUD (EC)	kWh Energy Units	182,778,364	
7	Residential Class	R-TOUE	kWh Energy Units	-	
8	Residential Class	R-TOUE (EC)	kWh Energy Units	-	
9	Total Residential			(a) <u>15,734,225,000</u>	
10	SGS Class	SGS	kWh Energy Units	1,761,616,512	
11	SGS Class	SGS-TOU-CLR	kWh Energy Units	28,808,426	
12	SGS Class	SGS-TOUE	kWh Energy Units	3,126,062	
13	Total SGS			(a) <u>1,793,551,000</u>	
14	MGS Class	APH-TES	kW Demand Units		4,763
15	MGS Class	CH-TOUE	kWh Energy Units	7,649,442	
16	MGS Class	CSE	kWh Energy Units	1,201,521	
17	MGS Class	CSG	kWh Energy Units	24,543	
18	MGS Class	SGS-TES	kW Demand Units		39,691
19	MGS Class	SGS-TOU	kW Demand Units		19,253,498
20	MGS Class	MGS	kW Demand Units		12,282,944
21	Total MGS			(a) <u>8,875,507</u>	<u>31,580,896</u>
22	LGS Class	LGS	kW Demand Units		2,721,715
23	LGS Class	LGS-RTP	kW Demand Units		41,214
24	LGS Class	LGS-RTP-TOU	kW Demand Units		10,983,979
25	LGS Class	LGS-TOU	kW Demand Units		3,200,135
26	Total LGs			(a) <u>16,947,042</u>	
27	SI Class	SI	kWh Energy Units	(b) 52,470,176	
28	TSS Class	TFS	kWh Energy Units	171,845	
29	TSS Class	TSS	kWh Energy Units	4,716,652	
30	Total TSS			(b) <u>4,888,497</u>	
31	Total All Rates			<u>17,594,010,180</u>	<u>48,527,938</u>

NOTES:

KWh sales for MGS-kWh billed	8,875,507	0.09%
KWh sales for MGS-kW billed	<u>10,332,752,188</u>	99.91%
Total MGS Class KWH Sales for the Year were:	<u><u>10,341,627,695</u></u>	

(a) Source: 2018 Spring Sales Forecast

(b) Source: Monthly CIM Query of Billing Determinants for the twelve month period ended March 31, 2018.

DUKE ENERGY PROGRESS  
 FUEL SAVINGS BY CUSTOMER CLASS RELATED TO FACILITIES ACQUIRED FROM NCEMPA  
 TEST PERIOD: JANUARY 2017 - DECEMBER 2017

		(Col. A) Without Acquisition	(Col. B) Change	(Col. C) With Acquisition
<b>Fuel Costs - Dollars:</b>				
	Coal	\$ 288,687,903	\$ 14,616,879	\$ 303,304,782
	Reagents	55,087,981	707,963	55,795,944
	Gas	710,330,215	-	710,330,215
	Nuclear	173,851,266	28,050,697	201,901,963
	Hydro	0	-	-
	Purchased Power	325,445,179	-	325,445,179
	Recovered through off-system sales	(146,344,889)	-	(146,344,889)
1	<b>Total Cost</b>	\$ 1,407,057,654	\$ 43,375,540	\$ 1,450,433,194
2	<b>Sales - kWh</b>	56,345,332,552	4,466,911,448	60,812,244,000
3	<b>Average System Fuel Costs - cents/kwh</b>	Line 1 / Line 2	<b>2.497</b>	<b>2.385</b>
4	<b>Reduction Average System Fuel Costs - cents /kWh</b>	Line 3 Col. C - Line 3 Co. A	<b>(0.112)</b>	
5	<b>Total NC Retail Sales January - December - MWh</b>		36,829,899	
6	<b>NC Retail Share of Savings - Dollars</b>	Line 4 * Line 5	\$ (41,287,411)	
<b>Allocation Among Customer Classes:</b>				
	Residential	38.30%	\$ (15,813,078)	
	Small General Service	4.59%	\$ (1,895,092)	
	Medium General Service	30.97%	\$ (12,786,711)	
	Large General Service	25.82%	\$ (10,660,409)	
	Lighting	0.32%	\$ (132,120)	
	<b>Total NC Retail</b>	<b>100.00%</b>	<b>\$ (41,287,411)</b>	