

1 PLACE: Dobbs Building, Raleigh, North Carolina
2 DATE: Monday, September 9, 2019
3 TIME: 2:06 p.m. - 2:10 p.m.
4 DOCKET NO: E-2, Sub 1207
5 BEFORE: Chair Charlotte A. Mitchell, Presiding
6 Commissioner ToNola D. Brown-Bland
7 Commissioner Lyons Gray
8 Commissioner Daniel G. Clodfelter
9
10

11 IN THE MATTER OF:

12 Application of Duke Energy Progress, LLC,
13 Pursuant to N.C.G.S. § 62-133.14 and NCUC Rule R8-70
14 for Approval of a Joint Agency Asset Rider for
15 Recovery of Joint Agency Asset Costs
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FILED
OCT 08 2019
Clerk's Office
N.C. Utilities Commission

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4 Deputy General Counsel

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6 Raleigh, North Carolina 27602

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9 Robert F. Page, Esq.

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14 FOR CAROLINA INDUSTRIAL GROUP FOR FAIR UTILITY

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NORTH CAROLINA UTILITIES COMMISSION

T A B L E O F C O N T E N T S

LAWANDA M. JIGGETTS

Prefiled Direct Testimony..... 9

DARLENE P. PEEDIN

Prefiled Affidavit and Appendix A..... 28

E X H I B I T S

Identified / Admitted

Application of

Duke Energy Progress, LLC..... --/8

Jiggetts Exhibits A-E through L..... 8/8

NORTH CAROLINA UTILITIES COMMISSION

APPEARANCE SLIP

DATE: 9/9/19 DOCKET NO.: E-2, Sub 1207
ATTORNEY NAME and TITLE: Lawrence B. Sowers, Deputy General Counsel
FIRM NAME: Duke Energy Progress, LLC Corp.
ADDRESS: _____
CITY: _____ STATE: _____ ZIP CODE: _____

APPEARING FOR: Duke Energy Progress, LLC

APPLICANT: ☒ COMPLAINANT: _____ INTERVENOR: _____
PROTESTANT: _____ RESPONDENT: _____ DEFENDANT: _____

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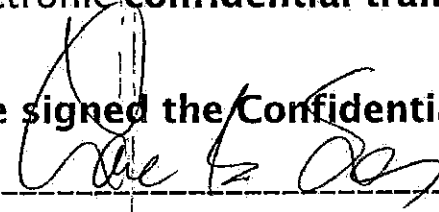
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NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 09/09/19 DOCKET #: E-2, Subs 1204, 1205, 1206 & 1207
NAME AND TITLE OF ATTORNEY Robert F. Page
FIRM NAME Crisp & Page PLLC
ADDRESS 4010 Barrett Dr., Suite 205
CITY Raleigh ZIP 27609

APPEARING FOR: Carolina Utility Customers Association, Inc.

APPLICANT	COMPLAINANT	INTERVENER
PROTESTANT	RESPONDENT	DEFENDANT

✓

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Signature: _____

NORTH CAROLINA UTILITIES COMMISSION

APPEARANCE SLIP

DATE: September 5, 2019

DOCKET NO. E-2, 1207

NAME AND TITLE OF ATTORNEY Ralph McDonald

FIRM NAME Bailey & Dixon, L.L.P.

ADDRESS Post Office Box 1351

CITY Raleigh, NC ZIP 27602-1351

APPEARING FOR: **Carolina Industrial Group for Fair Utility Rates II (CIGFUR II)**

APPLICANT _____ COMPLAINANT _____ INTERVENER X
PROTESTANT _____ RESPONDENT _____

ORDER FOR TRANSCRIPT OF TESTIMONY:

I HEREBY ORDER ____ COPIES OF THE TRANSCRIPT AT \$1.00 PER PAGE.
(MINIMUM \$5.00 – G.S. 62-300(9)).

*I HEREBY ORDER ____ ASCII DISK(S) OF THE TRANSCRIPT AT \$5.00
WITH PURCHASE OF TRANSCRIPT OR PRICE OF TRANSCRIPT AT \$1.00
PER PAGE.

(SIGNATURE OF PARTY OR ATTORNEY ORDERING TRANSCRIPT/DISK)

*DISKS AVAILABLE UPON REQUEST.

NORTH CAROLINA UTILITIES COMMISSION

APPEARANCE SLIP

DATE: 7/9/2019 DOCKET NO.: E-2 subs 1204, 1205, 1206
ATTORNEY NAME and TITLE: Benjamin Smith, Regulatory Counsel
FIRM NAME: N/A
ADDRESS: 4800 Six Forks Road, Suite 300
CITY: Raleigh STATE: NC ZIP CODE: 27609
APPEARING FOR: NCSEA

APPLICANT: ___ COMPLAINANT: ___ INTERVENOR: ☒
PROTESTANT: ___ RESPONDENT: ___ DEFENDANT: ___

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NORTH CAROLINA UTILITIES COMMISSION
PUBLIC STAFF - APPEARANCE SLIP

DATE September 9, 2019 DOCKET #: E-2, Sub 1207

PUBLIC STAFF MEMBER Heather Fennell

ORDER FOR TRANSCRIPT OF TESTIMONY TO BE **EMAILED** TO THE
PUBLIC STAFF - PLEASE INDICATE YOUR DIVISION AS WELL AS
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LEGAL heather.fennell@psncuc.nc.gov _____
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Signature of Public Staff Member

A

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1207

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

NOW COMES Duke Energy Progress, LLC ("DEP," "Company" or "Applicant"), pursuant to North Carolina General Statutes ("N.C. Gen. Stat.") §62-133.14 and North Carolina Utilities Commission ("NCUC" or the "Commission") Rule R8-70, and hereby makes this Application for approval of the Joint Agency Asset Rider ("JAAR") to recover costs to acquire the ownership interests of the North Carolina Eastern Municipal Power Agency ("NCEMPA"), a joint agency established under Chapter 159B of the North Carolina General Statutes, in certain electric generating facilities, as well as the associated estimated financing and non-fuel operating costs expected to be incurred prior to December 1, 2020. In support thereof, the Applicant respectfully shows the Commission the following:

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

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

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

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

Tel: (919) 546-6722
bo.somers@duke-energy.com

Dwight Allen
Allen Law Offices, PLLC
1514 Glenwood Avenue, Suite 200
Raleigh, North Carolina 27608
Tel: (919) 838-0529
dallen@theallenlawoffices.com

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 leveled over the useful life of the assets at the time of acquisition.

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

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

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

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

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

5. On November 8, 2018, the Commission issued its *Order Approving Joint Agency Asset Rider Adjustment*, which established the JAAR to recover the costs expected to be incurred by DEP from December 1, 2018 through November 30, 2019, and included a Joint Agency Asset rolling recovery factor ("RRF") adjustment related to the over recovery of costs incurred for the test year ended December 31, 2017.

6. NCUC Rule R8-70 provides that the Commission shall schedule annual hearings pursuant to N.C. Gen. Stat. §62-133.14 to establish an annual Joint Agency Asset Rider for the applicable electric public utility. Rule R8-70 schedules an annual adjustment hearing for DEP and requires that the Company use a test period of the calendar year that precedes the end of the test period for each electric public utility for purposes of Rule R8-55. Therefore, the test period used in this Application for these proceedings is January 1, 2018 through December 31, 2018. The rate period to be used in this Application for these proceedings is December 1, 2019 through November 30, 2020.

7. The information and data required to be filed by NCUC Rule R8-70 is contained in the direct testimony and exhibits of LaWanda M. Jiggetts, which are being filed simultaneously with this Application and incorporated herein by reference. In compliance with Rule R8-70(e)(1)(vi), Exhibit L reports the total actual fuel savings experienced during the test period months January through December 31, 2018 of \$50 million.

8. Pursuant to N.C. Gen. Stat. §62-133.14 and Commission Rule R8-70, the Company requests Commission approval of the following JAAR rates to be effective for service on or after December 1, 2019:

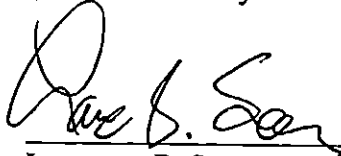
Rate Class	Applicable Schedule(s)	Incremental Rate*
Non-Demand Rate Class (dollars per kilowatt-hour)		
Residential	RES, R-TOUD, R-TOUE, R-TOU	0.00390
Small General Service	SGS, SGS-TOUE	0.00343
Medium General Service	CH-TOUE, CSE, CSG	0.00253
Seasonal and Intermittent Service	SI	(0.00172)
Traffic Signal Service	TSS, TFS	0.00171
Outdoor Lighting Service	ALS, SLS, SLR, SFLS	0.00000
Demand Rate Classes (dollars per kilowatt)		
Medium General Service	MGS, GS-TES, AP-TES, SGS-TOU	0.88
Large General Service	LGS, LGS-TOU	1.37

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

The estimated costs to be recovered in these rates will be subject to true-up in subsequent annual rider proceedings as provided for in Commission Rule R8-70. The proposed JAAR will be in effect until November 30, 2020.

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

Respectfully submitted, this the 11th day of June 2019.



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Deputy General Counsel
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ATTORNEYS FOR DUKE ENERGY PROGRESS, LLC

VERIFICATION

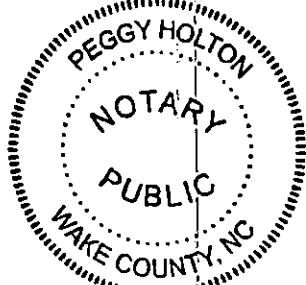
STATE OF NORTH CAROLINA)

COUNTY OF WAKE)

DOCKET NO. E-2, SUB 1207

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

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



LaWanda M. Jiggetts
LaWanda M. Jiggetts

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

Peggy Holton
Notary Public

My Commission expires: 12/22/2021

*Tiggett's EXS A-E through
L I/A*

SUMMARY OF EXHIBITS
DOCKET E-2, SUB 1207

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

SUMMARY RATE	CALCULATION OF JOINT AGENCY ASSET RIDER - SUMMARY RATE
EXHIBIT A-E	CALCULATION OF JOINT AGENCY ASSET RIDER FOR DECEMBER 2019 - NOVEMBER 2020
EXHIBIT B-E	COST COMPONENTS OF JOINT AGENCY ASSET RIDER
EXHIBIT C-E	SUMMARY OF ANNUAL LEVELIZATION REVENUE TO BE INCLUDED IN THE JOINT AGENCY PURCHASE RIDER
EXHIBIT C-1-E	LEVELIZED COST FOR THE HARRIS NUCLEAR PLANT
EXHIBIT C-2-E	LEVELIZED COST FOR THE BRUNSWICK UNIT 1 NUCLEAR PLANT
EXHIBIT C-3-E	LEVELIZED COST FOR THE BRUNSWICK UNIT 2 NUCLEAR PLANT
EXHIBIT C-4-E	LEVELIZED COST FOR THE MAYO COAL STATION
EXHIBIT C-5-E	LEVELIZED COST FOR THE ROXBORO COAL STATION
EXHIBIT C-6-E	LEVELIZED COST FOR THE ACQUISITION ADJUSTMENT
EXHIBIT C-7-E	NET BOOK VALUE OF THE NCEMPA GENERATING ASSETS BY PLANT
EXHIBIT C-8-E	CALCULATION OF REMAINING LIFE OF ASSETS PURCHASED FOR LEVELIZATION
EXHIBIT C-9-E	MACRS TAX DEPRECIATION RATES
EXHIBIT C-10-E	COMPOSITE DEPRECIATION RATES FOR EACH NCEMPA GENERATION ASSET PURCHASED
EXHIBIT C-11-E	BOOK DEPRECIATION EXPENSE FOR EACH NCEMPA GENERATION ASSET PURCHASED
EXHIBIT D-E	CALCULATION OF REVENUE REQUIREMENT FOR ACQUISITION COSTS EXCLUDED FROM THE LEVELIZATION
EXHIBIT D-1A-E	ESTIMATED NET NUCLEAR FUEL BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
EXHIBIT D-1B-E	ACCUMULATED DEFERRED INCOME TAXES ASSOCIATED WITH NUCLEAR FUEL SINCE THE DATE OF PURCHASE
EXHIBIT D-1C-E	TAX VERSUS BOOK DEPRECIATION ASSOCIATED WITH NUCLEAR FUEL ADDITIONS SINCE THE DATE OF PURCHASE
EXHIBIT D-2-E	ESTIMATED MATERIALS AND SUPPLIES BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
EXHIBIT D-3-E	DEFERRED TAX ASSET RELATED TO NCEMPA'S NUCLEAR DECOMMISSIONING FUNDS TRANSFERRED TO DEP
EXHIBIT D-4-E	ESTIMATED DRY CASK STORAGE BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD

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

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EXHIBIT E-1-E	ACTUAL CAPITAL ADDITIONS SUMMARY BY GENERATING UNIT FROM DATE OF PURCHASE
EXHIBIT E-2-E	ACTUAL CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH FROM DATE OF PURCHASE THROUGH DECEMBER 31, 2018
EXHIBIT E-3-E	ACTUAL DEPRECIATION EXPENSE on CAPITAL ADDITIONS by GENERATING UNIT by month FROM DATE of PURCHASE through DECEMBER 31, 2018
EXHIBIT E-4-E	ESTIMATED ACCUMULATED DEPRECIATION BALANCES on ACTUAL CAPITAL ADDITIONS by GENERATING UNIT through the end of the RATE PERIOD
EXHIBIT E-5-E	ESTIMATED ACCUMULATED DEFERRED INCOME TAXES on ACTUAL CAPITAL ADDITIONS by GENERATING UNIT through the end of the RATE PERIOD
EXHIBIT E-6-E	ESTIMATED AVERAGE NET INCREMENTAL CAPITAL ADDITIONS BY GENERATING UNIT FOR THE NEXT RATE PERIOD
EXHIBIT E-7-E	ESTIMATED INCREMENTAL CAPITAL ADDITIONS BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
EXHIBIT E-8-E	ESTIMATED ACCUMULATED DEPRECIATION ON CAPITAL ADDITIONS BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
EXHIBIT E-9-E	DEFERRED TAXES ON ESTIMATED CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH THROUGH THE END OF THE NEXT RATE PERIOD
EXHIBIT F-E	CALCULATION OF INCREMENTAL OPERATING EXPENSES AND REDUCTION OF OTHER ELECTRIC REVENUE
EXHIBIT F-1-E	CALCULATION OF INCREMENTAL NUCLEAR DECOMMISSIONING EXPENSE
EXHIBIT G-E	NO LONGER NEEDED
EXHIBIT G-1-E	NO LONGER NEEDED
EXHIBIT H-E	NO LONGER NEEDED
EXHIBIT I-E	PRODUCTION DEMAND ALLOCATION FACTORS INCLUDING ADJUSTMENT FOR NCEMPA ADDITIONAL SALES
EXHIBIT J-E	COST OF CAPITAL AND TAX RATES
EXHIBIT K-E	BILLING DETERMINANTS FOR THE TWELVE MONTH PERIOD ENDED NOVEMBER 30, 2020
EXHIBIT A - TU	CALCULATION OF JOINT AGENCY ASSET RIDER
EXHIBIT A-1 -TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR
EXHIBIT A-2 - TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - RESIDENTIAL

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

EXHIBIT A-3 - TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - SMALL GENERAL SERVICE
EXHIBIT A-4 - TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - MEDIUM GENERAL SERVICE - kWh BILLED
EXHIBIT A-5 - TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - SEASONAL INTERMITTENT
EXHIBIT A-6 - TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - TRAFFIC SIGNAL SERVICE
EXHIBIT A-7 - TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - MEDIUM GENERAL SERVICE - kW BILLED
EXHIBIT A-8 - TU	JOINT AGENCY ASSET RIDER ROLLING RECOVERY FACTOR - LARGE GENERAL SERVICE
EXHIBIT B - TU	CALCULATION OF NC RETAIL NCEMPA RIDER REVENUE for TEST YEAR ENDING DECEMBER 31, 2018
EXHIBIT C - TU	SUMMARY OF REVENUE ASSOCIATED WITH LEVELIZED RECOVERY OF INCREMENTAL COSTS TO BE INCLUDED IN THE JOINT AGENCY PURCHASE RIDER for TEST YEAR ENDING DECEMBER 31, 2018
EXHIBIT C-1 ESTIMATE - TU	LEVELIZED COST FOR THE HARRIS NUCLEAR PLANT - ESTIMATE
EXHIBIT C-1 ACTUAL - TU	LEVELIZED COST FOR THE HARRIS NUCLEAR PLANT - ACTUAL
EXHIBIT C-2 ESTIMATE - TU	LEVELIZED COST FOR THE BRUNSWICK UNIT 1 NUCLEAR PLANT - ESTIMATE
EXHIBIT C-2 ACTUAL - TU	LEVELIZED COST FOR THE BRUNSWICK UNIT 1 NUCLEAR PLANT - ACTUAL
EXHIBIT C-3 ESTIMATE - TU	LEVELIZED COST FOR THE BRUNSWICK UNIT 2 NUCLEAR PLANT - ESTIMATE
EXHIBIT C-3 ACTUAL - TU	LEVELIZED COST FOR THE BRUNSWICK UNIT 2 NUCLEAR PLANT - ACTUAL
EXHIBIT C-4 ESTIMATE - TU	LEVELIZED COST FOR THE MAYO COAL STATION - ESTIMATE
EXHIBIT C-4 ACTUAL - TU	LEVELIZED COST FOR THE MAYO COAL STATION - ACTUAL
EXHIBIT C-5 ESTIMATE - TU	LEVELIZED COST FOR THE ROXBORO COAL STATION - ESTIMATE
EXHIBIT C-5 ACTUAL - TU	LEVELIZED COST FOR THE ROXBORO COAL STATION - ACTUAL
EXHIBIT C-6 ESTIMATE - TU	LEVELIZED COST FOR THE ACQUISITION ADJUSTMENT - ESTIMATE
EXHIBIT C-6 ACTUAL - TU	LEVELIZED COST FOR THE ACQUISITION ADJUSTMENT - ACTUAL
EXHIBIT C-7 - TU	NET BOOK VALUE OF THE NCEMPA GENERATING ASSETS BY PLANT

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

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

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

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

EXHIBIT G-1 - TU	CALCULATION OF RATE BASE AND OPERATING EXPENSE DECREMENT FOR CHANGE IN NC RETAIL ALLOCATION FACTORS
EXHIBIT H - TU	CALCULATION OF THE MONTHLY AMORTIZATION OF NC RETAIL DEFERRED COST BALANCE
EXHIBIT I - TU	PRODUCTION DEMAND ALLOCATION FACTORS INCLUDING ADJUSTMENT FOR NCEMPA ADDITIONAL SALES
EXHIBIT J - TU	COST OF CAPITAL AND TAX RATES
EXHIBIT K - TU	BILLING DETERMINANTS FOR THE TWELVE MONTH PERIOD ENDED NOVEMBER 30, 2020
EXHIBIT L	FUEL SAVINGS BY CUSTOMER CLASS RELATED TO FACILITIES ACQUIRED FROM NCEMPA

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

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

<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	\$ 0.00474	\$ (0.00084)	\$ 0.00390 per KWH
2	Small General Service	\$ 0.00522	\$ (0.00179)	\$ 0.00343 per KWH
3	Medium General Service -KWH	\$ 0.00415	\$ (0.00162)	\$ 0.00253 per KWH
4	Seasonal Intermittent	\$ 0.00251	\$ (0.00423)	\$ (0.00172) per KWH
5	Lighting	\$ -	\$ -	\$ - per KWH
6	Traffic Signal	\$ 0.00236	\$ (0.00065)	\$ 0.00171 per KWH
Customers billed based on KW				
7	Medium General Service -KW	\$ 1.37	\$ (0.49000)	\$ 0.88 per KW
8	Large General Service	\$ 1.45	\$ (0.08000)	\$ 1.37 per KW

Notes:

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

EXHIBIT A - E
DOCKET E-2, SUB 1207

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

Line No.	Description	Demand Allocation Factors	NC Retail Amount	Demand KW (c) (Col. C)	Energy KWH (c.) (Col. D)	Prospective Rate (Col. E)
		To Customer Classes (b) (Col. A)	(Thousands of Dollars) (Col. B)			
1	Total annual revenue for calculation of joint agency asset rider		\$ 152,923 (a)			
	Allocation of monthly revenue to customer classes:					
	Customers billed based on KWH					
2	Residential	49.5990%	\$ 75,848		16,009,594,458	\$ 0.00474 per KWH
3	Small General Service	6.1557%	\$ 9,413		1,802,494,710	\$ 0.00522 per KWH
4	Medium General Service -KWH	0.0241%	\$ 37		8,900,213	\$ 0.00415 per KWH
5	Seasonal Intermittent	0.0709%	\$ 108		43,257,472	\$ 0.00251 per KWH
6	Lighting	0.0000%	\$ -			
7	Traffic Signal	0.0073%	\$ 11		4,723,299	\$ 0.00236 per KWH
		55.8570%	\$ 85,418			
	Customers billed based on KW					
8	Medium General Service -KW	28.1566%	\$ 43,058	31,382,336		\$ 1.37 per KW
9	Large General Service	15.9864%	\$ 24,447	16,842,986		\$ 1.45 per KW
		44.1430%	\$ 67,505			
10		100.0000%	\$ 152,923			

Notes:

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

EXHIBIT B - E
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
COST COMPONENTS OF JOINT AGENCY ASSET RIDER
CALCULATION OF NC RETAIL NCEMPA ANNUAL RIDER REVENUE
FOR DECEMBER 2019 - NOVEMBER 2020
(Thousands of Dollars)

Line No.	<u>Description</u>	<u>NC Retail Annual Revenue Amount (f) (Col A)</u>
1	Levelized recovery of pretax cost of certain acquisition costs at the purchase date	\$ 56,265 (a)
2	Incremental pretax cost for acquisition costs not included in the levelization of costs	\$ 8,472 (b)
3	Incremental pretax cost for financing and operating costs related to capital additions since the purchase date	\$ 15,945 (c)
4	Incremental pretax cost for operating costs on acquired assets	<u>\$ 72,026 (d)</u>
5	Total annual pre-tax deferred cost for joint agency asset rider (Line 1 + Line 2 + Line 3 + Line 4)	\$ 152,709
6	Regulatory fee (Line 8 / (1 - 0.140%) x 0.140%)	<u>\$ 214 (e)</u>
7	Total annual revenue for calculation of joint agency asset rider (Line 7 + Line 8)	<u><u>\$ 152,923</u></u>

Notes:

- (a) From Exhibit C-E, Line 7
- (b) From Exhibit D-E, Line 10
- (c) From Exhibit E-E, Line 13
- (d) From Exhibit F-E, Line 14
- (e) From Exhibit J-E, Line 12, Regulatory fee percentage 0.140%
- (f) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study of 61.52780%

EXHIBIT C - E
DOCKET E-2, SUB 1207

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

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

Notes:

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

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

	ESTIMATE	REVISIONS FOR 2017	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:				
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 895,648 (a)			
LAND COST AT JULY 31, 2015	\$ 10,269 (a)			
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 500,186 (a)			
NET PLANT EXCLUDING ACQUISITION COSTS	\$405,929			
RETIREMENT DATE	10/24/2046 (a)			
LEVELIZATION PERIOD IN MONTHS	375 (a)			
TAX LIFE	15 (a)			
COMPOSITE TAX RATE	35.16% (a)	34.01% (b)	23.50% (d)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)	6.4476% (f)
DEPRECIATION RATE	1.5346% (a)			
FIRST YEAR BOOK DEPRECIATION RATE	0.6395% (a)			
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		1.6440% (e)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		5.1450% (e)	
NC RETAIL ALLOCATION FACTOR	61.52780% (c)			

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL 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)
2015	\$ 244,678																
2016	\$ 241,130	5.000%	\$ 11,824	\$ 8,377	\$ 2,945	\$ 2,945	\$ 3,548	\$ 241,431	\$ 2,161	\$ 5,438	\$ 2,949	\$ 14,096		\$ 9,585	\$ 4,511	\$ 4,589	
2017	\$ 232,690	5.000%	\$ 22,778	\$ 14,238	\$ 4,925	\$ 7,870	\$ 8,540	\$ 231,452	\$ 4,971	\$ 12,512	\$ 6,817	\$ 32,641		\$ 22,272	\$ 10,369	\$ 15,855	
2018	\$ 218,097	5.000%	\$ 20,760	\$ 11,936	\$ 2,499	\$ 8,118	\$ 8,814	\$ 216,487	\$ 4,692	\$ 11,810	\$ 6,087	\$ 31,404		\$ 22,179	\$ 8,225	\$ 26,290	
2019	\$ 208,215	5.000%	\$ 18,745	\$ 10,966	\$ 2,577	\$ 10,696	\$ 7,779	\$ 210,479	\$ 4,183	\$ 10,951	\$ 3,354	\$ 28,276		\$ 20,565	\$ 5,711	\$ 33,963	\$ 31,905
2020	\$ 200,440	5.000%	\$ 15,166	\$ 9,052	\$ 2,107	\$ 12,503	\$ 7,779	\$ 200,358	\$ 3,895	\$ 10,314	\$ 3,111	\$ 25,099	\$ 23,579				
2021	\$ 192,661	5.000%	\$ 14,363	\$ 8,564	\$ 1,526	\$ 14,515	\$ 7,779	\$ 180,670	\$ 3,707	\$ 9,816	\$ 2,960	\$ 24,261	\$ 21,411				
2022	\$ 184,882	5.000%	\$ 14,363	\$ 8,564	\$ 1,526	\$ 17,566	\$ 7,779	\$ 161,273	\$ 3,524	\$ 9,332	\$ 2,814	\$ 23,449	\$ 19,441				
2023	\$ 177,103	5.000%	\$ 14,363	\$ 8,564	\$ 1,531	\$ 19,097	\$ 7,779	\$ 141,669	\$ 3,343	\$ 8,853	\$ 2,670	\$ 22,645	\$ 17,637				
2024	\$ 169,324	5.000%	\$ 14,363	\$ 8,564	\$ 1,526	\$ 20,622	\$ 7,779	\$ 121,861	\$ 3,162	\$ 8,374	\$ 2,525	\$ 21,840	\$ 15,880				
2025	\$ 161,546	5.000%	\$ 14,363	\$ 8,564	\$ 1,531	\$ 22,154	\$ 7,779	\$ 101,854	\$ 2,981	\$ 7,895	\$ 2,381	\$ 21,035	\$ 14,459				
2026	\$ 153,767	5.000%	\$ 14,363	\$ 8,564	\$ 1,526	\$ 23,679	\$ 7,779	\$ 81,847	\$ 2,799	\$ 7,416	\$ 2,238	\$ 20,231	\$ 13,064				
2027	\$ 145,988	5.000%	\$ 14,363	\$ 8,564	\$ 1,531	\$ 25,210	\$ 7,779	\$ 61,840	\$ 2,618	\$ 6,936	\$ 2,095	\$ 19,426	\$ 11,784				
2028	\$ 138,209	5.000%	\$ 14,363	\$ 8,564	\$ 1,526	\$ 26,736	\$ 7,779	\$ 41,833	\$ 2,438	\$ 6,457	\$ 1,947	\$ 18,622	\$ 10,512				
2029	\$ 130,430	5.000%	\$ 14,363	\$ 8,564	\$ 1,531	\$ 28,267	\$ 7,779	\$ 21,826	\$ 2,257	\$ 5,978	\$ 1,803	\$ 17,817	\$ 9,339				
2030	\$ 122,652	2.950%	\$ 7,182	\$ (587)	\$ (138)	\$ 28,126	\$ 7,779	\$ 1,818	\$ 2,077	\$ 5,498	\$ 1,658	\$ 17,013	\$ 8,155				
2031	\$ 114,873	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 26,326	\$ 7,779	\$ (1,835)	\$ 1,912	\$ 5,018	\$ 1,527	\$ 16,200	\$ 7,002				
2032	\$ 107,094	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 24,524	\$ 7,779	\$ (3,638)	\$ 1,739	\$ 4,538	\$ 1,405	\$ 15,387	\$ 5,889				
2033	\$ 99,315	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 22,722	\$ 7,779	\$ (5,440)	\$ 1,563	\$ 4,058	\$ 1,282	\$ 14,574	\$ 4,776				
2034	\$ 91,536	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 20,919	\$ 7,779	\$ (7,242)	\$ 1,389	\$ 3,578	\$ 1,160	\$ 13,761	\$ 3,665				
2035	\$ 83,758	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 19,117	\$ 7,779	\$ (9,044)	\$ 1,208	\$ 3,098	\$ 1,038	\$ 12,948	\$ 2,554				
2036	\$ 75,979	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 17,315	\$ 7,779	\$ (10,846)	\$ 1,027	\$ 2,618	\$ 917	\$ 12,135	\$ 1,442				
2037	\$ 68,200	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 15,513	\$ 7,779	\$ (12,648)	\$ 846	\$ 2,138	\$ 796	\$ 11,322	\$ 531				
2038	\$ 60,421	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 13,710	\$ 7,779	\$ (14,450)	\$ 665	\$ 1,658	\$ 675	\$ 10,509	\$ 360				
2039	\$ 52,642	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 11,908	\$ 7,779	\$ (16,252)	\$ 484	\$ 1,178	\$ 594	\$ 9,696	\$ 169				
2040	\$ 44,864	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 10,106	\$ 7,779	\$ (18,054)	\$ 303	\$ 893	\$ 513	\$ 8,883	\$ 0				
2041	\$ 37,085	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 8,303	\$ 7,779	\$ (19,856)	\$ 122	\$ 602	\$ 432	\$ 8,070	\$ (111)				
2042	\$ 29,306	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 6,501	\$ 7,779	\$ (21,658)	\$ (59)	\$ 311	\$ 361	\$ 7,257	\$ (272)				
2043	\$ 21,527	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 4,698	\$ 7,779	\$ (23,460)	\$ (269)	\$ 120	\$ 210	\$ 6,444	\$ (383)				
2044	\$ 13,748	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 2,896	\$ 7,779	\$ (25,262)	\$ (405)	\$ (59)	\$ 122	\$ 5,631	\$ (494)				
2045	\$ 5,970	0.000%	\$ -	\$ (7,779)	\$ (1,802)	\$ 1,094	\$ 7,779	\$ (27,064)	\$ (539)	\$ (203)	\$ 39	\$ 4,818	\$ (605)				
2046	TEN MONTHS	0.000%	\$ -	\$ (8,353)	\$ (1,472)	\$ (376)	\$ 6,353	\$ 2,436	\$ 47	\$ 125	\$ 39	\$ 4,083	\$ (714)				
TOTAL			\$ 242,780	\$ (2,281)		\$ 245,061		\$ 65,263	\$ 171,148	\$ 58,353	\$ 539,824	\$ 231,365					

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
(c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study.
(d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
(e) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(f) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate.
(g) See Exhibit J-E Cost of Capital.

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

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

	ESTIMATE	REVISIONS FOR 2017	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:				
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 273,020 (a)			
LAND COST AT JULY 31, 2015	\$ 1 (a)			
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 168,091 (a)			
NET PLANT EXCLUDING ACQUISITION COSTS	\$104,930			
RETIREMENT DATE	9/8/2036 (a)			
LEVELIZATION PERIOD IN MONTHS	253 (a)			
TAX LIFE	15 (a)			
COMPOSITE TAX RATE	35.16% (a)	34.01% (b)	23.50% (d)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)	6.4476% (f)
DEPRECIATION RATE	2.5035% (a)		(e)	
FIRST YEAR BOOK DEPRECIATION RATE	1.0431%			
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		1.9440% (e)	
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)		5.1480% (e)	
NC RETAIL ALLOCATION FACTOR	61.52780% (c)			

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
2015	\$ 83,248																
2016	\$ 81,489	5.000%	\$ 3,162	\$ 1,404	\$ 494	\$ 494	\$ 1,759	\$ 62,122	\$ 556	\$ 1,389	\$ 759	\$ 4,473		\$ 3,035	\$ 1,438	\$ 1,462	
2017	\$ 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	
2018	\$ 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
2019	\$ 50,230	7.700%	\$ 4,971	\$ 2,124	\$ 499	\$ 1,565	\$ 2,847	\$ 50,338	\$ 1,001	\$ 2,619	\$ 805	\$ 7,271		\$ 6,014	\$ 1,257	\$ 9,979	\$ 9,374
2020	\$ 47,383	8.930%	\$ 4,474	\$ 1,627	\$ 377	\$ 1,942	\$ 2,847	\$ 47,053	\$ 916	\$ 2,422	\$ 731	\$ 6,914	\$ 6,496				
2021	\$ 44,536	6.230%	\$ 4,022	\$ 1,175	\$ 272	\$ 2,214	\$ 2,847	\$ 43,892	\$ 853	\$ 2,259	\$ 681	\$ 6,640	\$ 5,860				
2022	\$ 41,689	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 2,437	\$ 2,847	\$ 40,787	\$ 793	\$ 2,100	\$ 633	\$ 6,373	\$ 5,284				
2023	\$ 38,842	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 2,660	\$ 2,847	\$ 37,717	\$ 733	\$ 1,942	\$ 586	\$ 6,107	\$ 4,757				
2024	\$ 35,995	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 2,885	\$ 2,847	\$ 34,647	\$ 674	\$ 1,784	\$ 538	\$ 5,842	\$ 4,274				
2025	\$ 33,148	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 3,107	\$ 2,847	\$ 31,576	\$ 614	\$ 1,626	\$ 490	\$ 5,577	\$ 3,833				
2026	\$ 30,302	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 3,332	\$ 2,847	\$ 28,505	\$ 554	\$ 1,467	\$ 443	\$ 5,311	\$ 3,430				
2027	\$ 27,455	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 3,555	\$ 2,847	\$ 25,435	\$ 494	\$ 1,309	\$ 395	\$ 5,046	\$ 3,081				
2028	\$ 24,600	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 3,778	\$ 2,847	\$ 22,364	\$ 435	\$ 1,151	\$ 347	\$ 4,780	\$ 2,724				
2029	\$ 21,761	5.900%	\$ 3,809	\$ 962	\$ 223	\$ 4,002	\$ 2,847	\$ 19,293	\$ 375	\$ 993	\$ 300	\$ 4,515	\$ 2,417				
2030	\$ 18,914	5.910%	\$ 3,816	\$ 969	\$ 224	\$ 4,227	\$ 2,847	\$ 16,223	\$ 315	\$ 835	\$ 252	\$ 4,249	\$ 2,137				
2031	\$ 16,067	2.950%	\$ 1,905	\$ (942)	\$ (218)	\$ 4,008	\$ 2,847	\$ 13,373	\$ 260	\$ 688	\$ 208	\$ 4,003	\$ 1,891				
2032	\$ 13,220	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 3,349	\$ 2,847	\$ 10,965	\$ 213	\$ 564	\$ 170	\$ 3,795	\$ 1,684				
2033	\$ 10,373	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 2,689	\$ 2,847	\$ 8,778	\$ 171	\$ 452	\$ 136	\$ 3,606	\$ 1,503				
2034	\$ 7,528	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 2,029	\$ 2,847	\$ 6,590	\$ 128	\$ 339	\$ 102	\$ 3,417	\$ 1,338				
2035	\$ 4,679	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 1,370	\$ 2,847	\$ 4,403	\$ 86	\$ 227	\$ 68	\$ 3,228	\$ 1,188				
2036	\$ 1,832	0.000%	\$ -	\$ (2,847)	\$ (660)	\$ 710	\$ 2,847	\$ 2,216	\$ 43	\$ 114	\$ 34	\$ 3,039	\$ 1,050				
2036 NINE MONTHS	\$ (130)	0.000%	\$ -	\$ (1,962)	\$ (455)	\$ 255	\$ 1,962	\$ 368	\$ 7	\$ 19	\$ 6	\$ 1,994	\$ 648				
TOTAL		100.000%	\$ 64,385	\$ 1,007			\$ 63,376		\$ 11,634	\$ 30,368	\$ 10,858	\$ 116,258	\$ 53,575				

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
(c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2016 cost of service study.
(d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
(e) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(f) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.

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

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

	2015	REVISIONS FOR 2017	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:				
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 218,790 (a)			
LAND COST AT JULY 31, 2015	\$ 615 (a)			
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 122,314 (a)			
NET PLANT EXCLUDING ACQUISITION COSTS	\$97,091			
RETIREMENT DATE	12/27/2034 (a)			
LEVELIZATION PERIOD IN MONTHS	233 (a)			
TAX LIFE	15 (a)			
COMPOSITE TAX RATE	35.16% (a)	34.01% (b)	23.50% (d)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.9189% (b)	6.4416% (e)	6.4476% (f)
DEPRECIATION RATE	2.0153% (a)			
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	61.5278% (c)			

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
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	\$ 2,965	\$ 1,569	\$ 8,494		\$ 6,204	\$ 2,290	\$ 3,503	
2017	\$ 51,759	8.550%	\$ 5,060	\$ 2,245	\$ 17	\$ 1,588	\$ 2,814	\$ 51,246	\$ 1,101	\$ 2,770	\$ 1,428	\$ 8,113		\$ 6,185	\$ 1,928	\$ 5,743	\$ 5,395
2018	\$ 48,707	7.700%	\$ 4,571	\$ 1,519	\$ 357	\$ 1,945	\$ 3,052	\$ 48,466	\$ 963	\$ 2,522	\$ 775	\$ 7,312		\$ 6,002	\$ 1,309	\$ 7,485	\$ 7,032
2019	\$ 45,655	6.930%	\$ 4,114	\$ 1,062	\$ 245	\$ 2,191	\$ 3,052	\$ 45,113	\$ 877	\$ 2,322	\$ 700	\$ 6,952	\$ 6,531				
2020	\$ 42,603	6.230%	\$ 3,698	\$ 648	\$ 150	\$ 2,341	\$ 3,052	\$ 41,883	\$ 814	\$ 2,155	\$ 650	\$ 6,671	\$ 5,887				
2021	\$ 39,551	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,445	\$ 3,052	\$ 38,694	\$ 752	\$ 1,991	\$ 601	\$ 6,396	\$ 5,303				
2022	\$ 36,499	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,549	\$ 3,052	\$ 35,528	\$ 691	\$ 1,829	\$ 552	\$ 6,123	\$ 4,769				
2023	\$ 33,447	5.910%	\$ 3,508	\$ 456	\$ 106	\$ 2,655	\$ 3,052	\$ 32,371	\$ 629	\$ 1,668	\$ 503	\$ 5,850	\$ 4,280				
2024	\$ 30,396	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,759	\$ 3,052	\$ 29,214	\$ 568	\$ 1,504	\$ 454	\$ 5,577	\$ 3,834				
2025	\$ 27,344	5.910%	\$ 3,508	\$ 458	\$ 106	\$ 2,865	\$ 3,052	\$ 26,057	\$ 507	\$ 1,341	\$ 405	\$ 5,304	\$ 3,425				
2026	\$ 24,292	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 2,969	\$ 3,052	\$ 22,901	\$ 445	\$ 1,179	\$ 356	\$ 5,032	\$ 3,052				
2027	\$ 21,240	5.910%	\$ 3,508	\$ 458	\$ 106	\$ 3,075	\$ 3,052	\$ 19,744	\$ 384	\$ 1,016	\$ 307	\$ 4,759	\$ 2,712				
2028	\$ 18,188	5.900%	\$ 3,502	\$ 450	\$ 104	\$ 3,179	\$ 3,052	\$ 16,587	\$ 322	\$ 854	\$ 258	\$ 4,486	\$ 2,401				
2029	\$ 15,136	5.910%	\$ 3,508	\$ 458	\$ 106	\$ 3,285	\$ 3,052	\$ 13,430	\$ 261	\$ 691	\$ 209	\$ 4,213	\$ 2,119				
2030	\$ 12,084	2.950%	\$ 1,751	\$ (1,301)	\$ (301)	\$ 2,984	\$ 3,052	\$ 10,476	\$ 204	\$ 539	\$ 163	\$ 3,957	\$ 1,870				
2031	\$ 9,032	0.000%	\$ -	\$ (3,052)	\$ (707)	\$ 2,277	\$ 3,052	\$ 7,928	\$ 154	\$ 408	\$ 123	\$ 3,737	\$ 1,659				
2032	\$ 5,980	0.000%	\$ -	\$ (3,052)	\$ (707)	\$ 1,570	\$ 3,052	\$ 5,583	\$ 109	\$ 287	\$ 87	\$ 3,534	\$ 1,474				
2033	\$ 2,929	0.000%	\$ -	\$ (3,052)	\$ (707)	\$ 862	\$ 3,052	\$ 3,239	\$ 63	\$ 167	\$ 50	\$ 3,332	\$ 1,305				
2034 TWELVE MONTHS	\$ (98)	0.000%	\$ -	\$ (3,027)	\$ (701)	\$ 161	\$ 3,027	\$ 903	\$ 18	\$ 48	\$ 14	\$ 3,105	\$ 1,143				
TOTAL		100.000%	\$ 59,198	\$ 577		\$	\$ 58,621		\$ 10,555	\$ 27,555	\$ 9,903	\$ 102,946	\$ 51,763				

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
(c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
(d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
(e) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(f) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.

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

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

	2015	REVISIONS FOR 2017	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:				
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ -178,639 - (a)	-	-	-
LAND COST AT JULY 31, 2015	\$ -3,300 - (a)	-	-	-
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 100,548 (a)	-	-	-
NET PLANT EXCLUDING ACQUISITION COSTS	\$81,382	-	-	-
RETIREMENT DATE	6/20/2035 (a)	-	-	-
LEVELIZATION PERIOD IN MONTHS	239 (a)	-	-	-
TAX LIFE	20 (a)	-	-	-
COMPOSITE TAX RATE	35.16% (a)	34.01% (b)	23.50% (d)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.5856% (a)	6.6169% (b)	6.4416% (e)	6.4476% (f)
DEPRECIATION RATE	3.0624% (a)	-	-	-
FIRST YEAR BOOK DEPRECIATION RATE	1.2510%	-	-	-
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)	-	1.9440% (e)	-
WEIGHTED ANNUAL NET OF TAX EQUITY RATE	5.4060% (a)	-	5.1480% (e)	-
NC RETAIL ALLOCATION FACTOR	61.52780% (c)	-	-	-

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Beg Balance July 31, 2015	\$ 49,060																
2015	\$ 47,596	3.750%	\$ 1,765	\$ 401	\$ 141	\$ 141	\$ 1,365	\$ 48,307	\$ 432	\$ 1,088	\$ 590	\$ 3,475	\$ 5,380	\$ 2,495	\$ 980	\$ 896	
2016	\$ 44,412	7.219%	\$ 3,416	\$ 133	\$ 45	\$ 187	\$ 3,283	\$ 45,890	\$ 985	\$ 2,481	\$ 1,312	\$ 8,062	\$ 5,380	\$ 5,755	\$ 2,306	\$ 3,457	
2017	\$ 41,104	6.577%	\$ 3,198	\$ (110)	\$ (87)	\$ 100	\$ 3,308	\$ 42,592	\$ 915	\$ 2,303	\$ 1,187	\$ 7,712	\$ 5,174	\$ 5,737	\$ 1,975	\$ 5,742	\$ 5,395
2018	\$ 38,735	6.177%	\$ 2,968	\$ 599	\$ 141	\$ 241	\$ 2,369	\$ 39,750	\$ 790	\$ 2,068	\$ 635	\$ 5,863	\$ 5,591	\$ 4,891	\$ 972	\$ 7,135	\$ 6,702
2019	\$ 36,368	5.713%	\$ 2,745	\$ 378	\$ 87	\$ 328	\$ 2,369	\$ 37,287	\$ 724	\$ 1,919	\$ 579	\$ 5,591	\$ 5,252				
2020	\$ 33,897	5.285%	\$ 2,539	\$ 170	\$ 39	\$ 387	\$ 2,369	\$ 34,834	\$ 677	\$ 1,793	\$ 541	\$ 5,380	\$ 4,748				
2021	\$ 31,628	4.986%	\$ 2,349	\$ (20)	\$ (5)	\$ 362	\$ 2,369	\$ 32,448	\$ 631	\$ 1,670	\$ 504	\$ 5,174	\$ 4,290				
2022	\$ 29,259	4.522%	\$ 2,173	\$ (186)	\$ (45)	\$ 317	\$ 2,369	\$ 30,104	\$ 585	\$ 1,550	\$ 467	\$ 4,971	\$ 3,872				
2023	\$ 26,899	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ 285	\$ 2,369	\$ 27,784	\$ 540	\$ 1,430	\$ 431	\$ 4,771	\$ 3,491				
2024	\$ 24,521	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ 213	\$ 2,369	\$ 25,467	\$ 495	\$ 1,311	\$ 395	\$ 4,571	\$ 3,142				
2025	\$ 22,152	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ 160	\$ 2,369	\$ 23,150	\$ 450	\$ 1,192	\$ 359	\$ 4,370	\$ 2,822				
2026	\$ 19,783	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ 108	\$ 2,369	\$ 20,833	\$ 405	\$ 1,072	\$ 323	\$ 4,170	\$ 2,530				
2027	\$ 17,414	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ 56	\$ 2,369	\$ 18,516	\$ 360	\$ 953	\$ 287	\$ 3,970	\$ 2,262				
2028	\$ 15,045	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ 4	\$ 2,369	\$ 16,200	\$ 315	\$ 834	\$ 252	\$ 3,769	\$ 2,018				
2029	\$ 12,676	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ (48)	\$ 2,369	\$ 13,883	\$ 270	\$ 715	\$ 218	\$ 3,569	\$ 1,795				
2030	\$ 10,307	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ (101)	\$ 2,369	\$ 11,566	\$ 225	\$ 595	\$ 180	\$ 3,369	\$ 1,592				
2031	\$ 7,938	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ (153)	\$ 2,369	\$ 9,249	\$ 180	\$ 476	\$ 144	\$ 3,169	\$ 1,406				
2032	\$ 5,569	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ (205)	\$ 2,369	\$ 6,932	\$ 135	\$ 357	\$ 108	\$ 2,968	\$ 1,238				
2033	\$ 3,200	4.462%	\$ 2,144	\$ (225)	\$ (52)	\$ (257)	\$ 2,369	\$ 4,616	\$ 90	\$ 238	\$ 72	\$ 2,768	\$ 1,084				
2034	\$ 831	4.461%	\$ 2,143	\$ (226)	\$ (52)	\$ (309)	\$ 2,369	\$ 2,299	\$ 45	\$ 118	\$ 36	\$ 2,568	\$ 945				
2035 SIX MONTHS	\$ (289)	2.231%	\$ 1,072	\$ (48)	\$ (11)	\$ (320)	\$ 1,120	\$ 586	\$ 11	\$ 30	\$ 9	\$ 1,170	\$ 405				
TOTAL		100.000%	\$ 47,950	\$ (1,399)		\$	\$ 49,349	\$ 492,273	\$ 9,281	\$ 24,184	\$ 8,626	\$ 91,429	\$ 42,890				

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2018 on Docket E-2, Sub 1110.
(b) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
(c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
(d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
(e) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(f) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.

	2018 Ending Deferral	Future Revenue Streams 2019 Forward	Total
Net present value	\$ 6,702	\$ 42,890	\$ 49,592
Annual payment	\$ 660	\$ 4,226	\$ 4,887
Monthly payment	\$ 55	\$ 352	\$ 407.24

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

	2015	REVISIONS FOR 2017	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:				
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 72,950 (a)			
LAND COST AT JULY 31, 2015	\$ 1 (a)			
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 62,539 (a)			
NET PLANT EXCLUDING ACQUISITION COS	\$10,412			
RETIREMENT DATE	6/20/2035 (a)		6/20/2033 (f)	
LEVELIZATION PERIOD IN MONTHS	239 (a)		215 (f)	
TAX LIFE	20 (a)			
COMPOSITE TAX RATE	35.16% (a)	34.01% (b)	23.50% (d)	23.17% (g)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.0189% (b)	6.4418% (e)	6.4476% (g)
DEPRECIATION RATE	1.8678% (a)			
FIRST YEAR BOOK DEPRECIATION RATE	0.7783%			
WEIGHTED ANNUAL INTEREST RATE	2.1479% (a)		1.9440% (e)	
WEIGHTED ANNUAL NET OF TAX EQUITY RA	5.4060% (a)		5.1480% (e)	
NC RETAIL ALLOCATION FACTOR	61.52780% (c)			

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - O)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Beg Balance July 31, 2015	\$ 6,278																
2015	\$ 6,079	3.750%	\$ 235	\$ 38	\$ 13	\$ 13	\$ 197	\$ 6,171	\$ 55	\$ 139	\$ 75	\$ 487		\$ 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%	\$ 428	\$ (55)	\$ (15)	\$ (8)	\$ 482	\$ 5,366	\$ 115	\$ 290	\$ 149	\$ 1,036		\$ 899	\$ 137	\$ 418	\$ 393
2018	\$ 4,786	6.177%	\$ 396	\$ 59	\$ 14	\$ 8	\$ 336	\$ 4,956	\$ 99	\$ 258	\$ 79	\$ 772		\$ 622	\$ 150	\$ 602	\$ 566
2019	\$ 4,450	5.713%	\$ 368	\$ 30	\$ 7	\$ 12	\$ 336	\$ 4,609	\$ 90	\$ 237	\$ 72	\$ 735	\$ 690				
2020	\$ 4,114	5.285%	\$ 339	\$ 2	\$ 1	\$ 13	\$ 336	\$ 4,269	\$ 83	\$ 220	\$ 66	\$ 705	\$ 622				
2021	\$ 3,777	4.888%	\$ 313	\$ (23)	\$ (5)	\$ 8	\$ 336	\$ 3,935	\$ 77	\$ 203	\$ 61	\$ 676	\$ 561				
2022	\$ 3,441	4.522%	\$ 290	\$ (47)	\$ (11)	\$ (3)	\$ 336	\$ 3,607	\$ 70	\$ 188	\$ 56	\$ 648	\$ 505				
2023	\$ 3,105	4.462%	\$ 286	\$ (50)	\$ (12)	\$ (15)	\$ 336	\$ 3,282	\$ 64	\$ 169	\$ 51	\$ 620	\$ 454				
2024	\$ 2,769	4.461%	\$ 286	\$ (51)	\$ (12)	\$ (27)	\$ 336	\$ 2,957	\$ 57	\$ 152	\$ 46	\$ 592	\$ 407				
2025	\$ 2,432	4.462%	\$ 286	\$ (50)	\$ (12)	\$ (38)	\$ 336	\$ 2,633	\$ 51	\$ 136	\$ 41	\$ 564	\$ 364				
2026	\$ 2,096	4.461%	\$ 286	\$ (51)	\$ (12)	\$ (50)	\$ 336	\$ 2,308	\$ 45	\$ 119	\$ 36	\$ 536	\$ 325				
2027	\$ 1,760	4.462%	\$ 286	\$ (50)	\$ (12)	\$ (62)	\$ 336	\$ 1,984	\$ 39	\$ 102	\$ 31	\$ 508	\$ 289				
2028	\$ 1,423	4.461%	\$ 286	\$ (51)	\$ (12)	\$ (73)	\$ 336	\$ 1,659	\$ 32	\$ 85	\$ 26	\$ 480	\$ 257				
2029	\$ 1,087	4.462%	\$ 286	\$ (50)	\$ (12)	\$ (85)	\$ 336	\$ 1,335	\$ 25	\$ 69	\$ 21	\$ 452	\$ 227				
2030	\$ 751	4.461%	\$ 286	\$ (51)	\$ (12)	\$ (109)	\$ 336	\$ 1,010	\$ 20	\$ 52	\$ 16	\$ 424	\$ 200				
2031	\$ 415	4.462%	\$ 286	\$ (50)	\$ (12)	\$ (120)	\$ 336	\$ 685	\$ 13	\$ 35	\$ 11	\$ 395	\$ 176				
2032	\$ 78	4.461%	\$ 286	\$ (51)	\$ (12)	\$ (120)	\$ 336	\$ 361	\$ 7	\$ 19	\$ 6	\$ 367	\$ 153				
2033 SIX MONTHS	\$ (81)	4.462%	\$ 286	\$ 127	\$ 29	\$ (91)	\$ 159	\$ 104	\$ 2	\$ 5	\$ 2	\$ 168	\$ 66				
TOTAL		100.000%	\$ 5,964	\$ (393)		\$ 8,357		\$ 1,070	\$ 2,790	\$ 1,010	\$ 11,227	\$ 5,295					

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
(c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study.
(d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
(e) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(f) From Exhibit C-8-E, Line 2.
(g) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.

	2018 Ending Deferral	Future Revenue Streams 2019 Forward	Total
Net present value	\$ 568	\$ 5,296	\$ 5,861
Annual payment	\$ 60	\$ 561	\$ 621
Monthly payment	\$ 5	\$ 47	\$ 52

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

	2015	REVISIONS FOR 2017	REVISIONS FOR 2018	REVISIONS FOR 2019
ASSUMPTIONS:				
ACQUISITION COSTS	\$ 349,802 (a)			
LAST MONTH OF AMORTIZATION	12/31/2042 (a)			
LEVELIZATION PERIOD IN MONTHS	329 (a)			
TAX LIFE	15 (a)			
COMPOSITE TAX RATE	35.16% (a)	34.01% (b)	23.50% (d)	23.17% (f)
AFTER TAX COST OF CAPITAL	6.5956% (a)	6.6189% (b)	6.4416% (e)	6.4476% (f)
AMORTIZATION RATE	3.6474% (a)			
FIRST YEAR AMORTIZATION RATE	1.5188% (a)			
WEIGHTED INTEREST RATE	2.1479% (a)		1.9440% (e)	
WEIGHTED NET OF TAX EQUITY RATE	5.4060% (a)		5.1480% (e)	
NC RETAIL ALLOCATION FACTOR	61.52780% (c)			

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL AMORTIZATION (Col C)	TAX DEPR. MINUS BOOK AMORT. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK AMORTIZATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)		EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Bog 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	\$ 12,408	\$ 4,291	\$ 8,871	\$ 7,732	\$ 199,051	\$ 4,275	\$ 10,761	\$ 5,690	\$ 28,458			\$ 19,824	\$ 8,634	\$ 13,072	
2017	\$ 192,085	8.550%	\$ 16,345	\$ 10,519	\$ 240	\$ 7,112	\$ 7,826	\$ 187,477	\$ 4,027	\$ 10,135	\$ 5,223	\$ 27,211			\$ 19,746	\$ 7,465	\$ 18,067	\$ 16,973
2018	\$ 184,235	7.700%	\$ 10,572	\$ 8,722	\$ 2,050	\$ 9,162	\$ 7,850	\$ 180,023	\$ 3,578	\$ 9,368	\$ 2,877	\$ 23,672			\$ 18,219	\$ 5,452	\$ 24,929	\$ 23,419
2019	\$ 176,385	6.930%	\$ 14,915	\$ 7,065	\$ 1,637	\$ 10,798	\$ 7,850	\$ 170,330	\$ 3,311	\$ 8,769	\$ 2,644	\$ 22,574	\$ 21,207					
2020	\$ 168,534	6.230%	\$ 13,409	\$ 5,558	\$ 1,288	\$ 12,086	\$ 7,850	\$ 161,017	\$ 3,130	\$ 8,289	\$ 2,500	\$ 21,769	\$ 19,212					
2021	\$ 160,684	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 13,210	\$ 7,850	\$ 151,961	\$ 2,954	\$ 7,823	\$ 2,359	\$ 20,986	\$ 17,399					
2022	\$ 152,834	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 14,333	\$ 7,850	\$ 142,988	\$ 2,780	\$ 7,361	\$ 2,220	\$ 20,211	\$ 15,741					
2023	\$ 144,984	5.910%	\$ 12,720	\$ 4,870	\$ 1,128	\$ 15,461	\$ 7,850	\$ 134,012	\$ 2,605	\$ 6,899	\$ 2,081	\$ 19,435	\$ 14,220					
2024	\$ 137,134	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 16,585	\$ 7,850	\$ 125,036	\$ 2,431	\$ 6,437	\$ 1,941	\$ 18,659	\$ 12,825					
2025	\$ 129,284	5.910%	\$ 12,720	\$ 4,870	\$ 1,128	\$ 17,713	\$ 7,850	\$ 116,060	\$ 2,256	\$ 5,975	\$ 1,802	\$ 17,883	\$ 11,548					
2026	\$ 121,433	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 18,836	\$ 7,850	\$ 107,084	\$ 2,082	\$ 5,513	\$ 1,662	\$ 17,107	\$ 10,377					
2027	\$ 113,583	5.910%	\$ 12,720	\$ 4,870	\$ 1,128	\$ 19,965	\$ 7,850	\$ 98,108	\$ 1,907	\$ 5,051	\$ 1,523	\$ 16,331	\$ 9,307					
2028	\$ 105,733	5.900%	\$ 12,698	\$ 4,848	\$ 1,123	\$ 21,088	\$ 7,850	\$ 89,132	\$ 1,733	\$ 4,589	\$ 1,384	\$ 15,555	\$ 8,328					
2029	\$ 97,883	5.910%	\$ 12,720	\$ 4,870	\$ 1,128	\$ 22,216	\$ 7,850	\$ 80,156	\$ 1,558	\$ 4,126	\$ 1,244	\$ 14,779	\$ 7,433					
2030	\$ 90,033	2.950%	\$ 6,349	\$ (1,501)	\$ (348)	\$ 21,868	\$ 7,850	\$ 71,915	\$ 1,398	\$ 3,702	\$ 1,117	\$ 14,067	\$ 6,646					
2031	\$ 82,183	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 20,049	\$ 7,850	\$ 65,149	\$ 1,287	\$ 3,354	\$ 1,011	\$ 13,482	\$ 5,984					
2032	\$ 74,332	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 18,231	\$ 7,850	\$ 59,117	\$ 1,149	\$ 3,043	\$ 918	\$ 12,861	\$ 5,404					
2033	\$ 66,482	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 16,412	\$ 7,850	\$ 53,086	\$ 1,032	\$ 2,733	\$ 824	\$ 12,439	\$ 4,873					
2034	\$ 58,632	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 14,593	\$ 7,850	\$ 47,055	\$ 915	\$ 2,422	\$ 731	\$ 11,918	\$ 4,388					
2035	\$ 50,782	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 12,774	\$ 7,850	\$ 41,024	\$ 798	\$ 2,112	\$ 637	\$ 11,396	\$ 3,940					
2036	\$ 42,932	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 10,955	\$ 7,850	\$ 34,992	\$ 680	\$ 1,801	\$ 543	\$ 10,875	\$ 3,532					
2037	\$ 35,082	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 9,136	\$ 7,850	\$ 28,961	\$ 563	\$ 1,491	\$ 450	\$ 10,354	\$ 3,159					
2038	\$ 27,231	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 7,317	\$ 7,850	\$ 22,930	\$ 446	\$ 1,180	\$ 358	\$ 9,832	\$ 2,818					
2039	\$ 19,381	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 5,498	\$ 7,850	\$ 16,898	\$ 329	\$ 870	\$ 262	\$ 9,311	\$ 2,507					
2040	\$ 11,531	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 3,680	\$ 7,850	\$ 10,867	\$ 211	\$ 559	\$ 169	\$ 8,790	\$ 2,223					
2041	\$ 3,681	0.000%	-	\$ (7,850)	\$ (1,819)	\$ 1,861	\$ 7,850	\$ 4,838	\$ 94	\$ 249	\$ 75	\$ 8,268	\$ 1,965					
2042	\$ -	0.000%	-	\$ -	\$ (3,681)	\$ (853)	\$ 1,008	\$ 3,681	\$ 406	\$ 8	\$ 21	\$ 8	\$ 3,716	\$ 829				
		100.000%	\$ 214,641	\$ 3,794			\$ 210,847		\$ 49,377	\$ 129,315	\$ 44,790	\$ 434,330	\$ 195,862					

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2018 on Docket E-2, Sub 1110.
(b) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate on Docket E-2, Sub 1143.
(c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2018 cost of service study
(d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate and the elimination of the manufacturing deduction based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-E Cost of Capital.
(e) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.
(f) The composite tax rate and after tax costs of capital were updated January 1, 2019 as a result of the reduction in the NC state tax rate. See Exhibit J-E Cost of Capital.

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

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

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

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

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

Notes:

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

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

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

EXHIBIT C-10-E
DOCKET E-2, SUB 1207

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

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

Notes:

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

EXHIBIT C-11-E
DOCKET E-2, SUB 1207

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

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

Notes:

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

EXHIBIT D-E
DOCKET E-2, SUB 1207

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

Line No.	Amount (Col A)
1 Average Net Nuclear Fuel Inventory excluding CWIP	\$ 64,903 (a)
2 Average Deferred Tax Asset (Liability) Associated with Nuclear Fuel	\$ 2,076 (b)
3 Average Materials and Supplies Inventory	\$ 61,100 (c)
4 Average Dry Cask Storage	\$ 3,911 (d)
5 Total average system investment for the rate period (Line 1 + Line 2 + Line 3 + Line 4)	<u>\$ 131,989</u>
6 Allocated to NC retail (Line 5 x 61.52780%)	<u>\$ 81,210 (e)</u>
7 Rate base pre-tax annual cost of capital	8.6440% (f)
8 Total annual NC retail revenues required for financing costs on above investments (Line 6 x Line 7)	<u>\$ 7,020</u>
9 NC retail pre-tax return on deferred tax assets related to NCEMPA's nuclear decommissioning funds	\$ 1,453 (g)
10 Total annual NC retail revenues required for financing costs (Line 8 + Line 9)	<u>\$ 8,472</u>

Notes:

- (a) From Exhibit D-1A-E: Net Nuclear Fuel, Line 14
- (b) From Exhibit D-1B-E: Accumulated Deferred Taxes Associated with Nuclear Fuel, Line 25
- (c) From Exhibit D-2-E: Materials & Supplies, Line 14
- (d) From Exhibit D-4-E: Dry Cask Storage, Line 14
- (e) From Exhibit I-E: Demand Allocator to NC Retail from 2018 cost of service study of: 61.52780%
- (f) From Exhibit J-E: Cost of Capital, Line 3, Column K
- (g) From Exhibit D-3-E: Deferred tax asset, Column K

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

DUKE ENERGY PROGRESS, LLC

NCEMPA GENERATION ASSET PURCHASE

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

(EXCLUDES NUCLEAR FUEL CWIP BALANCES)

(Thousands of Dollars)

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col C)	Total (Col D)
Next Rate Period: December 2019 - November 2020					
1	November	\$ 12,029	\$ 33,766	\$ 20,072	\$ 65,867
2	December	\$ 11,245	\$ 33,011	\$ 19,148	\$ 63,404
3	January	\$ 10,477	\$ 32,248	\$ 18,225	\$ 60,950
4	February	\$ 26,134	\$ 31,574	\$ 17,367	\$ 75,075
5	March	\$ 26,034	\$ 30,849	\$ 16,473	\$ 73,356
6	April	\$ 25,333	\$ 30,124	\$ 15,635	\$ 71,093
7	May	\$ 24,619	\$ 29,400	\$ 14,763	\$ 68,782
8	June	\$ 23,928	\$ 28,703	\$ 13,936	\$ 66,567
9	July	\$ 23,241	\$ 27,979	\$ 13,064	\$ 64,284
10	August	\$ 22,534	\$ 27,258	\$ 12,220	\$ 62,012
11	September	\$ 21,831	\$ 26,552	\$ 11,385	\$ 59,768
12	October	\$ 21,107	\$ 25,820	\$ 10,521	\$ 57,448
13	November	\$ 20,407	\$ 25,093	\$ 9,634	\$ 55,133
14	Average Balance for Next Rate Period	\$ 20,686	\$ 29,414	\$ 14,803	\$ 64,903

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

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

Line No.	ADIT Expense Associated with Nuclear Fuel			
	Brunswick 1 (Col A) (a)	Brunswick 2 (Col B) (b)	Harris (Col C) (c)	Total (Col D) (d)
Current Rate Period: January 2019 - November 2019				
1	2019 January	\$ (73)	\$ (69)	\$ (142)
2	2019 February	\$ (56)	\$ (40)	\$ (96)
3	2019 March	\$ (79)	\$ 119	\$ (39)
4	2019 April	\$ (63)	\$ (50)	\$ (113)
5	2019 May	\$ (72)	\$ (61)	\$ (133)
6	2019 June	\$ (57)	\$ (49)	\$ (106)
7	2019 July	\$ (66)	\$ (54)	\$ (120)
8	2019 August	\$ (74)	\$ (55)	\$ (129)
9	2019 September	\$ (65)	\$ (48)	\$ (113)
10	2019 October	\$ (70)	\$ (58)	\$ (128)
11	2019 November	\$ (67)	\$ (54)	\$ (121)
Next Rate Period: December 2019 - November 2020				
12	2019 December	\$ (58)	\$ (33)	\$ (91)
13	2020 January	\$ (36)	\$ (65)	\$ (101)
14	2020 February	\$ (20)	\$ (44)	\$ (64)
15	2020 March	\$ 119	\$ (56)	\$ (67)
16	2020 April	\$ (20)	\$ (56)	\$ (76)
17	2020 May	\$ (24)	\$ (56)	\$ (80)
18	2020 June	\$ (19)	\$ (49)	\$ (68)
19	2020 July	\$ (17)	\$ (56)	\$ (73)
20	2020 August	\$ (22)	\$ (55)	\$ (77)
21	2020 September	\$ (21)	\$ (52)	\$ (73)
22	2020 October	\$ (26)	\$ (57)	\$ (83)
23	2020 November	\$ (20)	\$ (56)	\$ (76)

ADIT Asset (Liability) Balance Associated with Nuclear Fuel				
	Brunswick 1 (Col E)	Brunswick 2 (Col F)	Harris (Col G)	Total (Col H)
Beginning Balance	\$ (200)	\$ (625)	\$ 851	\$ 26
1	\$ (127)	\$ (557)	\$ 895	\$ 211
2	\$ (71)	\$ (517)	\$ 918	\$ 331
3	\$ 8	\$ (636)	\$ 957	\$ 329
4	\$ 71	\$ (586)	\$ 983	\$ 468
5	\$ 143	\$ (525)	\$ 1,013	\$ 631
6	\$ 200	\$ (477)	\$ 1,036	\$ 759
7	\$ 266	\$ (423)	\$ 1,067	\$ 911
8	\$ 340	\$ (368)	\$ 1,095	\$ 1,067
9	\$ 405	\$ (320)	\$ 1,120	\$ 1,206
10	\$ 476	\$ (262)	\$ 1,032	\$ 1,246
11	\$ 543	\$ (207)	\$ 1,009	\$ 1,345
12	\$ 601	\$ (174)	\$ 1,046	\$ 1,473
13	\$ 637	\$ (110)	\$ 1,119	\$ 1,646
14	\$ 657	\$ (65)	\$ 1,178	\$ 1,770
15	\$ 539	\$ (10)	\$ 1,245	\$ 1,774
16	\$ 559	\$ 46	\$ 1,300	\$ 1,905
17	\$ 583	\$ 102	\$ 1,362	\$ 2,047
18	\$ 601	\$ 151	\$ 1,414	\$ 2,167
19	\$ 619	\$ 207	\$ 1,476	\$ 2,302
20	\$ 641	\$ 262	\$ 1,533	\$ 2,436
21	\$ 662	\$ 314	\$ 1,587	\$ 2,563
22	\$ 688	\$ 371	\$ 1,648	\$ 2,706
23	\$ 708	\$ 428	\$ 1,713	\$ 2,848
24	Estimated Accumulated Deferred Tax Asset / (Liability) as of November 30, 2020			
	\$ 708	\$ 428	\$ 1,713	\$ 2,848
25	Average balance for the Next Rate Period			
	\$ 618	\$ 101	\$ 1,356	\$ 2,076

Notes:

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

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

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

Line No.	TAX DEPRECIATION EXPENSE MINUS BOOK AMORTIZATION				TAX BASIS DEPRECIATION EXPENSE ON NUCLEAR FUEL BY MONTH				BOOK AMORTIZATION EXPENSE ON NUCLEAR FUEL BY MONTH				
	Brunswick 1	Brunswick 2	Harris	Total	Brunswick 1	Brunswick 2	Harris	Total	Brunswick 1	Brunswick 2	Harris	Total	
	(Col A)	(Col B)	(Col C)	(Col D)	(Col E)	(Col F)	(Col G)	(Col H)	(Col I)	(Col J)	(Col K)	(Col L)	
Current Rate Period: January 2019 - November 2019													
1	2019 January	\$ (314)	\$ (296)	\$ (189)	\$ (799)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 863	\$ 908	\$ 841	\$ 2,613
3	2019 February	\$ (244)	\$ (171)	\$ (101)	\$ (516)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 793	\$ 783	\$ 754	\$ 2,330
4	2019 March	\$ (339)	\$ 512	\$ (168)	\$ 4	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 888	\$ 100	\$ 821	\$ 1,809
5	2019 April	\$ (274)	\$ (215)	\$ (110)	\$ (599)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 823	\$ 827	\$ 763	\$ 2,413
6	2019 May	\$ (309)	\$ (262)	\$ (132)	\$ (702)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 858	\$ 874	\$ 785	\$ 2,518
7	2019 June	\$ (248)	\$ (210)	\$ (96)	\$ (554)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 797	\$ 822	\$ 749	\$ 2,368
8	2019 July	\$ (284)	\$ (232)	\$ (137)	\$ (654)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 833	\$ 844	\$ 790	\$ 2,487
9	2019 August	\$ (320)	\$ (236)	\$ (117)	\$ (673)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 869	\$ 848	\$ 770	\$ 2,487
10	2019 September	\$ (280)	\$ (207)	\$ (111)	\$ (598)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 829	\$ 819	\$ 764	\$ 2,412
11	2019 October	\$ (303)	\$ (252)	\$ 382	\$ (173)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 852	\$ 864	\$ 271	\$ 1,987
12	2019 November	\$ (291)	\$ (235)	\$ 98	\$ (428)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 840	\$ 847	\$ 555	\$ 2,241
Next Rate Period: December 2019 - November 2020													
13	2019 December	\$ (249)	\$ (143)	\$ (162)	\$ (554)	\$ 549	\$ 612	\$ 653	\$ 1,814	\$ 799	\$ 755	\$ 815	\$ 2,368
14	2020 January	\$ (156)	\$ (279)	\$ (313)	\$ (748)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 794	\$ 763	\$ 815	\$ 2,372
15	2020 February	\$ (88)	\$ (190)	\$ (255)	\$ (533)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 726	\$ 674	\$ 757	\$ 2,157
16	2020 March	\$ 512	\$ (241)	\$ (287)	\$ (17)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 126	\$ 725	\$ 789	\$ 1,640
17	2020 April	\$ (88)	\$ (241)	\$ (237)	\$ (567)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 727	\$ 725	\$ 739	\$ 2,190
18	2020 May	\$ (102)	\$ (241)	\$ (289)	\$ (611)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 740	\$ 725	\$ 769	\$ 2,234
19	2020 June	\$ (80)	\$ (213)	\$ (228)	\$ (520)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 718	\$ 697	\$ 729	\$ 2,144
20	2020 July	\$ (75)	\$ (241)	\$ (268)	\$ (583)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 713	\$ 725	\$ 769	\$ 2,207
21	2020 August	\$ (95)	\$ (237)	\$ (243)	\$ (575)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 734	\$ 721	\$ 745	\$ 2,199
22	2020 September	\$ (91)	\$ (223)	\$ (235)	\$ (548)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 730	\$ 708	\$ 736	\$ 2,172
23	2020 October	\$ (112)	\$ (248)	\$ (261)	\$ (621)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 750	\$ 732	\$ 762	\$ 2,244
24	2020 November	\$ (89)	\$ (244)	\$ (281)	\$ (613)	\$ 638	\$ 484	\$ 502	\$ 1,624	\$ 726	\$ 727	\$ 783	\$ 2,237
25	Total	\$ (713)	\$ (2,740)	\$ (3,038)	\$ (6,490)	\$ 7,569	\$ 5,934	\$ 6,171	\$ 19,674	\$ 8,282	\$ 8,673	\$ 9,208	\$ 26,164

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

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
ESTIMATED MATERIALS AND SUPPLIES BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
(Thousands of Dollars)

Line No.		Brunswick Common (Col A) (a)	Harris (Col B)	Mayo (Col C)	Roxboro Common (Col D) (b)	Total (Col E)
Next Rate Period: December 2019 - November 2020						
1	2019 November	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
2	2020 December	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
3	2020 January	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
4	2020 February	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
5	2020 March	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
6	2020 April	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
7	2020 May	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
8	2020 June	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
9	2020 July	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
10	2020 August	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
11	2020 September	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
12	2020 October	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
13	2020 November	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100
14	Average Balance for Next Rate Period	\$ 36,000	\$ 21,000	\$ 2,500	\$ 1,600	\$ 61,100

Notes:

- (a) Material and supplies inventory is not assigned at the generating unit level. All inventory is assigned to Brunswick Common. Approximately 18.33% of the inventory assigned to Brunswick Common has been captured under this rider.
- (b) Material and supplies inventory is not assigned at the generating unit level. All inventory that could be used at the four generating units at Roxboro is assigned to the Roxboro Common. Approximately 3.77% of the inventory assigned to Roxboro Common has been captured under this rider.

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

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

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

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (b) (Col B)	ANNUAL REDUCTION IN TAX DEPRECIATION (Col C)	TAX DEPR. NOT ALLOWED CURRENTLY (Col D)	ANNUAL DEF. TAXES FOR NON DEDUCTIBLE (Col E)	DEFERRED TAX ASSET BALANCE (Col F)	AVERAGE INVESTMENT FOR THE YEAR (Col G)	COST OF CAPITAL		INCOME TAXES (Col J)	NC RETAIL REVENUE (Col K)
								INTEREST (Col H)	EQUITY (Col I)		
Beg Balance July 31, 2015	\$ 173,039										
2015 FIVE MONTHS	\$ -	5.000%	\$ 8,652	\$ 8,652	\$ 3,042	\$ 3,042	\$ 634	\$ 14	\$ 34	\$ 19	\$ 66
2016	\$ -	9.500%	\$ 16,527	\$ 16,527	\$ 5,717	\$ 8,759	\$ 5,900	\$ 127	\$ 319	\$ 169	\$ 614
2017	\$ -	8.550%	\$ 15,055	\$ 15,055	\$ 696	\$ 9,455	\$ 11,128	\$ 239	\$ 602	\$ 310	\$ 1,151
2018	\$ -	7.700%	\$ 13,601	\$ 13,601	\$ 3,196	\$ 12,651	\$ 11,053	\$ 219	\$ 575	\$ 176	\$ 970
2019	\$ -	6.930%	\$ 12,241	\$ 12,241	\$ 2,877	\$ 15,528	\$ 14,090	\$ 274	\$ 725	\$ 223	\$ 1,222
2020	\$ -	6.230%	\$ 11,004	\$ 11,004	\$ 2,550	\$ 18,077	\$ 16,803	\$ 327	\$ 865	\$ 261	\$ 1,453

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

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

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

DUKE ENERGY PROGRESS

NCEMPA GENERATION ASSET PURCHASE

ESTIMATED DRY CASK STORAGE BALANCE BY GENERATING UNIT THROUGH THE END OF THE NEXT RATE PERIOD
(Thousands of Dollars)

Line No.		Brunswick Common (Col A) (a)	Total (Col B)
Next Rate Period: December 2019 - November 2020			
1	2019 November	\$ 3,911	\$ 3,911
2	2019 December	\$ 3,911	\$ 3,911
3	2020 January	\$ 3,911	\$ 3,911
4	2020 February	\$ 3,911	\$ 3,911
5	2020 March	\$ 3,911	\$ 3,911
6	2020 April	\$ 3,911	\$ 3,911
7	2020 May	\$ 3,911	\$ 3,911
8	2020 June	\$ 3,911	\$ 3,911
9	2020 July	\$ 3,911	\$ 3,911
10	2020 August	\$ 3,911	\$ 3,911
11	2020 September	\$ 3,911	\$ 3,911
12	2020 October	\$ 3,911	\$ 3,911
13	2020 November	\$ 3,911	\$ 3,911
14	Average Balance for Next Rate Period	<u>\$ 3,911</u>	<u>\$ 3,911</u>

Notes:

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

EXHIBIT E-E
DOCKET E-2, SUB 1207

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

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	\$ 161,416 (a)
2	Average incremental rate base for estimated capital additions to plant in service through the end of the next rate period allocated to NCEMPA	\$ 55,708 (b)
3	Total average net plant in service on capital additions for the next rate period (Line 1 + Line 2)	<u>\$ 217,124</u>
4	Allocation to NC retail (Line 3 x Line 11)	<u>\$ 133,592</u>
5	Pre tax cost of capital on Rate base	8.6440% (c)
6	Total annual NC retail revenues required for cost of capital on above investments (Line 4 x Line 5)	<u>\$ 11,548</u>
Incremental operating expenses related to capital additions:		
7	Annual depreciation expense on actual capital additions for the next rate period	\$ 5,465 (d)
8	Annual depreciation expense on estimated capital additions for the next rate period	\$ 1,683 (e)
9	Other operating expenses related to capital additions for the next rate period	\$ -
10	Total annual operating expenses related to capital additions for the next rate period (Line 7 + Line 8 + Line 9)	<u>\$ 7,148</u>
11	NC retail allocation factor	61.52780% (f)
12	Total annual operating expenses related to capital additions for the next rate period allocated to NC retail (Line 10 x Line 11)	<u>\$ 4,398</u>
13	Total annual NC retail revenues required for financial and operating expenses related to capital additions since the acquisition date (Line 6 + Line 12)	<u>\$ 15,945</u>

Notes:

- (a) From Exhibit E-1-E: Summary of Actual Capital Additions, Line 8, Column E
- (b) From Exhibit E-6-E: Summary of Estimated Capital Additions, Line 8, Column D
- (c) From Exhibit J-E: Cost of Capital, Line 3, Column K
- (d) From Exhibit E-4-E, Line 26, Column H
- (e) From Exhibit E-8-E: Summary of Estimated Accumulated Depreciation, Line 29, Column P
- (f) From Exhibit I-E: Demand Allocator to NC Retail from 2018 cost of service study as adjusted for NCEMPA Purchase

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

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

Line No.		Cumulative Actual Capital Additions (Col A) (a)	Actual Accumulated Depreciation (Col B) (b)	Accumulated Depreciation Thru End of Next Rate Period (Col C) (c)	Accumulated Deferred Income Taxes Thru End of Next Rate Period (Col D) (d)	Average Rate Base for Actual Capital Additions (Col E) = A + B + C + D
1	Brunswick 1	\$ 76,722	\$ (3,114)	\$ (3,224)	\$ (11,548)	\$ 58,837
2	Brunswick 2	\$ 34,157	\$ (1,520)	\$ (1,265)	\$ (4,146)	\$ 27,226
3	Brunswick Common	\$ -	\$ -	\$ -	\$ -	\$ -
4	Harris	\$ 66,385	\$ (1,873)	\$ (2,193)	\$ (9,738)	\$ 52,581
5	Mayo	\$ 4,161	\$ (237)	\$ (196)	\$ (519)	\$ 3,208
6	Roxboro 4	\$ 14,144	\$ (165)	\$ (331)	\$ (1,406)	\$ 12,241
7	Roxboro Common	\$ 8,909	\$ (283)	\$ (304)	\$ (998)	\$ 7,324
8	Total	<u>\$ 204,477</u>	<u>\$ (7,192)</u>	<u>\$ (7,514)</u>	<u>\$ (28,355)</u>	<u>\$ 161,416</u>

Notes:

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

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

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
ACTUAL CAPITAL ADDITIONS BY GENERATING UNIT BY MONTH FROM DATE OF PURCHASE THROUGH DECEMBER 31, 2018
(Thousands of Dollars)

Line No.	ACTUAL CAPITAL ADDITIONS FOR THE MONTH									
			Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
Prior Rate Period: December 2017 - November 2018										
1	2018	Beginning Balance	\$ 45,092	\$ 30,680	\$ -	\$ 44,939	\$ 3,335	\$ 4,118	\$ 4,415	\$ 132,579
2	2018	January	\$ 1,408	\$ 295	\$ -	\$ 915	\$ 35	\$ (9)	\$ 16	\$ 2,660
3	2018	February	\$ 1,774	\$ 133	\$ -	\$ 340	\$ 0	\$ 5	\$ 5	\$ 2,256
4	2018	March	\$ 3,222	\$ (267)	\$ -	\$ (29)	\$ 0	\$ (0)	\$ 3	\$ 2,930
5	2018	April	\$ 12,781	\$ (93)	\$ -	\$ 770	\$ 41	\$ 2	\$ 25	\$ 13,525
6	2018	May	\$ 908	\$ 2,628	\$ -	\$ 15,921	\$ 0	\$ 8,023	\$ (3)	\$ 27,477
7	2018	June	\$ 5,655	\$ 22	\$ -	\$ 1,045	\$ 307	\$ 1,154	\$ 4	\$ 8,186
8	2018	July	\$ 1,109	\$ 334	\$ -	\$ 733	\$ 8	\$ (22)	\$ 12	\$ 2,175
9	2018	August	\$ 1,227	\$ 91	\$ -	\$ 470	\$ 3	\$ 29	\$ (2)	\$ 1,818
10	2018	September	\$ (299)	\$ 63	\$ -	\$ 396	\$ 0	\$ (27)	\$ 2	\$ 135
11	2018	October	\$ 155	\$ 63	\$ -	\$ 204	\$ -	\$ 65	\$ 40	\$ 528
12	2018	November	\$ 1,714	\$ 162	\$ -	\$ 359	\$ 234	\$ 20	\$ 25	\$ 2,514
13		Total	\$ 74,748	\$ 34,110	\$ -	\$ 66,063	\$ 3,963	\$ 13,358	\$ 4,540	\$ 196,782
Current Rate Period: December 2018 - November 2019										
14	2018	December	\$ 1,975	\$ 47	\$ -	\$ 322	\$ 197	\$ 786	\$ 4,369	\$ 7,696
15		Total	\$ 1,975	\$ 47	\$ -	\$ 322	\$ 197	\$ 786	\$ 4,369	\$ 7,696
16		Total to date	\$ 76,722	\$ 34,157	\$ -	\$ 66,385	\$ 4,161	\$ 14,144	\$ 8,909	\$ 204,477

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

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
ACTUAL DEPRECIATION EXPENSE on CAPITAL ADDITIONS by GENERATING UNIT by month FROM DATE of PURCHASE through DECEMBER 31, 2018
(Thousands of Dollars)

			DEPRECIATION EXPENSE ON ACTUAL CAPITAL ADDITIONS BY MONTH							
Line No.			Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
Prior Rate Period: December 2017 - November 2018										
1	2018	Beginning Balance	\$ 1,236	\$ 709	\$ -	\$ 649	\$ 118	\$ 16	\$ 151	\$ 2,879
2	2018	January	\$ 94	\$ 45	\$ -	\$ 50	\$ 9	\$ 2	\$ 10	\$ 211
3	2018	February	\$ 97	\$ 46	\$ -	\$ 52	\$ 9	\$ 2	\$ 10	\$ 215
4	2018	March	\$ 113	\$ 57	\$ -	\$ 64	\$ 9	\$ 4	\$ 11	\$ 256
5	2018	April	\$ 132	\$ 67	\$ -	\$ 75	\$ 9	\$ 5	\$ 11	\$ 300
6	2018	May	\$ 165	\$ 67	\$ -	\$ 76	\$ 10	\$ 5	\$ 11	\$ 333
7	2018	June	\$ 166	\$ 75	\$ -	\$ 126	\$ 10	\$ 16	\$ 11	\$ 404
8	2018	July	\$ 181	\$ 75	\$ -	\$ 128	\$ 11	\$ 19	\$ 11	\$ 425
9	2018	August	\$ 183	\$ 76	\$ -	\$ 129	\$ 11	\$ 19	\$ 11	\$ 429
10	2018	September	\$ 186	\$ 76	\$ -	\$ 130	\$ 11	\$ 19	\$ 11	\$ 433
11	2018	October	\$ 185	\$ 76	\$ -	\$ 130	\$ 11	\$ 19	\$ 11	\$ 433
12	2018	November	\$ 186	\$ 76	\$ -	\$ 131	\$ 11	\$ 19	\$ 11	\$ 434
13		Total	\$ 2,925	\$ 1,443	\$ -	\$ 1,741	\$ 226	\$ 146	\$ 272	\$ 6,753
Current Rate Period: December 2018 - November 2019										
14	2018	December	\$ 190	\$ 77	\$ -	\$ 132	\$ 11	\$ 19	\$ 11	\$ 439
15		Total	\$ 190	\$ 77	\$ -	\$ 132	\$ 11	\$ 19	\$ 11	\$ 439
16		Total depreciation expense to date	\$ 3,114	\$ 1,520	\$ -	\$ 1,873	\$ 237	\$ 165	\$ 283	\$ 7,192

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

DUKE ENERGY PROGRESS, LLC

NCEMPA GENERATION ASSET PURCHASE

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

ADDITIONAL ESTIMATED DEPRECIATION EXPENSE ON ACTUAL CAPITAL ADDITIONS

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
Current Rate Period: December 2018 - November 2019									
1	2018 December								
2	2019 January	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455 (a)
3	2019 February	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
4	2019 March	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
5	2019 April	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
6	2019 May	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
7	2019 June	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
8	2019 July	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
9	2019 August	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
10	2019 September	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
11	2019 October	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
12	2019 November	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
13	Total	\$ 2,149	\$ 844	\$ -	\$ 1,462	\$ 131	\$ 221	\$ 203	\$ 5,009
Next Rate Period: December 2019 - November 2020									
14	2019 December	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
15	2020 January	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
16	2020 February	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
17	2020 March	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
18	2020 April	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
19	2020 May	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
20	2020 June	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
21	2020 July	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
22	2020 August	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
23	2020 September	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
24	2020 October	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
25	2020 November	\$ 195	\$ 77	\$ -	\$ 133	\$ 12	\$ 20	\$ 18	\$ 455
26	Total Estimated Additional Depreciation Expense	\$ 2,345	\$ 920	\$ -	\$ 1,595	\$ 143	\$ 241	\$ 221	\$ 5,465
27	Average Balance of Accumulated Depreciation on actual capital additions in the next rate period (b)	\$ (3,224)	\$ (1,265)	\$ -	\$ (2,193)	\$ (196)	\$ (331)	\$ (304)	\$ (7,514)

Notes:

- (a) Estimated depreciation expense for December 2018 is not needed for this schedule. Actual depreciation expense for 2018 is captured on E-3-E for rider purposes.
(b) Amount reflects the weighted average ending balance based on monthly activity.

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

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

Line No.		Cumulative Additions through December 31, 2016 (Col A) (a)	Deferred Tax Percentage Vintage Years 2015 and 2016 (Col B) (b)	Calculated Deferred Taxes Vintage Years 2016 and 2016 (Col C) = A x B	Cumulative Additions YTD Ending December 31, 2017 (Col D) (c)	Deferred Tax Percentage Vintage Years 2017 (Col E) (b)	Calculated Deferred Taxes Vintage Years 2017 (Col F) = D x E	Cumulative Additions YTD Ending December 31, 2018 (Col G) (d)	Deferred Tax Percentage Vintage Years 2018 (Col H) (b)	Calculated Deferred Taxes Vintage Years 2018 (Col I) = G x H	Total Deferred Taxes (Col J) = C + F + I
1	Brunswick 1	\$ 24,007	24%	\$ (5,762)	\$ 21,085	12%	\$ (2,530)	\$ 31,630	10%	\$ (3,256)	\$ (11,548)
2	Brunswick 2	\$ 13,753	13%	\$ (1,788)	\$ 16,927	12%	\$ (2,031)	\$ 3,477	9%	\$ (327)	\$ (4,146)
3	Brunswick Common	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -
4	Harris	\$ 29,472	16%	\$ (4,716)	\$ 15,466	16%	\$ (2,320)	\$ 21,446	13%	\$ (2,702)	\$ (9,739)
5	Mayo	\$ 1,982	14%	\$ (277)	\$ 1,353	12%	\$ (162)	\$ 826	10%	\$ (80)	\$ (519)
6	Roxboro 4	\$ 860	14%	\$ (120)	\$ 3,258	12%	\$ (391)	\$ 10,026	9%	\$ (895)	\$ (1,406)
7	Roxboro Common	\$ 3,360	14%	\$ (470)	\$ 1,055	12%	\$ (127)	\$ 4,494	9%	\$ (401)	\$ (998)
		<u>\$ 73,435</u>		<u>\$ (13,133)</u>	<u>\$ 59,144</u>		<u>\$ (7,561)</u>	<u>\$ 71,899</u>		<u>\$ (7,660)</u>	<u>\$ (28,355)</u>

Notes:

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

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

DUKE ENERGY PROGRESS, LLC

NCEMPA GENERATION ASSET PURCHASE

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

(Thousands of Dollars)

Line No.		Estimated Average Capital Additions (a) (Col A)	Estimated Average Accumulated Depreciation (b) (Col B)	Estimated Average Accumulated Deferred Tax Asset (Liability) (c) (Col C)	Average Rate Base for Estimated Capital Additions (Col D) = A + B + C
1	Brunswick 1	\$ 27,223	\$ (500)	\$ (2,605)	\$ 24,118
2	Brunswick 2	\$ 9,115	\$ (284)	\$ (855)	\$ 7,975
3	Brunswick Common	\$ -	\$ -	\$ -	\$ -
4	Harris	\$ 23,450	\$ (236)	\$ (2,711)	\$ 20,503
5	Mayo	\$ 2,834	\$ (69)	\$ (269)	\$ 2,496
6	Roxboro 4	\$ 330	\$ (2)	\$ (26)	\$ 302
7	Roxboro Common	\$ 349	\$ (6)	\$ (29)	\$ 314
8	Grand Total	<u>\$ 63,300</u>	<u>\$ (1,097)</u>	<u>\$ (6,496)</u>	<u>\$ 55,708</u>

Notes:

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

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

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

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
Current Rate Period: December 2018 - November 2019									
1	2018 December								
2	2019 January	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 2 (a)
3	2019 February	\$ -	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 2
4	2019 March	\$ 5,076	\$ 7,689	\$ -	\$ 1,099	\$ -	\$ -	\$ -	\$ 13,864
5	2019 April	\$ -	\$ 164	\$ -	\$ -	\$ -	\$ 8	\$ 22	\$ 194
6	2019 May	\$ -	\$ 164	\$ -	\$ -	\$ 17	\$ 11	\$ 29	\$ 220
7	2019 June	\$ 5,368	\$ 164	\$ -	\$ 1,044	\$ 53	\$ 2	\$ 5	\$ 6,635
8	2019 July	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 163
9	2019 August	\$ -	\$ 163	\$ -	\$ -	\$ 2,290	\$ -	\$ -	\$ 2,452
10	2019 September	\$ 4,793	\$ 163	\$ -	\$ 1,008	\$ 180	\$ 6	\$ 15	\$ 6,166
11	2019 October	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ 32	\$ 81	\$ 276
12	2019 November	\$ -	\$ 163	\$ -	\$ 16,291	\$ 132	\$ 43	\$ 111	\$ 16,740
13	Total	\$ 15,237	\$ 8,995	\$ -	\$ 19,445	\$ 2,672	\$ 102	\$ 263	\$ 46,714
Next Rate Period: December 2019 - November 2020									
14	2019 December	\$ 4,236	\$ 131	\$ -	\$ 2,110	\$ 106	\$ 53	\$ 20	\$ 6,656
15	2020 January	\$ 1	\$ -	\$ -	\$ 20	\$ -	\$ -	\$ -	\$ 21
16	2020 February	\$ 1	\$ -	\$ -	\$ 16	\$ -	\$ -	\$ -	\$ 16
17	2020 March	\$ 4,516	\$ -	\$ -	\$ 1,732	\$ -	\$ 0	\$ 0	\$ 6,248
18	2020 April	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 30	\$ 11	\$ 44
19	2020 May	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 115	\$ 43	\$ 161
20	2020 June	\$ 10,890	\$ -	\$ -	\$ 1,553	\$ 130	\$ 234	\$ 88	\$ 12,895
21	2020 July	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 5	\$ 2	\$ 10
22	2020 August	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 2	\$ 1	\$ 5
23	2020 September	\$ 3,324	\$ -	\$ -	\$ 1,420	\$ 44	\$ 15	\$ 6	\$ 4,809
24	2020 October	\$ 0	\$ -	\$ -	\$ 2	\$ 42	\$ 21	\$ 8	\$ 73
25	2020 November	\$ 0	\$ -	\$ -	\$ 2	\$ 244	\$ 11	\$ 4	\$ 262
26	Total Estimated Capital Additions	\$ 38,204	\$ 9,126	\$ -	\$ 26,309	\$ 3,238	\$ 589	\$ 447	\$ 77,912
Average Balance of Estimated Capital additions in the next rate period (b)									
27		\$ 27,223	\$ 9,115	\$ -	\$ 23,450	\$ 2,834	\$ 330	\$ 349	\$ 63,300

Notes:

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

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

Line No.	CAPITAL ADDITIONS								DEPRECIATION EXPENSE							
	Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)	Brunswick 1 (Col I)	Brunswick 2 (Col J)	Brunswick Common (Col K)	Harris (Col L)	Mayo (Col M)	Roxboro 4 (Col N)	Roxboro Common (Col O)	Total (Col P)
Current Rate Period: December 2018 - November 2019																
1																
2	2018 December	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	2019 January	\$ -	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	2019 February	\$ -	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	2019 March	\$ 5,078	\$ 7,889	\$ -	\$ 1,099	\$ -	\$ -	\$ 13,864	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ 0
6	2019 April	\$ -	\$ 164	\$ -	\$ -	\$ -	\$ 8	\$ 22	\$ 13	\$ 19	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 33
7	2019 May	\$ -	\$ 164	\$ -	\$ -	\$ 17	\$ 11	\$ 29	\$ 13	\$ 19	\$ -	\$ 2	\$ -	\$ 0	\$ 0	\$ 34
8	2019 June	\$ 5,368	\$ 164	\$ -	\$ 1,044	\$ 53	\$ 2	\$ 6,635	\$ 13	\$ 20	\$ -	\$ 2	\$ 0	\$ 0	\$ 0	\$ 34
9	2019 July	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ -	\$ 163	\$ 26	\$ 20	\$ -	\$ 4	\$ 0	\$ 0	\$ 0	\$ 50
10	2019 August	\$ -	\$ 163	\$ -	\$ -	\$ 2,290	\$ -	\$ 2,452	\$ 26	\$ 20	\$ -	\$ 4	\$ 0	\$ 0	\$ 0	\$ 51
11	2019 September	\$ 4,793	\$ 163	\$ -	\$ 1,008	\$ 180	\$ 6	\$ 6,166	\$ 26	\$ 21	\$ -	\$ 4	\$ 7	\$ 0	\$ 0	\$ 58
12	2019 October	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ 32	\$ 276	\$ 38	\$ 21	\$ -	\$ 5	\$ 8	\$ 0	\$ 0	\$ 73
13	2019 November	\$ -	\$ 163	\$ -	\$ 16,291	\$ 132	\$ 43	\$ 16,740	\$ 38	\$ 22	\$ -	\$ 5	\$ 8	\$ 0	\$ 0	\$ 73
13	Total	\$ 15,237	\$ 8,995	\$ -	\$ 19,445	\$ 2,672	\$ 102	\$ 46,714	\$ 192	\$ 162	\$ -	\$ 27	\$ 23	\$ 0	\$ 1	\$ 406
Next Rate Period: December 2019 - November 2020																
14	2018 December	\$ 4,236	\$ 131	\$ -	\$ 2,110	\$ 106	\$ 53	\$ 6,656	\$ 38	\$ 22	\$ -	\$ 33	\$ 8	\$ 0	\$ 1	\$ 102
15	2019 January	\$ 1	\$ -	\$ -	\$ 20	\$ -	\$ -	\$ 21	\$ 49	\$ 22	\$ -	\$ 37	\$ 8	\$ 0	\$ 1	\$ 117
16	2019 February	\$ 1	\$ -	\$ -	\$ 18	\$ -	\$ -	\$ 19	\$ 49	\$ 22	\$ -	\$ 37	\$ 8	\$ 0	\$ 1	\$ 117
17	2019 March	\$ 4,516	\$ -	\$ -	\$ 1,732	\$ -	\$ 0	\$ 6,248	\$ 49	\$ 22	\$ -	\$ 37	\$ 8	\$ 0	\$ 1	\$ 117
18	2019 April	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 30	\$ 44	\$ 60	\$ 22	\$ -	\$ 40	\$ 8	\$ 0	\$ 1	\$ 131
19	2019 May	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 115	\$ 161	\$ 60	\$ 22	\$ -	\$ 40	\$ 8	\$ 0	\$ 1	\$ 131
20	2019 June	\$ 10,890	\$ -	\$ -	\$ 1,553	\$ 130	\$ 234	\$ 12,895	\$ 60	\$ 22	\$ -	\$ 40	\$ 8	\$ 0	\$ 1	\$ 132
21	2019 July	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 5	\$ 10	\$ 87	\$ 22	\$ -	\$ 42	\$ 9	\$ 1	\$ 1	\$ 163
22	2019 August	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 2	\$ 5	\$ 87	\$ 22	\$ -	\$ 42	\$ 9	\$ 1	\$ 1	\$ 163
23	2019 September	\$ 3,324	\$ -	\$ -	\$ 1,420	\$ 44	\$ 15	\$ 4,809	\$ 87	\$ 22	\$ -	\$ 42	\$ 9	\$ 1	\$ 1	\$ 163
24	2019 October	\$ 0	\$ -	\$ -	\$ 2	\$ 42	\$ 21	\$ 73	\$ 95	\$ 22	\$ -	\$ 45	\$ 9	\$ 1	\$ 1	\$ 174
25	2019 November	\$ 0	\$ -	\$ -	\$ 2	\$ 244	\$ 11	\$ 262	\$ 95	\$ 22	\$ -	\$ 45	\$ 9	\$ 1	\$ 1	\$ 174
26	Total	\$ 36,204	\$ 9,126	\$ -	\$ 26,309	\$ 3,238	\$ 569	\$ 77,912	\$ 1,009	\$ 429	\$ -	\$ 507	\$ 125	\$ 6	\$ 13	\$ 2,089
27	Average Balance of Estimated Accumulated depreciation in the next rate period (b)								\$ (500)	\$ (284)	\$ -	\$ (236)	\$ (69)	\$ (2)	\$ (6)	\$ (1,097)
28	Depreciation Rate (c)								2.9977%	2.9365%	0.0000%	2.0445%	3.6102%	1.6268%	3.3958%	
29	Depreciation expense on estimated capital additions in the next rate period (sum of Lines 14 through 25)								\$ 816	\$ 267	\$ -	\$ 479	\$ 102	\$ 6	\$ 12	\$ 1,683

Notes:
(a) Estimated depreciation expense for December 2018 is not needed for this schedule. Actual depreciation expense for 2018 is captured on E-3-E for rider purposes.
(b) Amount reflects the weighted average ending balance based on monthly activity.
(c) From Exhibit C-10-E

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

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

DEFERRED TAX BALANCES									
Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Brunswick Common (Col C)	Hams (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2018 - 2019 (a)	10%	9%		13%	10%	9%	9%	
	Capital Additions								
2019									
2	Gross Capital Additions in December	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	(b)
3	Gross Capital Additions in January	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	2 (b)
4	Gross Capital Additions in February	\$ -	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	2 (b)
5	Gross Capital Additions in March	\$ 5,076	\$ 7,680	\$ -	\$ 1,099	\$ -	\$ -	\$ -	13,664 (b)
6	Gross Capital Additions in April	\$ -	\$ 164	\$ -	\$ -	\$ -	\$ 6	\$ 22	194 (b)
7	Gross Capital Additions in May	\$ -	\$ 164	\$ -	\$ -	\$ 17	\$ 11	\$ 29	220 (b)
8	Gross Capital Additions in June	\$ 5,368	\$ 164	\$ -	\$ 1,044	\$ 53	\$ 2	\$ 5	6,635 (b)
9	Gross Capital Additions in July	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ -	\$ -	163 (b)
10	Gross Capital Additions in August	\$ -	\$ 163	\$ -	\$ -	\$ 2,290	\$ -	\$ -	2,452 (b)
11	Gross Capital Additions in September	\$ 4,783	\$ 163	\$ -	\$ 1,008	\$ -	\$ 6	\$ 15	6,166 (b)
12	Gross Capital Additions in October	\$ -	\$ 163	\$ -	\$ -	\$ -	\$ 32	\$ 81	276 (b)
13	Gross Capital Additions in November	\$ -	\$ 163	\$ -	\$ 16,291	\$ 132	\$ 43	\$ 111	16,740 (b)
2020									
14	Gross Capital Additions in December	\$ 4,236	\$ 131	\$ -	\$ 2,110	\$ 106	\$ 53	\$ 20	6,656 (b)
15	Gross Capital Additions in January	\$ 1	\$ -	\$ -	\$ 20	\$ -	\$ -	\$ -	21 (b)
16	Gross Capital Additions in February	\$ 1	\$ -	\$ -	\$ 16	\$ -	\$ -	\$ -	16 (b)
17	Gross Capital Additions in March	\$ 4,516	\$ -	\$ -	\$ 1,732	\$ -	\$ 0	\$ 0	6,248 (b)
18	Gross Capital Additions in April	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 30	\$ 11	44 (b)
19	Gross Capital Additions in May	\$ 0	\$ -	\$ -	\$ 3	\$ -	\$ 115	\$ 43	181 (b)
20	Gross Capital Additions in June	\$ 10,880	\$ -	\$ -	\$ 1,553	\$ 130	\$ 234	\$ 88	12,895 (b)
21	Gross Capital Additions in July	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 5	\$ 2	10 (b)
22	Gross Capital Additions in August	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ 2	\$ 1	5 (b)
23	Gross Capital Additions in September	\$ 3,324	\$ -	\$ -	\$ 1,420	\$ 44	\$ 15	\$ 6	4,809 (b)
24	Gross Capital Additions in October	\$ 0	\$ -	\$ -	\$ 2	\$ 42	\$ 21	\$ 8	73 (b)
25	Gross Capital Additions in November	\$ 0	\$ -	\$ -	\$ 2	\$ 244	\$ 11	\$ 4	262 (b)
26	Balance at November 30, 2020	\$ 38,204	\$ 9,126	\$ -	\$ 26,309	\$ 3,238	\$ 569	\$ 447	\$ 77,912
Deferred Tax Expense / (Benefit) (c)									
2019									
27	Deferred Taxes in December	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
28	Deferred Taxes in January	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
29	Deferred Taxes in February	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	0
30	Deferred Taxes in March	\$ -	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ -	0
31	Deferred Taxes in April	\$ 522	\$ 723	\$ -	\$ 138	\$ -	\$ -	\$ -	1,384
32	Deferred Taxes in May	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ 1	\$ 2	18
33	Deferred Taxes in June	\$ -	\$ 15	\$ -	\$ -	\$ 2	\$ 1	\$ 3	21
34	Deferred Taxes in July	\$ 652	\$ 15	\$ -	\$ 131	\$ 5	\$ 0	\$ 0	705
35	Deferred Taxes in August	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -	15
36	Deferred Taxes in September	\$ -	\$ 15	\$ -	\$ -	\$ 221	\$ -	\$ -	236
37	Deferred Taxes in October	\$ 493	\$ 15	\$ -	\$ 127	\$ 17	\$ 1	\$ 1	655
38	Deferred Taxes in November	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ 3	\$ 7	25
39	Total	\$ 1,568	\$ 831	\$ -	\$ 397	\$ 245	\$ 5	\$ 14	\$ 3,060
2020									
40	Deferred Taxes in December	\$ -	\$ 15	\$ -	\$ 2,053	\$ 13	\$ 4	\$ 10	2,094
41	Deferred Taxes in January	\$ 436	\$ 12	\$ -	\$ 266	\$ 10	\$ 5	\$ 2	731
42	Deferred Taxes in February	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	3
43	Deferred Taxes in March	\$ 0	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	2
44	Deferred Taxes in April	\$ 465	\$ -	\$ -	\$ 218	\$ -	\$ 0	\$ 0	683
45	Deferred Taxes in May	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 3	\$ 4	7
46	Deferred Taxes in June	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 10	\$ 4	14
47	Deferred Taxes in July	\$ 1,121	\$ -	\$ -	\$ 198	\$ 13	\$ 21	\$ 8	1,358
48	Deferred Taxes in August	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 0	\$ 0	1
49	Deferred Taxes in September	\$ 0	\$ -	\$ -	\$ 0	\$ -	\$ 0	\$ 0	1
50	Deferred Taxes in October	\$ 342	\$ -	\$ -	\$ 179	\$ 4	\$ 1	\$ 1	527
51	Deferred Taxes in November	\$ 0	\$ -	\$ -	\$ 0	\$ 4	\$ 2	\$ 1	7
52	Balance at November 30, 2020	\$ 3,932	\$ 658	\$ -	\$ 3,315	\$ 288	\$ 52	\$ 40	\$ 8,485
53	Average Balance of Accumulated Deferred Tax Asset (Liability) on actual capital additions in the next rate period (d)	\$ (2,605)	\$ (855)	\$ -	\$ (2,711)	\$ (269)	\$ (26)	\$ (29)	\$ (6,436)

Notes:

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

EXHIBIT F-E
DOCKET E-2, SUB 1207

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

Line No.	Description	FERC Account Number (Col A)	Annual System Incremental Amount (a) (dollars) (Col B)	Annual Amount (Thousands of dollars)	
				NC Retail (c) (Col C)	
1	Roxboro 4 O&M	500-514	\$ 3,152,748	\$	1,940
2	Mayo 1 O&M	500-514	\$ 3,783,348	\$	2,328
3	Brunswick Plant O&M	517-532	\$ 41,396,201	\$	25,470
4	Harris 1 O&M	517-532	\$ 20,056,551	\$	12,340
5	A&G Expenses	929	\$ 30,999,217	\$	19,073
6	Payroll Taxes	408	\$ 3,380,143	\$	2,080
7	General Plant Return	454	\$ 2,618,712	\$	1,611
8	Dispatch Fee	456	\$ 35,255	\$	22
9	Auxiliary Power	447	\$ 501,885	\$	309
10	Site Representative	456	\$ 4,908	\$	3
11	NCEMPA Revenue Included in Cost of Service for a Return on Coal Inventory	454	\$ 83,972	\$	52
12	Property Taxes	408	\$ 6,086,872	\$	3,745
13	Incremental Nuclear Decommissioning Costs	403		\$	3,054
14	Total			\$	72,026

(b)

Notes:

- (a) Annual system amounts on lines 1-11 are estimates of the amounts that would have been billed to NCEMPA for the next rate period.
- (b) From Exhibit F-1-E, Line 7
- (c) Calculated as Column B x NC Retail Allocation from 2018 cost of service study of from Exhibit I -E 61.52780%

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

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

Line No.		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 - 2018 Cost of Service	61.5278%	61.5278%	61.5278%	61.5278%	
7	NC retail's incremental nuclear decommissioning expense (Line 11 x Line 12)	\$ 1,540,240	\$ 464,792	\$ 1,048,567	\$ -	\$ 3,053,599

DUKE ENERGY PROGRESS, LLC
NCEMPA GENERATION ASSET PURCHASE
PRODUCTION DEMAND ALLOCATION FACTORS INCLUDING ADJUSTMENT FOR NCEMPA ADDITIONAL SALES
Retail Per Books Cost of Service Study - 12 Months Ending December 31, 2018

EXHIBIT E
DOCKET E-2, SUB 1207

Line No.	Rate Schedule	Summer CP Demand (KW) (Col A)	Ratio of Each Rate Schedule To Total (Col B)	Rate Class	NC Retail Allocation Factors	
					Percent of System (Col C)	Class Percent of Total NC Retail (Col D)
1	NC RES	3,750,145	0.297189	Residential Class	30.517189%	49.5990%
2	NC RES-TOU	100,728	0.007982	SGS Class	3.78746%	6.1557%
3	NC SGS	474,027	0.037565	MGS Class	17.33896%	28.1807% **
4	NC SGS-CLR	3,901	0.000309	SI Class	0.04362%	0.0709%
5	NC MGS-TOU	1,534,242	0.121585	LGS Class	9.63610%	15.9864%
6	NC MGS	653,710	0.051805	TSS Class	0.00448%	0.0073%
7	NC SI	5,504	0.000438	ALS Class	0.00000%	0.0000%
8	NC LGS	183,991	0.014561	SLS Class	0.00000%	0.0000%
9	NC LGS-TOU	227,561	0.018034	SFLS Class	0.00000%	0.0000%
10	NC LGS-RTP	829,637	0.065747	Total	61.52780%	100.0000%
11	NC TSS	566	0.000045			
12	NC ALS	-	0.000000			
13	NC SLS	-	0.000000			
14	NC SFLS	-	0.000000			
15	Total NCR	7,764,011	0.615278			
16	NCEMC (Note 1)	1,780,255	0.141081	**Allocation of MGS Class between kW and kWh billed customers MGS Class - billed on kWh basis 0.05% 0.0241% Note 2 MGS Class - billed on kW basis 99.91% 28.1566% Note 2		
17	Fayetteville	424,978	0.033679			
18	FBEMC	69,623	0.005517			
19	Piedmont EMC	21,284	0.001687			
20	Haywood EMC	10,205	0.000809			
21	Tri-Towns	-	0.000000			
22	Waynesville	-	0.000000			
23	Winterville	-	0.000000			
24	Total NCWhS	2,308,354	0.182773			
25	NCEMPA (Note 2)	1,310,939	0.103888			
26	Total NC	11,381,303	0.901939			
27	SC RES	490,690	0.038586			
28	SC RET	9,862	0.000782			
29	SC SGS	69,778	0.005530			
30	SC SGS-CLR	552	0.000044			
31	SC MGS-TOU	201,037	0.015932			
32	SC MGS	118,479	0.009389			
33	SC SI	3,033	0.000240			
34	SC LGS	104,339	0.008269			
35	SC LGS-TOU	39,802	0.003216			
36	SC LGS-CRTL-TOU	78,758	0.006083			
37	SC LGS-RTP	90,521	0.006381			
38	SC TSS	101	0.000008			
39	SC ALS	-	0.000000			
40	SC SLS	-	0.000000			
41	SC SFLS	-	0.000000			
42	Total SCR	1,191,950	0.094459			
43	SCWHS (Camden)	45,452	0.003602			
44	Total SC	1,237,402	0.098061			
45	Total System with NCEMPA retained capacity	12,618,705	1.000000			

Note 1: Excludes NCEMPA Peaking Capacity
Note 2: Allocated between kW and kWh billed customers using billing determinants. See Notes on Exhibit K-E.

EXHIBIT J-E
DOCKET E-2, SUB 1207

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

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

EXHIBIT K-E
DOCKET E-2, SUB 1207

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

	(Col A)	(Col B)	(Col C)	(Col D)	(Col E)
Line No.	Rate Class	Schedule	Billing Metric	Billing Determinants (kWh)	Billing Determinants (kW)
1	Residential Class	RES	kWh Energy Units	12,302,290,710	
2	Residential Class	RES (EC)	kWh Energy Units	3,229,521,884	
3	Residential Class	R-TOU	kWh Energy Units	36,153,135	
4	Residential Class	R-TOU (EC)	kWh Energy Units	17,743,588	
5	Residential Class	R-TOUD	kWh Energy Units	250,580,153	
6	Residential Class	R-TOUD (EC)	kWh Energy Units	173,304,988	
7	Residential Class	R-TOUE	kWh Energy Units	0	
8	Residential Class	R-TOUE (EC)	kWh Energy Units	0	
9	Total Residential			(a) 16,009,594,458	
10	SGS Class	SGS	kWh Energy Units	1,769,718,882	
11	SGS Class	SGS-TOU-CLR	kWh Energy Units	29,703,239	
12	SGS Class	SGS-TOUE	kWh Energy Units	3,072,589	
13	Total SGS			(a) 1,802,494,710	
14	MGS Class	APH-TES	kW Demand Units		4,409
15	MGS Class	CH-TOUE	kWh Energy Units	7,715,061	
16	MGS Class	CSE	kWh Energy Units	1,166,342	
17	MGS Class	CSG	kWh Energy Units	18,810	
18	MGS Class	SGS-TES	kW Demand Units		41,046
19	MGS Class	SGS-TOU	kW Demand Units		19,331,165
20	MGS Class	MGS	kW Demand Units		12,005,716
21	Total MGS			(a) 8,900,213	31,382,336
22	LGS Class	LGS	kW Demand Units		2,512,663
23	LGS Class	LGS-RTP	kW Demand Units		43,897
24	LGS Class	LGS-RTP-TOU	kW Demand Units		11,212,643
25	LGS Class	LGS-TOU	kW Demand Units		3,073,783
26	Total LGS			(a)	16,842,986
27	SI Class	SI	kWh Energy Units	(b) 43,257,472	
28	TSS Class	TFS	kWh Energy Units	179,236	
29	TSS Class	TSS	kWh Energy Units	4,544,063	
30	Total TSS			(b) 4,723,299	
31	Total All Rates			17,868,970,152	48,225,322

NOTES:

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

Notes:

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

EXHIBIT A - TU
DOCKET E-2, SUB 1207

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

Line No.	Description	Demand Allocation Factors To Customer Classes (e) (Col. A)	Rolling Recovery Factor as of Beginning of Year (Thousands of Dollars) (Col. B)	Revenue Required NC Retail Amount Current Year (Thousands of Dollars) (Col. C)	Revenue Collected NC Retail Amount Current Year (Thousands of Dollars) (Col. D)	Revenue Under / (Over) Collected NC Retail Amount Current Year (Thousands of Dollars) (Col. E) = C - D	Return on Deferred Balance Current Year (Thousands of Dollars) (Col. F)	Rolling Recovery Factor as of End of Year (Thousands of Dollars) (Col. G) = B + E + F	Demand KW (f) (Col. H)	Energy KWH (g) (Col. I)	Rate Rider (Col. J)
1	Rolling Recovery Factor as of 12/31/2017		\$ (9,196) (a)								
2	Revenue Requirement for Test Year Ended 12/31/2018			\$ 138,900 (b)							
3	Return on Rolling Recovery Factor for Test Year Ended 12/31/2018	-	-	-	-	-	\$ - (1,734) (d)	-			
4	Total revenue for calculation of joint agency asset rider		\$ (9,196)	\$ 138,900	\$ 159,588 (c)	\$ (22,688)	\$ (1,734)	\$ (33,618)			
Allocation of monthly revenue to customer groups:											
Customers billed based on KWH											
5	Residential	49.5990%	\$ (2,380)	\$ 67,901	\$ 78,175	\$ (10,274)	\$ (744)	\$ (13,398)		16,009,594,458	\$ (0.00084) per KWH
6	Small General Service	6.1557%	\$ (792)	\$ 8,427	\$ 10,710	\$ (2,283)	\$ (147)	\$ (3,222)		1,802,494,710	\$ (0.00179) per KWH
4	Medium General Service -KWH	0.0241%	\$ (3)	\$ 33	\$ 43	\$ (10)	\$ (1)	\$ (14)		8,900,213	\$ (0.00162) per KWH
5	Seasonal Intermittent	0.0709%	\$ 20	\$ 97	\$ 297	\$ (200)	\$ (2)	\$ (183)		43,257,472	\$ (0.00423) per KWH
6	Lighting	0.0000%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		0	\$ - per KWH
7	Traffic Signal	0.0073%	\$ (1)	\$ 10	\$ 12	\$ (2)	\$ (0)	\$ (3)		4,723,299	\$ (0.00065) per KWH
		55.8570%	\$ (3,156)	\$ 76,468	\$ 89,238	\$ (12,770)	\$ (895)	\$ (16,821)		17,868,970,152	
Customers billed based on KW											
8	Medium General Service -KW	28.1566%	\$ (5,743)	\$ 38,546	\$ 47,480	\$ (8,934)	\$ (758)	\$ (15,435)	31,382,336		\$ (0.49) per KW
9	Large General Service	15.9864%	\$ (297)	\$ 21,885	\$ 22,869	\$ (984)	\$ (81)	\$ (1,363)	16,842,986		\$ (0.08) per KW
		44.1430%	\$ (6,040)	\$ 60,432	\$ 70,350	\$ (9,918)	\$ (840)	\$ (16,798)	48,225,322		
10		100.0000%	\$ (9,196)	\$ 138,900	\$ 159,588	\$ (22,688)	\$ (1,734)	\$ (33,618)			

Notes:

- (a) From Exhibit A-1-TU, Line 29, Column H
- (b) From Exhibit B-TU, Line 9, Column M
- (c) From Exhibit A-1-TU, Line 30 - 41, Column B
- (d) From Exhibit A-1-TU, Line 30 - 41, Column G
- (e) From Exhibit I-TU, Column D
- (f) From Exhibit K-TU, Column D and Column E, Billing Determinants for the Twelve Months Ended November 30, 2019

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

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

Line
No.

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

	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
29	December 2017	\$ 5,301	\$ 8,720	\$ (3,419)	\$ (5,745)	\$ (4,395)	\$ (24)	\$ (9,196)
30	January 2018	\$ 4,905	\$ 16,829	\$ (11,923)	\$ (9,196)	\$ (7,035)	\$ (40)	\$ (21,171)
31	February	\$ 6,270	\$ 13,864	\$ (7,594)	\$ (21,171)	\$ (16,156)	\$ (92)	\$ (28,886)
32	March	\$ 12,408	\$ 11,977	\$ 431	\$ (28,886)	\$ (22,098)	\$ (122)	\$ (28,615)
33	April	\$ 14,862	\$ 11,929	\$ 2,933	\$ (28,615)	\$ (21,890)	\$ (118)	\$ (25,836)
34	May	\$ 12,720	\$ 11,294	\$ 1,425	\$ (25,836)	\$ (19,764)	\$ (106)	\$ (24,549)
35	June	\$ 12,297	\$ 13,499	\$ (1,203)	\$ (24,549)	\$ (18,780)	\$ (101)	\$ (25,884)
36	July	\$ 12,367	\$ 14,826	\$ (2,460)	\$ (25,884)	\$ (19,801)	\$ (106)	\$ (28,482)
37	August	\$ 12,921	\$ 14,877	\$ (1,957)	\$ (28,482)	\$ (21,789)	\$ (117)	\$ (30,592)
38	September	\$ 12,757	\$ 13,507	\$ (751)	\$ (30,592)	\$ (23,403)	\$ (126)	\$ (31,507)
39	October	\$ 12,129	\$ 13,377	\$ (1,248)	\$ (31,507)	\$ (24,103)	\$ (129)	\$ (32,924)
40	November	\$ 11,987	\$ 11,644	\$ 343	\$ (32,924)	\$ (25,187)	\$ (135)	\$ (32,757)
41	December 2018	\$ 11,278	\$ 11,963	\$ (686)	\$ (32,757)	\$ (25,059)	\$ (135)	\$ (33,618)
42	Total			\$ (22,688)			\$ (1,734)	

Notes:

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

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

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

Line
No.

Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018					Approved Cost of Capital per Docket E-2, Sub 1142 March 16, 2018 Forward		
Calculation of monthly rate of return :							
	Composite Income Tax Rate (e.)	Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return	Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return
1 Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (j)
2 Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (j)
3 After tax overall return				7.0491% (f)			6.6352% (j)
4 Discounted monthly after tax overall return				0.5693% (g)			0.5368% (k)
5 Demand allocation factor							49.5990% (l)

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6 December								\$ (2,380)
7 January 2018	\$ 2,433	\$ 10,054	\$ (7,621)	\$ (2,380)	\$ (1,820)	\$ (10)	\$ (14)	\$ (10,014)
8 February	\$ 3,110	\$ 7,168	\$ (4,059)	\$ (10,014)	\$ (7,661)	\$ (44)	\$ (57)	\$ (14,130)
9 March	\$ 6,154	\$ 5,529	\$ 625	\$ (14,130)	\$ (10,809)	\$ (60)	\$ (78)	\$ (13,582)
10 April	\$ 7,371	\$ 5,354	\$ 2,017	\$ (13,582)	\$ (10,390)	\$ (56)	\$ (73)	\$ (11,638)
11 May	\$ 6,309	\$ 4,781	\$ 1,528	\$ (11,638)	\$ (8,903)	\$ (48)	\$ (62)	\$ (10,173)
12 June	\$ 6,099	\$ 6,612	\$ (512)	\$ (10,173)	\$ (7,782)	\$ (42)	\$ (55)	\$ (10,740)
13 July	\$ 6,134	\$ 7,468	\$ (1,335)	\$ (10,740)	\$ (8,216)	\$ (44)	\$ (58)	\$ (12,132)
14 August	\$ 6,409	\$ 7,314	\$ (906)	\$ (12,132)	\$ (9,281)	\$ (50)	\$ (65)	\$ (13,103)
15 September	\$ 6,327	\$ 6,611	\$ (284)	\$ (13,103)	\$ (10,024)	\$ (54)	\$ (70)	\$ (13,457)
16 October	\$ 6,016	\$ 5,952	\$ 64	\$ (13,457)	\$ (10,294)	\$ (55)	\$ (72)	\$ (13,465)
17 November	\$ 5,945	\$ 5,044	\$ 902	\$ (13,465)	\$ (10,301)	\$ (55)	\$ (72)	\$ (12,636)
18 December 2018	\$ 5,594	\$ 6,288	\$ (694)	\$ (12,636)	\$ (9,666)	\$ (52)	\$ (68)	\$ (13,398)
19 Total			\$ (10,274)				\$ (744)	

Notes:

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

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

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

Line
No.

Calculation of monthly rate of return :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16, 2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate Rate of Return		Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)		48.00%	4.050%	1.4872% (j)
2	Member's equity		53.00%	10.20%	5.4060% (f)		52.00%	9.900%	5.1480% (j)
3	After tax overall return				7.0491% (f)				6.6352% (j)
4	Discounted monthly after tax overall return				0.5693% (g)				0.5368% (k)
5	Demand allocation factor								6.1557% (l)

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6	December							\$ (792)
7	January 2018	\$ 302	\$ 1,098	\$ (796)	\$ (792)	\$ (606)	\$ (3)	\$ (1,592)
8	February	\$ 386	\$ 892	\$ (506)	\$ (1,592)	\$ (1,218)	\$ (7)	\$ (2,107)
9	March	\$ 764	\$ 752	\$ 12	\$ (2,107)	\$ (1,612)	\$ (9)	\$ (2,107)
10	April	\$ 915	\$ 759	\$ 156	\$ (2,107)	\$ (1,612)	\$ (9)	\$ (1,963)
11	May	\$ 783	\$ 739	\$ 44	\$ (1,963)	\$ (1,501)	\$ (8)	\$ (1,930)
12	June	\$ 757	\$ 967	\$ (210)	\$ (1,930)	\$ (1,476)	\$ (8)	\$ (2,150)
13	July	\$ 761	\$ 1,052	\$ (291)	\$ (2,150)	\$ (1,645)	\$ (9)	\$ (2,452)
14	August	\$ 795	\$ 1,071	\$ (276)	\$ (2,452)	\$ (1,876)	\$ (10)	\$ (2,741)
15	September	\$ 785	\$ 972	\$ (187)	\$ (2,741)	\$ (2,097)	\$ (11)	\$ (2,943)
16	October	\$ 747	\$ 941	\$ (195)	\$ (2,943)	\$ (2,251)	\$ (12)	\$ (3,153)
17	November	\$ 738	\$ 844	\$ (106)	\$ (3,153)	\$ (2,412)	\$ (13)	\$ (3,276)
18	December 2018	\$ 694	\$ 622	\$ 72	\$ (3,276)	\$ (2,506)	\$ (13)	\$ (3,222)
19	Total			\$ (2,283)			\$ (147)	

Notes:

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

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

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

Line
No.

Calculation of monthly rate of return :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16, 2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate Rate of Return		Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)		48.00%	4.050%	1.4872% (j)
2	Member's equity		53.00%	10.20%	5.4060% (f)		52.00%	9.900%	5.1480% (j)
3	After tax overall return				7.0491% (f)				6.6352% (j)
4	Discounted monthly after tax overall return				0.5693% (g)				0.5368% (k)
5	Demand allocation factor								0.0241% (l)
		Revenue Requirement (Col A) (e)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6	December								\$ (3)
7	January 2018	\$ 1	\$	\$ (5)	\$ (3)	\$ (2)	\$ (0)	\$ (0)	\$ (9)
8	February	\$ 2	\$	\$ (3)	\$ (9)	\$ (7)	\$ (0)	\$ (0)	\$ (12)
9	March	\$ 3	\$	\$ 0	\$ (12)	\$ (9)	\$ (0)	\$ (0)	\$ (12)
10	April	\$ 4	\$	\$ 1	\$ (12)	\$ (9)	\$ (0)	\$ (0)	\$ (11)
11	May	\$ 3	\$	\$ 1	\$ (11)	\$ (8)	\$ (0)	\$ (0)	\$ (10)
12	June	\$ 3	\$	\$ (0)	\$ (10)	\$ (8)	\$ (0)	\$ (0)	\$ (10)
13	July	\$ 3	\$	\$ (1)	\$ (10)	\$ (8)	\$ (0)	\$ (0)	\$ (12)
14	August	\$ 3	\$	\$ (1)	\$ (12)	\$ (9)	\$ (0)	\$ (0)	\$ (13)
15	September	\$ 3	\$	\$ (1)	\$ (13)	\$ (10)	\$ (0)	\$ (0)	\$ (14)
16	October	\$ 3	\$	\$ (0)	\$ (14)	\$ (10)	\$ (0)	\$ (0)	\$ (14)
17	November	\$ 3	\$	\$ 0	\$ (14)	\$ (11)	\$ (0)	\$ (0)	\$ (13)
18	December 2018	\$ 3	\$	\$ (1)	\$ (13)	\$ (10)	\$ (0)	\$ (0)	\$ (14)
19	Total			\$ (10)			\$ (0)	\$ (1)	

Notes:

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

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

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

Line
No.

Calculation of monthly rate of return :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16, 2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate Rate of Return		Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)		48.00%	4.050%	1.4872% (j)
2	Member's equity		53.00%	10.20%	5.4060% (f)		52.00%	9.900%	5.1480% (j)
3	After tax overall return				7.0491% (f)				6.6352% (j)
4	Discounted monthly after tax overall return				0.5693% (g)				0.5368% (k)
5	Demand allocation factor								0.0709% (l)

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6	December							
7	January 2018	\$ 3	\$ 10	\$ (6)	\$ 20	\$ 15	\$ 0	\$ 20
8	February	\$ 4	\$ 8	\$ (4)	\$ 13	\$ 10	\$ 0	\$ 13
9	March	\$ 9	\$ 7	\$ 2	\$ 10	\$ 7	\$ 0	\$ 10
10	April	\$ 11	\$ 9	\$ 2	\$ 11	\$ 9	\$ 0	\$ 11
11	May	\$ 9	\$ 10	\$ (1)	\$ 13	\$ 10	\$ 0	\$ 13
12	June	\$ 9	\$ 16	\$ (7)	\$ 12	\$ 9	\$ 0	\$ 12
13	July	\$ 9	\$ 25	\$ (17)	\$ 5	\$ 4	\$ 0	\$ 5
14	August	\$ 9	\$ 50	\$ (41)	\$ (12)	\$ (9)	\$ (0)	\$ (12)
15	September	\$ 9	\$ 87	\$ (78)	\$ (53)	\$ (40)	\$ (0)	\$ (53)
16	October	\$ 9	\$ 42	\$ (34)	\$ (131)	\$ (100)	\$ (1)	\$ (131)
17	November	\$ 8	\$ 20	\$ (12)	\$ (165)	\$ (126)	\$ (1)	\$ (165)
18	December 2018	\$ 8	\$ 12	\$ (4)	\$ (178)	\$ (136)	\$ (1)	\$ (178)
19	Total			\$ (200)			\$ (2)	

Notes:

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

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

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

Line
No.

Calculation of monthly rate of return :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16, 2018 Forward			
		Composite Income Tax Rate (e.)	Capitalization Ratio (c.)	Cost Rate (d.)	After Tax Weighted Rate Rate of Return		Capitalization Ratio (h.)	Cost Rate (i.)	After Tax Weighted Rate Rate of Return
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)		48.00%	4.050%	1.4872% (j)
2	Member's equity		53.00%	10.20%	5.4060% (f)		52.00%	9.900%	5.1480% (j)
3	After tax overall return				7.0491% (f)				6.6352% (j)
4	Discounted monthly after tax overall return				0.5693% (g)				0.5368% (k)
5	Demand allocation factor								0.0073% (l)
		Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6	December								
7	January 2018	\$ 0	\$ 1	\$ (1)	(1) \$	(0) \$	(0) \$	(0) \$	(1) \$
8	February	\$ 0	\$ 1	\$ (1)	(1) \$	(1) \$	(0) \$	(0) \$	(1) \$
9	March	\$ 1	\$ 1	\$ (0)	(2) \$	(1) \$	(0) \$	(0) \$	(2) \$
10	April	\$ 1	\$ 1	\$ 0	(2) \$	(2) \$	(0) \$	(0) \$	(2) \$
11	May	\$ 1	\$ 1	\$ (0)	(2) \$	(2) \$	(0) \$	(0) \$	(2) \$
12	June	\$ 1	\$ 1	\$ (0)	(2) \$	(2) \$	(0) \$	(0) \$	(2) \$
13	July	\$ 1	\$ 1	\$ (0)	(2) \$	(2) \$	(0) \$	(0) \$	(2) \$
14	August	\$ 1	\$ 1	\$ (0)	(2) \$	(2) \$	(0) \$	(0) \$	(2) \$
15	September	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3) \$
16	October	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3) \$
17	November	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3) \$
18	December 2018	\$ 1	\$ 1	\$ (0)	(3) \$	(2) \$	(0) \$	(0) \$	(3) \$
19	Total			\$ (2)				\$ (0)	

Notes:

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

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

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

Line
No.

Calculation of monthly rate of return :		Approved Cost of Capital per Docket E-2, Sub 1023 Jan. 1 - March 15, 2018				Approved Cost of Capital per Docket E-2, Sub 1142 March 16, 2018 Forward			
		Composite Income Tax Rate (e)	Capitalization Ratio (c)	Cost Rate (d)	After Tax Weighted Rate Rate of Return	Capitalization Ratio (h)	Cost Rate (i)	After Tax Weighted Rate Rate of Return	
1	Long-term debt	23.5000%	47.00%	4.57%	1.6431% (f)	48.00%	4.050%	1.4872% (j)	
2	Member's equity		53.00%	10.20%	5.4060% (f)	52.00%	9.900%	5.1480% (j)	
3	After tax overall return				7.0491% (f)			6.6352% (j)	
4	Discounted monthly after tax overall return				0.5693% (g)			0.5368% (k)	
5	Demand allocation factor							28.1566% (l)	

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6	December							\$ (5,743)
7	January 2018	\$ 1,381	\$ 4,151	\$ (2,770)	\$ (5,743)	\$ (4,393)	\$ (25)	\$ (8,545)
8	February	\$ 1,765	\$ 3,951	\$ (2,185)	\$ (8,545)	\$ (6,537)	\$ (37)	\$ (10,779)
9	March	\$ 3,494	\$ 3,873	\$ (379)	\$ (10,779)	\$ (8,246)	\$ (46)	\$ (11,218)
10	April	\$ 4,185	\$ 3,897	\$ 288	\$ (11,218)	\$ (8,582)	\$ (46)	\$ (10,990)
11	May	\$ 3,581	\$ 3,862	\$ (281)	\$ (10,990)	\$ (8,408)	\$ (45)	\$ (11,330)
12	June	\$ 3,462	\$ 3,970	\$ (507)	\$ (11,330)	\$ (8,668)	\$ (47)	\$ (11,898)
13	July	\$ 3,482	\$ 4,164	\$ (682)	\$ (11,898)	\$ (9,102)	\$ (49)	\$ (12,644)
14	August	\$ 3,638	\$ 4,278	\$ (640)	\$ (12,644)	\$ (9,673)	\$ (52)	\$ (13,352)
15	September	\$ 3,592	\$ 3,915	\$ (323)	\$ (13,352)	\$ (10,214)	\$ (55)	\$ (13,746)
16	October	\$ 3,415	\$ 4,275	\$ (860)	\$ (13,746)	\$ (10,516)	\$ (56)	\$ (14,680)
17	November	\$ 3,375	\$ 3,785	\$ (409)	\$ (14,680)	\$ (11,230)	\$ (60)	\$ (15,168)
18	December 2018	\$ 3,175	\$ 3,361	\$ (186)	\$ (15,168)	\$ (11,604)	\$ (62)	\$ (15,435)
19	Total			\$ (8,934)			\$ (758)	

Notes:

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

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

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

Line
No.

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

	Revenue Requirement (Col A) (a)	Revenue Collected (Col B) (b)	Under (Over) Collection of Revenue (Col C) = A - B	Beginning Deferred Balance (Col D)	Net of Tax Deferral Balance For Return (Col E)	Net of Tax Return on Deferred Balance (Col F)	Gross Up of Return on Deferred Balance (Col G)	Ending Deferred Balance (Col H) = C + D + G
6 December								\$ (297)
7 January 2018	\$ 784	\$ 1,509	\$ (725)	\$ (297)	\$ (227)	(1) \$	(2) \$	(1,023)
8 February	\$ 1,002	\$ 1,839	\$ (837)	\$ (1,023)	\$ (783)	(4) \$	(6) \$	(1,866)
9 March	\$ 1,984	\$ 1,813	\$ 171	\$ (1,866)	\$ (1,427)	(8) \$	(10) \$	(1,705)
10 April	\$ 2,376	\$ 1,906	\$ 469	\$ (1,705)	\$ (1,305)	(7) \$	(9) \$	(1,245)
11 May	\$ 2,033	\$ 1,899	\$ 134	\$ (1,245)	\$ (953)	(5) \$	(7) \$	(1,118)
12 June	\$ 1,966	\$ 1,931	\$ 35	\$ (1,118)	\$ (855)	(5) \$	(6) \$	(1,088)
13 July	\$ 1,977	\$ 2,111	\$ (134)	\$ (1,088)	\$ (833)	(4) \$	(6) \$	(1,228)
14 August	\$ 2,066	\$ 2,159	\$ (93)	\$ (1,228)	\$ (940)	(5) \$	(7) \$	(1,328)
15 September	\$ 2,039	\$ 1,918	\$ 121	\$ (1,328)	\$ (1,016)	(5) \$	(7) \$	(1,214)
16 October	\$ 1,939	\$ 2,162	\$ (223)	\$ (1,214)	\$ (929)	(5) \$	(7) \$	(1,444)
17 November	\$ 1,916	\$ 1,947	\$ (31)	\$ (1,444)	\$ (1,104)	(6) \$	(8) \$	(1,482)
18 December 2018	\$ 1,803	\$ 1,675	\$ 128	\$ (1,482)	\$ (1,134)	(6) \$	(8) \$	(1,363)
19 Total			\$ (984)				\$ (81)	

Notes:

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

EXHIBIT B -TU
DOCKET E-2, SUB 1207

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

EXHIBIT C-TU
DOCKET E-2, SUB 1207

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
SUMMARY OF REVENUE ASSOCIATED WITH LEVELIZED RECOVERY OF INCREMENTAL COSTS TO BE INCLUDED IN THE JOINT AGENCY PURCHASE RIDER for TEST YEAR ENDING DECEMBER 31, 2018
(Thousands of Dollars)

Line No.	Description	For the Month												Year to Date
		January NC Retail Revenue Amount (Col A)	February NC Retail Revenue Amount (Col B)	March NC Retail Revenue Amount (Col C)	April NC Retail Revenue Amount (Col D)	May NC Retail Revenue Amount (Col E)	June NC Retail Revenue Amount (Col F)	July NC Retail Revenue Amount (Col G)	August NC Retail Revenue Amount (Col H)	September NC Retail Revenue Amount (Col I)	October NC Retail Revenue Amount (Col J)	November NC Retail Revenue Amount (Col K)	December NC Retail Revenue Amount (Col L)	Total NC Retail Revenue Amount (Col M)
1	Revenue related to purchase of the Harris Nuclear Unit 1													
2	Levelized Revenue	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 20,565 (a)
3	Change in Revenue Requirement - Actual vs. Estimated	\$ 97	\$ 97	\$ 48	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ 241 (b)
	Total Harris Nuclear Unit 1 (Line 2 + Line 3)	\$ 1,811	\$ 1,810	\$ 1,762	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 1,714	\$ 20,807
4	Revenue related to purchase of the Brunswick Nuclear Unit 1													
5	Levelized Revenue	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 6,014 (c)
6	Change in Revenue Requirement - Actual vs. Estimated	\$ 23	\$ 23	\$ 12	\$ 0	\$ 0	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ 58 (d)
7	Total Brunswick Nuclear Unit 1 (Line 5 + Line 6)	\$ 525	\$ 524	\$ 513	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 501	\$ 6,072
8	Revenue related to purchase of the Brunswick Nuclear Unit 2													
9	Levelized Revenue	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,002 (e)
10	Change in Revenue Requirement - Actual vs. Estimated	\$ 23	\$ 22	\$ 11	\$ 0	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ 56 (f)
11	Total Brunswick Nuclear Unit 2 (Line 9 + Line 10)	\$ 523	\$ 523	\$ 511	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,058
12	Revenue related to purchase of the Mayo Coal Unit													
13	Levelized Revenue	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 4,891 (g)
14	Change in Revenue Requirement - Actual vs. Estimated	\$ 18	\$ 18	\$ 9	\$ 0	\$ 0	\$ (0)	\$ (0)	\$ 0	\$ (0)	\$ 0	\$ 0	\$ (0)	\$ 46 (h)
15	Total Mayo Coal Unit (Line 13 + Line 14)	\$ 426	\$ 426	\$ 417	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 408	\$ 4,937
16	Revenue related to purchase of the Roxboro Coal Unit													
17	Levelized Revenue	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 622 (i)
18	Change in Revenue Requirement - Actual vs. Estimated	\$ 2	\$ 2	\$ 1	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 6 (j)
19	Total Roxboro Coal Unit (Line 17 + Line 18)	\$ 54	\$ 54	\$ 53	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 52	\$ 628
20	Revenue related to the Acquisition costs above net book value for the above plants													
21	Levelized Revenue	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 1,518	\$ 18,218 (k)
22	Change in Revenue Requirement - Actual vs. Estimated	\$ 85	\$ 85	\$ 43	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 230 (l)
23	Total Acquisition costs above net book value for above plants (Line 21 + Line 22)	\$ 1,604	\$ 1,603	\$ 1,562	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 1,520	\$ 18,450
24	Total monthly levelized revenue (Line 3 + Line 7 + Line 11 + Line 15 + Line 19 + Line 23)	\$ 4,942	\$ 4,941	\$ 4,817	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,695	\$ 4,694	\$ 4,694	\$ 4,694	\$ 56,951

Notes:

- (a) From Exhibit C1-Actual-TU, Col P.
(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.

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 2017	REVISIONS FOR 2018
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 895,848 (a)		
LAND COST AT JULY 31, 2015	\$ 10,289 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 500,188 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$ 405,939		
RETIREMENT DATE	10/24/2045 (a)		
LEVELIZATION PERIOD IN MONTHS-	375 (a)		345
TAX LIFE	15 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (a)
DEPRECIATION RATE			(a)
FIRST YEAR BOOK DEPRECIATION RATE			
WEIGHTED ANNUAL INTEREST RATE			1.8442% (a)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			5.1460% (a)
NC RETAIL ALLOCATION FACTOR	61.3723% (a)		

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEFERRAL RATE CASE PROCEEDING																	
YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEPR. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRESENT 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)
2015	\$ 244,678	5.000%	\$ 11,824	\$ 6,377	\$ 2,945	\$ 2,945	\$ 3,548	\$ 241,431	\$ 2,161	\$ 5,438	\$ 2,949	\$ 14,098		\$ 9,585	\$ 4,511	\$ 4,586	
2016	\$ 241,130	5.000%	\$ 11,824	\$ 6,377	\$ 2,945	\$ 2,945	\$ 3,548	\$ 241,431	\$ 2,161	\$ 5,438	\$ 2,949	\$ 14,098		\$ 22,272	\$ 10,363	\$ 15,655	
2017	\$ 223,777	5.000%	\$ 11,824	\$ 6,377	\$ 2,945	\$ 2,945	\$ 3,548	\$ 218,407	\$ 4,602	\$ 11,810	\$ 6,067	\$ 31,403		\$ 22,179	\$ 8,224	\$ 28,290	\$ 24,609
2018	\$ 223,126	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 215,226	\$ 349	\$ 923	\$ 284	\$ 2,204					
January	\$ 222,480	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 214,365	\$ 347	\$ 920	\$ 283	\$ 2,198					
February	\$ 221,832	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 213,503	\$ 345	\$ 918	\$ 281	\$ 2,191					
March	\$ 221,184	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 212,641	\$ 344	\$ 912	\$ 280	\$ 2,185					
April	\$ 220,533	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 211,779	\$ 343	\$ 909	\$ 279	\$ 2,179					
May	\$ 219,887	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 210,917	\$ 342	\$ 905	\$ 278	\$ 2,173					
June	\$ 219,239	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 210,055	\$ 340	\$ 901	\$ 277	\$ 2,168					
July	\$ 218,591	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 209,193	\$ 339	\$ 897	\$ 276	\$ 2,162					
August	\$ 217,942	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 208,332	\$ 338	\$ 894	\$ 275	\$ 2,154					
September	\$ 217,294	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 207,470	\$ 338	\$ 890	\$ 273	\$ 2,148					
October	\$ 216,646	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 206,608	\$ 335	\$ 886	\$ 272	\$ 2,142					
November	\$ 215,998	7.700%	\$ 1,557	\$ 909	\$ 214	\$ 8,333	\$ 648	\$ 205,746	\$ 333	\$ 883	\$ 271	\$ 2,135	\$ 24,400				
December	\$ 208,219	6.900%	\$ 18,818	\$ 9,039	\$ 2,124	\$ 12,697	\$ 7,770	\$ 200,384	\$ 3,895	\$ 10,315	\$ 3,159	\$ 25,157	\$ 22,204				
2020	\$ 200,440	6.300%	\$ 15,319	\$ 7,341	\$ 1,725	\$ 14,532	\$ 7,770	\$ 190,860	\$ 3,708	\$ 9,815	\$ 3,015	\$ 24,316	\$ 20,163				
2021	\$ 192,681	5.900%	\$ 14,319	\$ 6,540	\$ 1,537	\$ 16,069	\$ 7,770	\$ 181,250	\$ 3,524	\$ 9,331	\$ 2,906	\$ 23,499	\$ 19,307				
2022	\$ 184,882	5.500%	\$ 14,319	\$ 6,540	\$ 1,537	\$ 17,506	\$ 7,770	\$ 171,835	\$ 3,342	\$ 8,851	\$ 2,718	\$ 22,551	\$ 18,608				
2023	\$ 177,104	5.000%	\$ 14,343	\$ 6,564	\$ 1,543	\$ 19,148	\$ 7,770	\$ 162,610	\$ 3,161	\$ 8,371	\$ 2,572	\$ 21,693	\$ 17,814				
2024	\$ 169,325	5.000%	\$ 14,343	\$ 6,564	\$ 1,543	\$ 20,685	\$ 7,770	\$ 153,298	\$ 2,980	\$ 7,892	\$ 2,424	\$ 20,795	\$ 16,959				
2025	\$ 161,546	5.000%	\$ 14,343	\$ 6,564	\$ 1,543	\$ 22,226	\$ 7,770	\$ 143,979	\$ 2,798	\$ 7,412	\$ 2,277	\$ 19,897	\$ 16,050				
2026	\$ 153,767	5.000%	\$ 14,343	\$ 6,564	\$ 1,543	\$ 23,764	\$ 7,770	\$ 134,661	\$ 2,616	\$ 6,932	\$ 2,130	\$ 18,999	\$ 15,141				
2027	\$ 145,988	5.000%	\$ 14,343	\$ 6,564	\$ 1,543	\$ 25,303	\$ 7,770	\$ 125,342	\$ 2,437	\$ 6,453	\$ 1,982	\$ 18,101	\$ 14,232				
2028	\$ 138,210	5.000%	\$ 14,319	\$ 6,540	\$ 1,537	\$ 26,844	\$ 7,770	\$ 116,024	\$ 2,256	\$ 5,973	\$ 1,835	\$ 17,242	\$ 13,323				
2029	\$ 130,431	5.000%	\$ 14,343	\$ 6,564	\$ 1,543	\$ 28,386	\$ 7,770	\$ 106,706	\$ 2,074	\$ 5,493	\$ 1,687	\$ 16,384	\$ 12,414				
2030	\$ 122,652	2.950%	\$ 7,159	\$ (820)	\$ (146)	\$ 29,921	\$ 7,770	\$ 97,387	\$ 1,893	\$ 5,013	\$ 1,539	\$ 15,525	\$ 11,505				
2031	\$ 114,873	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 26,413	\$ 7,770	\$ 88,068	\$ 1,711	\$ 4,533	\$ 1,391	\$ 14,666	\$ 10,596				
2032	\$ 107,094	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 24,885	\$ 7,770	\$ 78,749	\$ 1,529	\$ 4,054	\$ 1,243	\$ 13,807	\$ 9,687				
2033	\$ 99,315	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 23,357	\$ 7,770	\$ 69,430	\$ 1,347	\$ 3,574	\$ 1,095	\$ 12,948	\$ 8,778				
2034	\$ 91,537	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 21,829	\$ 7,770	\$ 60,111	\$ 1,165	\$ 3,095	\$ 947	\$ 12,089	\$ 7,869				
2035	\$ 83,758	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 20,301	\$ 7,770	\$ 50,792	\$ 983	\$ 2,615	\$ 799	\$ 11,230	\$ 6,960				
2036	\$ 75,979	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 18,773	\$ 7,770	\$ 41,473	\$ 801	\$ 2,135	\$ 651	\$ 10,371	\$ 6,051				
2037	\$ 68,200	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 17,245	\$ 7,770	\$ 32,154	\$ 619	\$ 1,655	\$ 503	\$ 9,512	\$ 5,142				
2038	\$ 60,421	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 15,717	\$ 7,770	\$ 22,835	\$ 437	\$ 1,175	\$ 355	\$ 8,653	\$ 4,233				
2039	\$ 52,643	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 14,189	\$ 7,770	\$ 13,516	\$ 255	\$ 893	\$ 207	\$ 7,794	\$ 3,324				
2040	\$ 44,864	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 12,661	\$ 7,770	\$ 4,197	\$ 71	\$ 325	\$ 59	\$ 6,935	\$ 2,415				
2041	\$ 37,085	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 11,133	\$ 7,770	\$ (3,302)	\$ (21)	\$ 157	\$ (31)	\$ 6,076	\$ 1,506				
2042	\$ 29,306	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 9,605	\$ 7,770	\$ (4,823)	\$ (121)	\$ (81)	\$ (181)	\$ 5,217	\$ 617				
2043	\$ 21,527	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 8,077	\$ 7,770	\$ (6,344)	\$ (211)	\$ (171)	\$ (271)	\$ 4,368	\$ 118				
2044	\$ 13,749	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 6,549	\$ 7,770	\$ (7,865)	\$ (301)	\$ (261)	\$ (361)	\$ 3,519	\$ 28				
2045	\$ 5,970	0.000%	\$ -	\$ (7,779)	\$ (1,828)	\$ 5,021	\$ 7,770	\$ (9,386)	\$ (391)	\$ (351)	\$ (451)	\$ 2,670	\$ (72)				
2046	\$ (384)	0.000%	\$ -	\$ (8,353)	\$ (1,403)	\$ (973)	\$ 6,353	\$ 2,719	\$ 53	\$ 140	\$ 43	\$ 1,777	\$ (1,078)				
TOTAL			\$ 242,200	\$ (2,961)		\$ 245,061		\$ 65,157	\$ 171,072	\$ 59,082	\$ 540,382	\$ 242,331					

Notes:
(a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) The composite tax rate and after tax cost of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J-TU - Cost of Capital.
(c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study as filed under E-2 Sub 1178.
(d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-TU - Cost of Capital.
(e) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DCPs approved general rate case under Docket E-2, Sub 1142.

	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 24,699	\$ 242,331	\$ 267,030
Annual payment	\$ 1,802	\$ 18,663	\$ 20,565
Monthly payment	\$ 159	\$ 1,555	\$ 1,714

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

	2015	2017	2018
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 895,848 (a)		
LAND COST AT JULY 31, 2015	\$ 10,269 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 500,188 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$405,929		
RETIREMENT DATE	10/24/2045 (a)		
LEVELIZATION PERIOD IN MONTHS	375 (a)		
TAX LIFE	15 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (c)
AFTER TAX COST OF CAPITAL		5.6169% (b)	6.4416% (c)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			1.9440% (d)
WEIGHTED ANNUAL INTEREST RATE			5.1480% (d)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			61.52780% (e)
NC RETAIL ALLOCATION FACTOR		61.33723% (b)	

REVISIONS BASED ON 2018 TEST YEAR ACTUALS

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)		INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
Beg Balance July 31, 2015	\$ 244,676		\$ 11,824	\$ 8,377	\$ 2,945	\$ 2,945	\$ 3,348	\$ 241,445	\$ 2,161	\$ 5,439	\$ 2,840	\$ 14,098				\$ 9,885	\$ 4,511	\$ 4,588	
2016			\$ 22,778	\$ 14,237	\$ 4,825	\$ 7,870	\$ 8,541	\$ 231,451	\$ 4,871	\$ 12,512	\$ 6,817	\$ 32,642				\$ 22,272	\$ 10,370	\$ 18,688	
2017			\$ 20,760	\$ 11,938	\$ 249	\$ 8,119,220	\$ 8,814	\$ 218,487	\$ 4,892	\$ 11,810	\$ 6,887	\$ 28,763				\$ 22,170	\$ 8,228	\$ 28,290	
2018	January	\$ 223,120	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 8,334	\$ 648	\$ 215,226	\$ 385	\$ 970	\$ 290	\$ 2,301	\$ 2,204	\$ 97	\$ 1,714	\$ 587	\$ 27,922	
	February	\$ 222,480	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 8,549	\$ 648	\$ 214,363	\$ 384	\$ 966	\$ 297	\$ 2,294	\$ 2,188	\$ 97	\$ 1,714	\$ 591	\$ 27,750	
	March	\$ 221,832	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 8,763	\$ 648	\$ 213,500	\$ 384	\$ 939	\$ 288	\$ 2,240	\$ 2,191	\$ 48	\$ 1,714	\$ 526	\$ 28,430	
	April	\$ 221,184	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 8,978	\$ 648	\$ 212,637	\$ 344	\$ 912	\$ 280	\$ 2,185	\$ 2,185	\$ (0)	\$ 1,714	\$ 471	\$ 29,057	
	May	\$ 220,536	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 9,193	\$ 648	\$ 211,774	\$ 343	\$ 908	\$ 279	\$ 2,179	\$ 2,179	\$ (0)	\$ 1,714	\$ 465	\$ 29,680	
	June	\$ 219,887	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 9,408	\$ 648	\$ 210,911	\$ 342	\$ 905	\$ 278	\$ 2,173	\$ 2,173	\$ (0)	\$ 1,714	\$ 459	\$ 30,301	
	July	\$ 219,239	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 9,622	\$ 648	\$ 210,048	\$ 340	\$ 901	\$ 277	\$ 2,168	\$ 2,168	\$ (0)	\$ 1,714	\$ 453	\$ 30,919	
	August	\$ 218,591	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 9,837	\$ 648	\$ 209,185	\$ 339	\$ 897	\$ 276	\$ 2,160	\$ 2,160	\$ (0)	\$ 1,714	\$ 446	\$ 31,533	
	September	\$ 217,943	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 10,052	\$ 648	\$ 208,322	\$ 337	\$ 894	\$ 275	\$ 2,154	\$ 2,154	\$ (0)	\$ 1,714	\$ 440	\$ 32,145	
	October	\$ 217,295	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 10,267	\$ 648	\$ 207,459	\$ 336	\$ 890	\$ 273	\$ 2,148	\$ 2,148	\$ (0)	\$ 1,714	\$ 434	\$ 32,764	
	November	\$ 216,646	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 10,481	\$ 648	\$ 206,596	\$ 335	\$ 888	\$ 272	\$ 2,141	\$ 2,141	\$ (0)	\$ 1,714	\$ 428	\$ 33,380	
	December	\$ 215,998	7.700%	\$ 1,562	\$ 914	\$ 215	\$ 10,696	\$ 648	\$ 205,733	\$ 333	\$ 883	\$ 271	\$ 2,135	\$ 2,135	\$ (0)	\$ 1,714	\$ 421	\$ 33,993	

Notes:

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

Latest Levelized Payment Calculations			
	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 24,609	\$ 242,331	\$ 267,030
Annual payment	\$ 1,802	\$ 18,863	\$ 20,665
Monthly payment	\$ 159	\$ 1,555	\$ 1,714

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

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

	ESTIMATE	REVISIONS FOR 2017	REVISIONS FOR 2018
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 273,020 (a)		
LAND COST AT JULY 31, 2015	\$ 1 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 188,091 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$ 104,930		
RETIREMENT DATE	9/8/2036 (a)		
LEVELIZATION PERIOD IN MONTHS	253 (a)		224.27
TAX LIFE	15 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		0.8169% (b)	0.4416% (e)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			1.0440% (a)
WEIGHTED ANNUAL INTEREST RATE			5.1480% (e)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			
NC RETAIL ALLOCATION FACTOR	61.33723% (c)		

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Reg Balance July 31, 2015	\$ 63,248																
2015	\$ 81,489	5.000%	\$ 3,102	\$ 1,404	\$ 404	\$ 494	\$ 1,759	\$ 62,122	\$ 556	\$ 1,399	\$ 759	\$ 4,473		\$ 3,035	\$ 1,438	\$ 1,462	
2016	\$ 57,292	5.000%	\$ 8,041	\$ 1,633	\$ 634	\$ 1,128	\$ 4,208	\$ 58,575	\$ 1,258	\$ 3,167	\$ 1,875	\$ 10,307		\$ 7,046	\$ 3,281	\$ 4,944	
2017	\$ 55,077	8.550%	\$ 5,503	\$ 1,269	\$ (62)	\$ 1,068	\$ 4,204	\$ 53,849	\$ 1,157	\$ 2,911	\$ 1,500	\$ 9,772		\$ 7,026	\$ 2,746	\$ 8,131	\$ 7,639
2018	January	\$ 52,840	7.700%	\$ 413	\$ 178	\$ 41	\$ 1,107	\$ 237	\$ 51,872	\$ 84	\$ 223	\$ 68	\$ 612				
	February	\$ 52,603	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,146	\$ 237	\$ 51,594	\$ 84	\$ 221	\$ 68	\$ 610				
	March	\$ 52,365	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,190	\$ 237	\$ 51,315	\$ 83	\$ 220	\$ 68	\$ 608				
	April	\$ 52,128	7.700%	\$ 413	\$ 178	\$ 41	\$ 1,231	\$ 237	\$ 51,038	\$ 83	\$ 219	\$ 67	\$ 606				
	May	\$ 51,891	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,272	\$ 237	\$ 50,758	\$ 82	\$ 218	\$ 67	\$ 604				
	June	\$ 51,654	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,314	\$ 237	\$ 50,479	\$ 82	\$ 217	\$ 67	\$ 602				
	July	\$ 51,416	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,355	\$ 237	\$ 50,201	\$ 81	\$ 215	\$ 66	\$ 600				
	August	\$ 51,179	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,398	\$ 237	\$ 49,922	\$ 81	\$ 214	\$ 66	\$ 598				
	September	\$ 50,942	7.700%	\$ 413	\$ 178	\$ 41	\$ 1,437	\$ 237	\$ 49,644	\$ 80	\$ 213	\$ 65	\$ 596				
	October	\$ 50,705	7.700%	\$ 413	\$ 178	\$ 41	\$ 1,479	\$ 237	\$ 49,365	\$ 80	\$ 212	\$ 65	\$ 594				
	November	\$ 50,467	7.700%	\$ 413	\$ 176	\$ 41	\$ 1,520	\$ 237	\$ 49,087	\$ 80	\$ 211	\$ 65	\$ 592				
	December	\$ 50,230	7.700%	\$ 413	\$ 178	\$ 41	\$ 1,561	\$ 237	\$ 48,808	\$ 79	\$ 209	\$ 64	\$ 590	\$ 8,777			
2019	\$ 47,383	6.930%	\$ 4,460	\$ 1,613	\$ 370	\$ 1,940	\$ 2,847	\$ 47,056	\$ 916	\$ 2,422	\$ 744	\$ 8,628	\$ 8,115				
2020	\$ 44,936	6.230%	\$ 4,010	\$ 1,163	\$ 273	\$ 2,214	\$ 2,847	\$ 43,683	\$ 853	\$ 2,259	\$ 694	\$ 8,633	\$ 5,517				
2021	\$ 41,689	5.900%	\$ 3,787	\$ 950	\$ 223	\$ 2,437	\$ 2,847	\$ 40,767	\$ 793	\$ 2,100	\$ 645	\$ 8,385	\$ 4,874				
2022	\$ 38,842	5.900%	\$ 3,787	\$ 950	\$ 223	\$ 2,680	\$ 2,847	\$ 37,717	\$ 733	\$ 1,942	\$ 596	\$ 8,115	\$ 4,478				
2023	\$ 35,995	5.910%	\$ 3,804	\$ 957	\$ 223	\$ 2,885	\$ 2,847	\$ 34,648	\$ 674	\$ 1,784	\$ 548	\$ 5,852	\$ 4,024				
2024	\$ 33,148	5.900%	\$ 3,797	\$ 950	\$ 223	\$ 3,109	\$ 2,847	\$ 28,504	\$ 554	\$ 1,497	\$ 451	\$ 5,319	\$ 3,228				
2025	\$ 30,302	5.910%	\$ 3,804	\$ 957	\$ 223	\$ 3,333	\$ 2,847	\$ 25,433	\$ 494	\$ 1,309	\$ 402	\$ 5,053	\$ 2,681				
2026	\$ 27,455	5.900%	\$ 3,797	\$ 950	\$ 223	\$ 3,557	\$ 2,847	\$ 22,362	\$ 435	\$ 1,151	\$ 354	\$ 4,787	\$ 2,164				
2027	\$ 24,608	5.910%	\$ 3,804	\$ 957	\$ 223	\$ 3,782	\$ 2,847	\$ 19,291	\$ 375	\$ 993	\$ 305	\$ 4,520	\$ 1,780				
2028	\$ 21,761	5.900%	\$ 3,797	\$ 950	\$ 223	\$ 4,005	\$ 2,847	\$ 16,220	\$ 315	\$ 835	\$ 257	\$ 4,254	\$ 1,415				
2029	\$ 18,914	5.910%	\$ 3,804	\$ 957	\$ 223	\$ 4,230	\$ 2,847	\$ 13,149	\$ 255	\$ 688	\$ 211	\$ 4,007	\$ 1,180				
2030	\$ 16,067	2.950%	\$ 1,899	\$ (948)	\$ (223)	\$ 4,007	\$ 2,847	\$ 10,971	\$ 213	\$ 565	\$ 174	\$ 3,769	\$ 989				
2031	\$ 13,220	0.000%	\$ -	\$ (2,847)	\$ (669)	\$ 3,338	\$ 2,847	\$ 8,793	\$ 171	\$ 453	\$ 130	\$ 3,610	\$ 1,585				
2032	\$ 10,373	0.000%	\$ -	\$ (2,847)	\$ (669)	\$ 2,889	\$ 2,847	\$ 6,615	\$ 129	\$ 341	\$ 105	\$ 3,421	\$ 1,260				
2033	\$ 7,526	0.000%	\$ -	\$ (2,847)	\$ (669)	\$ 1,331	\$ 2,847	\$ 4,437	\$ 85	\$ 228	\$ 70	\$ 3,232	\$ 1,116				
2034	\$ 4,679	0.000%	\$ -	\$ (2,847)	\$ (669)	\$ 982	\$ 2,847	\$ 2,259	\$ 44	\$ 116	\$ 38	\$ 3,043	\$ 989				
2035	\$ 1,832	0.000%	\$ -	\$ (2,847)	\$ (669)	\$ 682	\$ 2,847	\$ 420	\$ 8	\$ 22	\$ 7	\$ 1,899	\$ 610				
2036	NINE MONTHS	\$ (130)	0.000%	\$ -	\$ (1,982)	\$ (401)	\$ 201	\$ 1,982	\$ -	\$ -	\$ -	\$ -	\$ -				
TOTAL		100.000%	\$ 84,232	\$ 853	\$ -	\$ 63,378	\$ -	\$ 11,815	\$ 30,369	\$ 10,966	\$ 118,329	\$ 57,209					

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2018 on Docket E-2, Sub 1110.
(b) The composite tax rate and after tax costs of capital were updated January 1, 2017 as a result of the reduction in the NC state tax rate. See Exhibit J-TU - Cost of Capital.
(c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study as filed on Docket E-2, Sub 1116.
(d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-TU - Cost of Capital.
(e) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.

	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 7,639	\$ 57,209	\$ 64,848
Annual payment	\$ 708	\$ 5,308	\$ 6,014
Monthly payment	\$ 59	\$ 442	\$ 501

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

	2015	2017	2018
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 273,020 (a)		
LAND COST AT JULY 31, 2015	\$ 1 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 168,091 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$104,930		
RETIREMENT DATE	9/8/2038 (a)		
LEVELIZATION PERIOD IN MONTHS	253 (a)		
TAX LIFE	15 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (c)
AFTER TAX COST OF CAPITAL		6.8169% (b)	6.4416% (d)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			1.9440% (d)
WEIGHTED ANNUAL INTEREST RATE			5.1480% (c)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			61.52780% (e)
NC RETAIL ALLOCATION FACTOR		61.33723% (b)	

REVISIONS BASED ON 2018 TEST YEAR ACTUALS

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)	
Orig Balance July 31, 2015	\$ 63,248																			
2015			\$ 3,162	\$ 1,404	\$ 494	\$ 494	\$ 1,759	\$ 62,125	\$ 556	\$ 1,399	\$ 769	\$ 4,473					\$ 3,035	\$ 1,438	\$ 1,462	
2016			\$ 6,041	\$ 1,833	\$ 634	\$ 1,128	\$ 4,208	\$ 58,572	\$ 1,258	\$ 3,166	\$ 1,874	\$ 10,307					\$ 7,046	\$ 3,280	\$ 4,944	
2017			\$ 5,603	\$ 1,299	\$ (62)	\$ 1,066	\$ 4,204	\$ 53,849	\$ 1,167	\$ 2,911	\$ 1,500	\$ 9,772					\$ 7,025	\$ 2,746	\$ 5,131	
2018 January	\$ 52,640	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,107	\$ 237	\$ 51,872	\$ 93	\$ 234	\$ 72	\$ 636		\$ 612	\$ 23	\$ 501	\$ 134	\$ 6,311		
February	\$ 52,603	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,149	\$ 237	\$ 51,583	\$ 92	\$ 232	\$ 71	\$ 633		\$ 610	\$ 23	\$ 501	\$ 132	\$ 6,489		
March	\$ 52,365	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,191	\$ 237	\$ 51,314	\$ 87	\$ 226	\$ 69	\$ 620		\$ 608	\$ 12	\$ 501	\$ 119	\$ 6,655		
April	\$ 52,128	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,232	\$ 237	\$ 51,035	\$ 83	\$ 219	\$ 67	\$ 606		\$ 606	\$ 0	\$ 501	\$ 105	\$ 6,807		
May	\$ 51,891	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,274	\$ 237	\$ 50,757	\$ 82	\$ 218	\$ 67	\$ 604		\$ 604	\$ 0	\$ 501	\$ 103	\$ 6,958		
June	\$ 51,654	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,315	\$ 237	\$ 50,478	\$ 82	\$ 217	\$ 67	\$ 602		\$ 602	\$ (0)	\$ 501	\$ 101	\$ 7,107		
July	\$ 51,415	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,357	\$ 237	\$ 50,199	\$ 81	\$ 215	\$ 66	\$ 600		\$ 600	\$ (0)	\$ 501	\$ 99	\$ 7,256		
August	\$ 51,179	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,399	\$ 237	\$ 49,920	\$ 81	\$ 214	\$ 65	\$ 598		\$ 598	\$ (0)	\$ 501	\$ 97	\$ 7,403		
September	\$ 50,942	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,440	\$ 237	\$ 49,641	\$ 80	\$ 213	\$ 65	\$ 596		\$ 596	\$ (0)	\$ 501	\$ 95	\$ 7,549		
October	\$ 50,705	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,482	\$ 237	\$ 49,362	\$ 80	\$ 212	\$ 65	\$ 594		\$ 594	\$ (0)	\$ 501	\$ 93	\$ 7,693		
November	\$ 50,467	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,523	\$ 237	\$ 49,083	\$ 80	\$ 211	\$ 65	\$ 592		\$ 592	\$ (0)	\$ 501	\$ 91	\$ 7,837		
December	\$ 50,230	7.700%	\$ 414	\$ 177	\$ 42	\$ 1,565	\$ 237	\$ 48,805	\$ 79	\$ 209	\$ 64	\$ 590		\$ 590	\$ (0)	\$ 501	\$ 89	\$ 7,978		

Notes:

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

Latest Levelized Payment Calculations			
2017	Future		
	Ending Deferral	Revenue Streams 2018 Forward	Total
Net present value	\$ 7,639	\$ 57,209	\$ 64,848
Annual payment	\$ 708	\$ 5,306	\$ 6,014
Monthly payment	\$ 58	\$ 442	\$ 501

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

	2015	REVISIONS FOR 2017	REVISIONS FOR 2018
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 218,790 (a)		
LAND COST AT JULY 31, 2015	\$ 615 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 122,314 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$ 97,091		
RETIREMENT DATE	12/27/2034 (a)		
LEVELIZATION PERIOD IN MONTHS	233 (a)		203.80
TAX LIFE	15 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4416% (e)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			1.9440% (e)
WEIGHTED ANNUAL INTEREST RATE			5.1480% (e)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			
NC RETAIL ALLOCATION FACTOR	01.33723% (c)		

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Beg Balance July 31, 2015	\$ 58,523																
2015	\$ 57,353	5.000%	\$ 2,868	\$ 1,737	\$ 611	\$ 611	\$ 1,170	\$ 57,832	\$ 516	\$ 1,298	\$ 704	\$ 3,668	\$ 2,650	\$ 2,650	\$ 1,038	\$ 1,056	
2016	\$ 54,573	5.500%	\$ 5,554	\$ 2,774	\$ 950	\$ 1,570	\$ 2,780	\$ 54,872	\$ 1,179	\$ 2,968	\$ 1,569	\$ 8,494	\$ 6,204	\$ 6,204	\$ 2,290	\$ 3,503	
2017	\$ 51,759	6.550%	\$ 5,960	\$ 2,245	\$ 17	\$ 1,568	\$ 2,814	\$ 51,248	\$ 1,101	\$ 2,770	\$ 1,428	\$ 8,113	\$ 6,185	\$ 6,185	\$ 1,926	\$ 5,743	\$ 5,395
2018 January	\$ 51,504	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,817	\$ 254	\$ 50,029	\$ 81	\$ 215	\$ 68	\$ 818					
February	\$ 51,250	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,647	\$ 254	\$ 49,745	\$ 81	\$ 213	\$ 66	\$ 814					
March	\$ 50,996	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,678	\$ 254	\$ 49,491	\$ 80	\$ 212	\$ 65	\$ 812					
April	\$ 50,741	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,706	\$ 254	\$ 49,178	\$ 80	\$ 211	\$ 65	\$ 810					
May	\$ 50,487	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,735	\$ 254	\$ 48,894	\$ 79	\$ 210	\$ 64	\$ 808					
June	\$ 50,233	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,765	\$ 254	\$ 48,610	\$ 79	\$ 209	\$ 64	\$ 806					
July	\$ 49,978	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,794	\$ 254	\$ 48,326	\$ 78	\$ 207	\$ 64	\$ 804					
August	\$ 49,724	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,824	\$ 254	\$ 48,042	\$ 78	\$ 206	\$ 63	\$ 802					
September	\$ 49,470	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,853	\$ 254	\$ 47,759	\$ 77	\$ 205	\$ 63	\$ 800					
October	\$ 49,215	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,883	\$ 254	\$ 47,475	\$ 77	\$ 204	\$ 63	\$ 797					
November	\$ 48,961	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,912	\$ 254	\$ 47,191	\$ 76	\$ 202	\$ 62	\$ 795					
December	\$ 48,707	7.700%	\$ 380	\$ 125	\$ 29	\$ 1,942	\$ 254	\$ 46,907	\$ 76	\$ 201	\$ 62	\$ 793	\$ 0,817				
2019	\$ 45,855	8.830%	\$ 4,101	\$ 1,049	\$ 247	\$ 2,160	\$ 3,052	\$ 45,118	\$ 677	\$ 2,323	\$ 713	\$ 6,965	\$ 6,147				
2020	\$ 42,603	8.230%	\$ 3,697	\$ 635	\$ 149	\$ 2,337	\$ 3,052	\$ 41,866	\$ 614	\$ 2,155	\$ 602	\$ 6,883	\$ 5,542				
2021	\$ 39,251	5.900%	\$ 3,491	\$ 439	\$ 103	\$ 2,441	\$ 3,052	\$ 38,888	\$ 752	\$ 1,992	\$ 612	\$ 6,407	\$ 4,952				
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	\$ 30,399	5.900%	\$ 3,491	\$ 439	\$ 103	\$ 2,752	\$ 3,052	\$ 29,221	\$ 568	\$ 1,504	\$ 462	\$ 5,596	\$ 3,609				
2025	\$ 27,344	5.910%	\$ 3,497	\$ 445	\$ 105	\$ 2,856	\$ 3,052	\$ 26,068	\$ 507	\$ 1,342	\$ 412	\$ 5,319	\$ 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%	\$ 1,748	\$ (1,306)	\$ (307)	\$ 2,965	\$ 3,052	\$ 10,491	\$ 204	\$ 540	\$ 168	\$ 3,962	\$ 1,760				
2031	\$ 9,032	0.000%	\$ -	\$ (3,052)	\$ (717)	\$ 2,848	\$ 3,052	\$ 7,952	\$ 155	\$ 409	\$ 128	\$ 3,742	\$ 1,581				
2032	\$ 5,980	0.000%	\$ -	\$ (3,052)	\$ (717)	\$ 2,731	\$ 3,052	\$ 5,617	\$ 109	\$ 289	\$ 89	\$ 3,539	\$ 1,387				
2033	\$ 2,929	0.000%	\$ -	\$ (3,052)	\$ (717)	\$ 2,604	\$ 3,052	\$ 3,282	\$ 64	\$ 169	\$ 52	\$ 3,337	\$ 1,229				
2034 TWELVE MONTHS	\$ (68)	0.000%	\$ -	\$ (3,027)	\$ (711)	\$ 102	\$ 3,027	\$ 957	\$ 10	\$ 49	\$ 15	\$ 3,110	\$ 1,078				
TOTAL		100.000%	\$ 59,057	\$ 438	\$ -	\$ 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.
(c) See Exhibit J-TU - Cost of Capital.
(d) From Exhibit H-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study.
(e) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017.
(f) See Exhibit J-TU - Cost of Capital.
(g) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.

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

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

	2015	2017	2018
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 216,790 (a)		
LAND COST AT JULY 31, 2015	\$ 815 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 122,314 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$ 94,476 (a)		
RETIREMENT DATE	12/31/2034 (a)		
LEVELIZATION PERIOD IN MONTHS	233 (a)		
TAX LIFE	15 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (c)
AFTER TAX COST OF CAPITAL		6.6189% (b)	6.4418% (d)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			1.9440% (d)
WEIGHTED ANNUAL INTEREST RATE			5.1480% (d)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			61.52780% (e)
NC RETAIL ALLOCATION FACTOR		61.33723% (b)	

REVISIONS BASED ON 2018 TEST YEAR ACTUALS

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (e) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
Reg Balance July 31, 2015	\$ 58,523																		
2015			\$ 2,908	\$ 1,737	\$ 811	\$ 811	\$ 1,170	\$ 57,834	\$ 816	\$ 1,298	\$ 704	\$ 3,868				\$ 2,850	\$ 1,038	\$ 1,058	
2016			\$ 5,854	\$ 2,774	\$ 980	\$ 1,570	\$ 2,780	\$ 64,871	\$ 1,170	\$ 2,968	\$ 1,569	\$ 8,493				\$ 8,204	\$ 2,290	\$ 3,603	
2017			\$ 8,060	\$ 2,245	\$ 17	\$ 1,508	\$ 2,814	\$ 51,248	\$ 1,101	\$ 2,770	\$ 1,428	\$ 8,113				\$ 6,185	\$ 1,928	\$ 5,743	
2018 January	\$ 51,504	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,618	\$ 254	\$ 50,029	\$ 80	\$ 225	\$ 69	\$ 838			\$ 618	\$ 500	\$ 138	\$ 5,913	
February	\$ 51,250	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,647	\$ 254	\$ 49,745	\$ 80	\$ 224	\$ 69	\$ 838			\$ 614	\$ 500	\$ 138	\$ 6,083	
March	\$ 50,998	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,677	\$ 254	\$ 49,461	\$ 84	\$ 218	\$ 87	\$ 823			\$ 612	\$ 500	\$ 123	\$ 6,239	
April	\$ 50,741	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,707	\$ 254	\$ 49,177	\$ 80	\$ 211	\$ 65	\$ 810			\$ 610	\$ 500	\$ 110	\$ 6,383	
May	\$ 50,487	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,737	\$ 254	\$ 48,893	\$ 79	\$ 210	\$ 64	\$ 808			\$ 608	\$ 500	\$ 108	\$ 6,528	
June	\$ 50,233	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,766	\$ 254	\$ 48,608	\$ 79	\$ 209	\$ 64	\$ 806			\$ 606	\$ 500	\$ 105	\$ 6,668	
July	\$ 49,978	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,796	\$ 254	\$ 48,324	\$ 78	\$ 207	\$ 64	\$ 804			\$ 604	\$ 500	\$ 103	\$ 6,808	
August	\$ 49,724	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,826	\$ 254	\$ 48,040	\$ 78	\$ 206	\$ 63	\$ 802			\$ 602	\$ 500	\$ 101	\$ 6,945	
September	\$ 49,470	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,856	\$ 254	\$ 47,756	\$ 77	\$ 205	\$ 63	\$ 800			\$ 600	\$ 500	\$ 99	\$ 7,082	
October	\$ 49,215	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,885	\$ 254	\$ 47,472	\$ 77	\$ 204	\$ 63	\$ 797			\$ 597	\$ 500	\$ 97	\$ 7,218	
November	\$ 48,961	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,916	\$ 254	\$ 47,188	\$ 76	\$ 202	\$ 62	\$ 795			\$ 595	\$ 500	\$ 95	\$ 7,352	
December	\$ 48,707	7.700%	\$ 381	\$ 127	\$ 30	\$ 1,945	\$ 254	\$ 46,904	\$ 76	\$ 201	\$ 62	\$ 793			\$ 593	\$ 500	\$ 93	\$ 7,485	

Latest Levelized Payment Calculations

	2017 Ending Deferral	Future Revenue Stream 2018 Forward	Total
Net present value	\$ 5,395	\$ 55,642	\$ 60,838
Annual payment	\$ 531	\$ 5,471	\$ 6,002
Monthly payment	\$ 44	\$ 458	\$ 500

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2018 on Docket E-2, Sub 1110.
 (b) Based on the assumptions as filed with the Commission under Docket E-2, Sub 1170.
 (c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017.
 (d) See Exhibit J-TU - Cost of Capital.
 (e) After tax cost of capital and weighted annual interest and after tax equity rates were updated for DEP's last general rate case. See Exhibit J-TU - Cost of Capital
 (f) From Exhibit I-TU, Demand Allocator to NC Retail from 2018 Cost of Service study

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

	2015	REVISIONS FOR 2017	REVISIONS FOR 2018
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 178,639 (a)		
LAND COST AT JULY 31, 2015	\$ 3,300 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 100,546 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$81,392		
RETIREMENT DATE	6/20/2035 (a)		
LEVELIZATION PERIOD IN MONTHS	239 (a)		209.67
TAX LIFE	20 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		6.6189% (b)	8.4416% (e)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			1.9440% (e)
WEIGHTED ANNUAL INTEREST RATE			5.1460% (e)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			
NC RETAIL ALLOCATION FACTOR	61.33723% (c)		

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - N)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Beg Balance July 31, 2015	\$ 40,060																
2016	\$ 47,898	3.750%	\$ 1,785	\$ 401	\$ 141	\$ 141	\$ 1,385	\$ 48,307	\$ 432	\$ 1,088	\$ 590	\$ 3,475		\$ 2,495	\$ 980	\$ 998	
2016	\$ 44,412	7.219%	\$ 3,416	\$ 133	\$ 45	\$ 187	\$ 3,283	\$ 45,890	\$ 988	\$ 2,481	\$ 1,312	\$ 8,082		\$ 5,755	\$ 2,308	\$ 3,457	
2017	\$ 41,104	6.677%	\$ 3,188	\$ (110)	\$ (67)	\$ 100	\$ 3,308	\$ 42,592	\$ 915	\$ 2,303	\$ 1,187	\$ 7,712		\$ 5,737	\$ 1,875	\$ 5,742	\$ 5,395
2018 January	\$ 40,907	6.177%	\$ 247	\$ 49	\$ 12	\$ 111	\$ 187	\$ 40,800	\$ 68	\$ 175	\$ 54	\$ 483					
February	\$ 40,709	6.177%	\$ 247	\$ 49	\$ 12	\$ 123	\$ 187	\$ 40,691	\$ 66	\$ 175	\$ 54	\$ 482					
March	\$ 40,512	6.177%	\$ 247	\$ 49	\$ 12	\$ 135	\$ 187	\$ 40,482	\$ 66	\$ 174	\$ 53	\$ 490					
April	\$ 40,315	6.177%	\$ 247	\$ 49	\$ 12	\$ 148	\$ 187	\$ 40,273	\$ 65	\$ 173	\$ 53	\$ 488					
May	\$ 40,117	6.177%	\$ 247	\$ 49	\$ 12	\$ 158	\$ 187	\$ 40,064	\$ 65	\$ 172	\$ 53	\$ 487					
June	\$ 39,920	6.177%	\$ 247	\$ 49	\$ 12	\$ 169	\$ 187	\$ 39,855	\$ 65	\$ 171	\$ 53	\$ 485					
July	\$ 39,722	6.177%	\$ 247	\$ 49	\$ 12	\$ 181	\$ 187	\$ 39,646	\$ 64	\$ 170	\$ 52	\$ 484					
August	\$ 39,525	6.177%	\$ 247	\$ 49	\$ 12	\$ 192	\$ 187	\$ 39,437	\$ 64	\$ 169	\$ 52	\$ 482					
September	\$ 39,328	6.177%	\$ 247	\$ 49	\$ 12	\$ 204	\$ 187	\$ 39,228	\$ 64	\$ 168	\$ 52	\$ 481					
October	\$ 39,130	6.177%	\$ 247	\$ 49	\$ 12	\$ 215	\$ 187	\$ 39,018	\$ 63	\$ 167	\$ 51	\$ 479					
November	\$ 38,933	6.177%	\$ 247	\$ 49	\$ 12	\$ 227	\$ 187	\$ 38,810	\$ 63	\$ 166	\$ 51	\$ 478					
December	\$ 38,735	6.177%	\$ 247	\$ 49	\$ 12	\$ 238	\$ 187	\$ 38,602	\$ 63	\$ 165	\$ 51	\$ 476	\$ 5,485				
2019	\$ 36,388	5.713%	\$ 2,737	\$ 388	\$ 88	\$ 325	\$ 2,389	\$ 37,289	\$ 725	\$ 1,919	\$ 689	\$ 5,602					\$ 4,944
2020	\$ 33,997	5.285%	\$ 2,532	\$ 182	\$ 38	\$ 363	\$ 2,389	\$ 34,838	\$ 677	\$ 1,763	\$ 551	\$ 5,391					\$ 4,470
2021	\$ 31,828	4.888%	\$ 2,341	\$ (28)	\$ (7)	\$ 357	\$ 2,389	\$ 32,453	\$ 631	\$ 1,671	\$ 513	\$ 5,164					\$ 4,038
2022	\$ 29,259	4.522%	\$ 2,166	\$ (203)	\$ (48)	\$ 309	\$ 2,369	\$ 30,111	\$ 585	\$ 1,550	\$ 478	\$ 4,981					\$ 3,645
2023	\$ 26,890	4.402%	\$ 2,137	\$ (232)	\$ (55)	\$ 254	\$ 2,369	\$ 27,793	\$ 540	\$ 1,431	\$ 440	\$ 4,780					\$ 3,280
2024	\$ 24,521	4.461%	\$ 2,137	\$ (232)	\$ (54)	\$ 145	\$ 2,369	\$ 25,479	\$ 495	\$ 1,312	\$ 403	\$ 4,579					\$ 2,958
2025	\$ 22,152	4.462%	\$ 2,137	\$ (232)	\$ (55)	\$ 91	\$ 2,369	\$ 23,164	\$ 450	\$ 1,192	\$ 366	\$ 4,378					\$ 2,657
2026	\$ 19,783	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ 36	\$ 2,369	\$ 20,850	\$ 405	\$ 1,073	\$ 330	\$ 4,177					\$ 2,382
2027	\$ 17,414	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ (18)	\$ 2,369	\$ 18,535	\$ 360	\$ 954	\$ 293	\$ 3,977					\$ 2,130
2028	\$ 15,045	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ (73)	\$ 2,369	\$ 16,221	\$ 315	\$ 835	\$ 257	\$ 3,776					\$ 1,900
2029	\$ 12,678	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ (127)	\$ 2,369	\$ 13,906	\$ 270	\$ 718	\$ 220	\$ 3,575					\$ 1,690
2030	\$ 10,307	4.481%	\$ 2,137	\$ (232)	\$ (55)	\$ (182)	\$ 2,369	\$ 11,592	\$ 225	\$ 597	\$ 183	\$ 3,374					\$ 1,489
2031	\$ 7,938	4.462%	\$ 2,137	\$ (232)	\$ (54)	\$ (236)	\$ 2,369	\$ 9,277	\$ 180	\$ 478	\$ 147	\$ 3,174					\$ 1,324
2032	\$ 5,569	4.401%	\$ 2,137	\$ (232)	\$ (55)	\$ (281)	\$ 2,369	\$ 6,963	\$ 135	\$ 358	\$ 110	\$ 2,973					\$ 1,186
2033	\$ 3,200	4.482%	\$ 2,137	\$ (232)	\$ (54)	\$ (345)	\$ 2,369	\$ 4,646	\$ 80	\$ 239	\$ 74	\$ 2,772					\$ 1,021
2034	\$ 831	4.461%	\$ 2,137	\$ (232)	\$ (55)	\$ (357)	\$ 1,120	\$ 2,334	\$ 45	\$ 120	\$ 37	\$ 2,571					\$ 890
2035 SIX MONTHS	\$ (289)	2.231%	\$ 1,068	\$ (51)	\$ (12)	\$ (357)	\$ 1,120	\$ 623	\$ 12	\$ 32	\$ 10	\$ 1,174					\$ 381
TOTAL		100.000%	\$ 47,827	\$ (1,521)		\$ 49,349		\$28,852	\$ 9,250	\$ 24,168	\$ 8,715	\$ 51,502	\$ 45,847				

Notes:

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

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

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

	2015	2017	2018
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 178,639 (a)		
LAND COST AT JULY 31, 2015	\$ 3,300 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 100,546 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$ 81,392		
RETIREMENT DATE	6/20/2035 (a)		
LEVELIZATION PERIOD IN MONTHS	239 (a)		
TAX LIFE	20 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (c)
AFTER TAX COST OF CAPITAL		8.6189% (b)	6.4418% (d)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			1.9440% (d)
WEIGHTED ANNUAL NET OF TAX INTEREST RATE			5.1480% (d)
NC RETAIL ALLOCATION FACTOR		81.33723% (b)	61.52780% (e)

REVISIONS BASED ON 2018 TEST YEAR ACTUALS

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
Reg Balance July 31, 2015	\$ 49,060																		
2015			\$ 1,765	\$ 401	\$ 141	\$ 141	\$ 1,358	\$ 48,310	\$ 432	\$ 1,085	\$ 690	\$ 3,476				\$ 2,495	\$ 950	\$ 998	
2016			\$ 3,418	\$ 133	\$ 46	\$ 187	\$ 3,283	\$ 45,889	\$ 888	\$ 2,481	\$ 1,312	\$ 8,061				\$ 6,788	\$ 2,306	\$ 3,457	
2017			\$ 3,198	\$ (116)	\$ (87)	\$ 100	\$ 3,308	\$ 42,592	\$ 915	\$ 2,303	\$ 1,187	\$ 7,712				\$ 5,737	\$ 1,975	\$ 5,742	
2018 January	\$ 40,907	6.177%	\$ 247	\$ 50	\$ 12	\$ 111	\$ 197	\$ 40,900	\$ 73	\$ 184	\$ 57	\$ 511		\$ 493	\$ 18	\$ 408	\$ 104	\$ 5,876	
February	\$ 40,709	6.177%	\$ 247	\$ 50	\$ 12	\$ 123	\$ 187	\$ 40,691	\$ 73	\$ 183	\$ 56	\$ 510		\$ 492	\$ 18	\$ 408	\$ 102	\$ 6,014	
March	\$ 40,512	6.177%	\$ 247	\$ 50	\$ 12	\$ 135	\$ 187	\$ 40,482	\$ 69	\$ 179	\$ 55	\$ 499		\$ 490	\$ 9	\$ 408	\$ 92	\$ 6,139	
April	\$ 40,315	6.177%	\$ 247	\$ 50	\$ 12	\$ 147	\$ 187	\$ 40,273	\$ 65	\$ 173	\$ 53	\$ 489		\$ 489	\$ 0	\$ 408	\$ 81	\$ 6,253	
May	\$ 40,117	6.177%	\$ 247	\$ 50	\$ 12	\$ 158	\$ 187	\$ 40,063	\$ 65	\$ 172	\$ 53	\$ 487		\$ 487	\$ 0	\$ 408	\$ 79	\$ 6,368	
June	\$ 39,920	6.177%	\$ 247	\$ 50	\$ 12	\$ 170	\$ 187	\$ 39,854	\$ 65	\$ 171	\$ 53	\$ 485		\$ 485	\$ (1)	\$ 408	\$ 78	\$ 6,479	
July	\$ 39,722	6.177%	\$ 247	\$ 50	\$ 12	\$ 182	\$ 187	\$ 39,645	\$ 64	\$ 169	\$ 52	\$ 484		\$ 484	\$ (1)	\$ 408	\$ 76	\$ 6,590	
August	\$ 39,525	6.177%	\$ 247	\$ 50	\$ 12	\$ 193	\$ 187	\$ 39,436	\$ 64	\$ 168	\$ 52	\$ 482		\$ 482	\$ 0	\$ 408	\$ 75	\$ 6,701	
September	\$ 39,327	6.177%	\$ 247	\$ 50	\$ 12	\$ 205	\$ 187	\$ 39,227	\$ 64	\$ 167	\$ 51	\$ 479		\$ 481	\$ (1)	\$ 408	\$ 73	\$ 6,811	
October	\$ 39,130	6.177%	\$ 247	\$ 50	\$ 12	\$ 217	\$ 187	\$ 39,018	\$ 63	\$ 166	\$ 51	\$ 478		\$ 479	\$ 0	\$ 408	\$ 72	\$ 6,920	
November	\$ 38,933	6.177%	\$ 247	\$ 50	\$ 12	\$ 229	\$ 187	\$ 38,809	\$ 63	\$ 166	\$ 51	\$ 478		\$ 478	\$ 0	\$ 408	\$ 70	\$ 7,020	
December	\$ 38,735	6.177%	\$ 247	\$ 50	\$ 12	\$ 240	\$ 187	\$ 38,599	\$ 63	\$ 166	\$ 51	\$ 478		\$ 478	\$ (1)	\$ 408	\$ 69	\$ 7,135	

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2018 on Docket E-2, Sub 1110.
(b) Based on the assumptions as filed with the Commission under Docket E-2, Sub 1178.
(c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017.
See Exhibit J-TU - Cost of Capital.
(d) After tax cost of capital and weighted annual interest and after tax equity rates were updated for DEP's last general rate case. See Exhibit J-TU - Cost of Capital.
(e) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study

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

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)

	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 -	8/20/2035 (a)		6/20/2035 (e)
LEVELIZATION PERIOD IN MONTHS	239 (a)		215
TAX LIFE	20 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.50% (d)
AFTER TAX COST OF CAPITAL		6.8189% (b)	6.4416% (e)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			
WEIGHTED ANNUAL INTEREST RATE			1.9440% (a)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			5.1480% (e)
NC RETAIL ALLOCATION FACTOR	61.33723% (c)		

REVISIONS BASED ON 2017 TEST YEAR ACTUALS & UPDATED DEPRECIATION RATE, COMPOSITE TAX RATE AND AFTER TAX COST OF CAPITAL BASED DEP'S RATE CASE PROCEEDING

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR PROPERTY (c) (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	LEVELIZED NC RETAIL REVENUE (Col N)	CURRENT MONTH DEFERRAL (Col O) (L - O)	CUMULATIVE DEFERRAL PLUS INTEREST (Col P)	DEFERRAL PRESENT VALUE (Col Q)
Begin 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	7.218%	\$ 455	\$ (19)	\$ (7)	\$ 7	\$ 475	\$ 5,631	\$ 125	\$ 315	\$ 167	\$ 1,082		\$ 908		\$ 174	\$ 258
2017	\$ 5,122	6.077%	\$ 426	\$ (55)	\$ (15)	\$ (9)	\$ 482	\$ 5,368	\$ 115	\$ 290	\$ 149	\$ 1,036		\$ 898		\$ 137	\$ 418
2018	\$ 5,094.5	6.177%	\$ 33	\$ 5	\$ 1	\$ (7)	\$ 28	\$ 5,110	\$ 8	\$ 22	\$ 7	\$ 65					
January	\$ 5,094.5	6.177%	\$ 33	\$ 5	\$ 1	\$ (7)	\$ 28	\$ 5,110	\$ 8	\$ 22	\$ 7	\$ 65					
February	\$ 5,058.4	6.177%	\$ 33	\$ 5	\$ 1	\$ (6)	\$ 28	\$ 5,087	\$ 8	\$ 22	\$ 7	\$ 65					
March	\$ 5,038.4	6.177%	\$ 33	\$ 5	\$ 1	\$ (5)	\$ 28	\$ 5,058	\$ 8	\$ 22	\$ 7	\$ 65					
April	\$ 5,010.4	6.177%	\$ 33	\$ 5	\$ 1	\$ (4)	\$ 28	\$ 5,029	\$ 8	\$ 22	\$ 7	\$ 64					
May	\$ 4,982.4	6.177%	\$ 33	\$ 5	\$ 1	\$ (3)	\$ 28	\$ 5,000	\$ 8	\$ 21	\$ 7	\$ 64					
June	\$ 4,954.3	6.177%	\$ 33	\$ 5	\$ 1	\$ (2)	\$ 28	\$ 4,971	\$ 8	\$ 21	\$ 7	\$ 64					
July	\$ 4,926.3	6.177%	\$ 33	\$ 5	\$ 1	\$ (1)	\$ 28	\$ 4,941	\$ 8	\$ 21	\$ 7	\$ 64					
August	\$ 4,898.3	6.177%	\$ 33	\$ 5	\$ 1	\$ 1	\$ 28	\$ 4,912	\$ 8	\$ 21	\$ 6	\$ 64					
September	\$ 4,870.3	6.177%	\$ 33	\$ 5	\$ 1	\$ 2	\$ 28	\$ 4,883	\$ 8	\$ 21	\$ 6	\$ 63					
October	\$ 4,842.2	6.177%	\$ 33	\$ 5	\$ 1	\$ 3	\$ 28	\$ 4,854	\$ 8	\$ 21	\$ 6	\$ 63					
November	\$ 4,814.2	6.177%	\$ 33	\$ 5	\$ 1	\$ 4	\$ 28	\$ 4,825	\$ 8	\$ 21	\$ 6	\$ 63					
December	\$ 4,786.2	6.177%	\$ 33	\$ 5	\$ 1	\$ 5	\$ 28	\$ 4,796	\$ 8	\$ 21	\$ 6	\$ 63	\$ 720				
2019	\$ 4,450	5.713%	\$ 385	\$ 29	\$ 7	\$ 12	\$ 336	\$ 4,810	\$ 90	\$ 237	\$ 73	\$ 736		\$ 650			
2020	\$ 4,114	5.285%	\$ 337	\$ 1	\$ 0	\$ 12	\$ 336	\$ 4,270	\$ 83	\$ 220	\$ 68	\$ 707		\$ 566			
2021	\$ 3,777	4.888%	\$ 312	\$ (24)	\$ (6)	\$ 6	\$ 336	\$ 3,936	\$ 77	\$ 203	\$ 62	\$ 678		\$ 526			
2022	\$ 3,441	4.522%	\$ 269	\$ (48)	\$ (11)	\$ (5)	\$ 336	\$ 3,606	\$ 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)	\$ (20)	\$ 336	\$ 2,960	\$ 58	\$ 152	\$ 47	\$ 593		\$ 383			
2025	\$ 2,432	4.462%	\$ 285	\$ (51)	\$ (12)	\$ (41)	\$ 336	\$ 2,635	\$ 51	\$ 136	\$ 42	\$ 565		\$ 343			
2026	\$ 2,096	4.461%	\$ 255	\$ (51)	\$ (12)	\$ (53)	\$ 336	\$ 2,311	\$ 45	\$ 119	\$ 37	\$ 537		\$ 306			
2027	\$ 1,760	4.462%	\$ 285	\$ (51)	\$ (12)	\$ (65)	\$ 336	\$ 1,987	\$ 39	\$ 102	\$ 31	\$ 509		\$ 272			
2028	\$ 1,423	4.461%	\$ 285	\$ (51)	\$ (12)	\$ (77)	\$ 336	\$ 1,663	\$ 32	\$ 86	\$ 26	\$ 481		\$ 242			
2029	\$ 1,087	4.462%	\$ 285	\$ (51)	\$ (12)	\$ (89)	\$ 336	\$ 1,339	\$ 26	\$ 69	\$ 21	\$ 452		\$ 214			
2030	\$ 751	4.461%	\$ 285	\$ (51)	\$ (12)	\$ (101)	\$ 336	\$ 1,014	\$ 20	\$ 52	\$ 16	\$ 424		\$ 188			
2031	\$ 415	4.462%	\$ 285	\$ (51)	\$ (12)	\$ (113)	\$ 336	\$ 690	\$ 13	\$ 38	\$ 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	\$ 159	\$ 62				
TOTAL		100.000%	\$ 5,949	\$ (408)		\$ 6,357		\$ 1,068	\$ 2,760	\$ 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.
(c) See Exhibit J-TU - Cost of Capital.
(d) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study.
(e) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017.
(f) See Exhibit J-TU - Cost of Capital.
(g) Depreciation rates and debt and equity return rates were updated to reflect new rates based on DEP's approved general rate case under Docket E-2, Sub 1142.

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

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

	2015	2017	2018
ASSUMPTIONS:			
GROSS DEPRECIABLE PLANT AT JULY 31, 2015	\$ 72,950 (a)		
LAND COST AT JULY 31, 2015	\$ 1 (a)		
ACCUMULATED DEPRECIATION AT JULY 31, 2015	\$ 62,539 (a)		
NET PLANT EXCLUDING ACQUISITION COSTS	\$10,412		
RETIREMENT DATE	6/20/2035 (a)		
LEVELIZATION PERIOD IN MONTHS	239 (a)		6/20/2033 (f) 215 (f)
TAX LIFE	20 (a)		
COMPOSITE TAX RATE		34.01% (b)	23.90% (c)
AFTER TAX COST OF CAPITAL		6.6165% (b)	8.4416% (c)
DEPRECIATION RATE			
FIRST YEAR BOOK DEPRECIATION RATE			1.9440% (d)
WEIGHTED ANNUAL INTEREST RATE			5.1400% (d)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE			61.52780% (e)
NC RETAIL ALLOCATION FACTOR		61.33723% (b)	

BASED ON 2018 TEST YEAR ACTUALS

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 20 YR DEPRECIATION (Col B)	TAX ANNUAL DEPRECIATION (Col C)	TAX DEPR. MINUS BOOK DEPR. (Col D)	ANNUAL DEF. TAXES FROM DEPR. (Col E)	DEFERRED TAX BALANCE (Col F)	BOOK DEPRECIATION (Col G)	AVERAGE INVESTMENT FOR THE YEAR (Col H)	COST OF CAPITAL INTEREST (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
Reg Balance July 31, 2015	\$ 8,270																		
2015			\$ 235	\$ 38	\$ 13	\$ 13	\$ 197	\$ 6,171	\$ 65	\$ 139	\$ 78	\$ 467				\$ 395	\$ 72	\$ 73	
2016			\$ 455	\$ (18)	\$ (7)	\$ 7	\$ 475	\$ 5,832	\$ 129	\$ 316	\$ 187	\$ 1,082				\$ 908	\$ 174	\$ 258	
2017			\$ 428	\$ (55)	\$ (18)	\$ (8)	\$ 482	\$ 5,368	\$ 115	\$ 290	\$ 149	\$ 1,036				\$ 809	\$ 137	\$ 418	
2018 January	\$ 5,094	6.177%	\$ 33	\$ 5	\$ 1	\$ (7)	\$ 28	\$ 5,118	\$ 0	\$ 23	\$ 7	\$ 67			\$ 65	\$ 62	\$ 15	\$ 438	
February	\$ 5,066	6.177%	\$ 33	\$ 5	\$ 1	\$ (6)	\$ 28	\$ 5,087	\$ 0	\$ 23	\$ 7	\$ 67			\$ 65	\$ 62	\$ 15	\$ 454	
March	\$ 5,039	6.177%	\$ 33	\$ 5	\$ 1	\$ (5)	\$ 28	\$ 5,058	\$ 0	\$ 22	\$ 7	\$ 66			\$ 65	\$ 62	\$ 14	\$ 471	
April	\$ 5,010	6.177%	\$ 33	\$ 5	\$ 1	\$ (4)	\$ 28	\$ 5,029	\$ 0	\$ 22	\$ 7	\$ 64			\$ 64	\$ 62	\$ 13	\$ 488	
May	\$ 4,982	6.177%	\$ 33	\$ 5	\$ 1	\$ (3)	\$ 28	\$ 5,000	\$ 0	\$ 21	\$ 7	\$ 64			\$ 64	\$ 62	\$ 12	\$ 501	
June	\$ 4,954	6.177%	\$ 33	\$ 5	\$ 1	\$ (2)	\$ 28	\$ 4,971	\$ 0	\$ 21	\$ 7	\$ 64			\$ 64	\$ 62	\$ 12	\$ 516	
July	\$ 4,926	6.177%	\$ 33	\$ 5	\$ 1	\$ (1)	\$ 28	\$ 4,941	\$ 0	\$ 21	\$ 7	\$ 64			\$ 64	\$ 62	\$ 12	\$ 530	
August	\$ 4,898	6.177%	\$ 33	\$ 5	\$ 1	\$ 1	\$ 28	\$ 4,912	\$ 0	\$ 21	\$ 6	\$ 64			\$ 64	\$ 62	\$ 12	\$ 545	
September	\$ 4,870	6.177%	\$ 33	\$ 5	\$ 1	\$ 2	\$ 28	\$ 4,883	\$ 0	\$ 21	\$ 6	\$ 63			\$ 63	\$ 62	\$ 11	\$ 559	
October	\$ 4,842	6.177%	\$ 33	\$ 5	\$ 1	\$ 3	\$ 28	\$ 4,854	\$ 0	\$ 21	\$ 6	\$ 63			\$ 63	\$ 62	\$ 11	\$ 574	
November	\$ 4,814	6.177%	\$ 33	\$ 5	\$ 1	\$ 4	\$ 28	\$ 4,825	\$ 0	\$ 21	\$ 6	\$ 63			\$ 63	\$ 62	\$ 11	\$ 588	
December	\$ 4,786	6.177%	\$ 33	\$ 5	\$ 1	\$ 5	\$ 28	\$ 4,795	\$ 0	\$ 21	\$ 6	\$ 63			\$ 63	\$ 62	\$ 11	\$ 602	

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) Based on the assumptions as filed with the Commission under Docket E-2, Sub 1170.
(c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-TU - Cost of Capital.
(d) After tax cost of capital and weighted annual interest and after tax equity rates were updated for DEP's last general rate case. See Exhibit J-TU - Cost of Capital.
(e) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 Cost of Service study.
(f) The plant retirement date was updated in connection with DEP's last general rate case. See Exhibit C-8-TU.

Latest Levelized Payment Calculations

	2017 Ending Deferral	Future Revenue Streams 2018 Forward	Total
Net present value	\$ 333	\$ 5,706	\$ 6,039
Annual payment	\$ 40	\$ 582	\$ 622
Monthly payment	\$ 3	\$ 48	\$ 52

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

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-7U - Cost of Capital.
- (c) From Exhibit I-E, Adjusted Demand Allocator using NC Retail 2017 cost of service study
- (d) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-7U - 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	\$ 223,443
Annual payment	\$ 1,384	\$ 16,835	\$ 18,219
Monthly payment	\$ 115	\$ 1,403	\$ 1,518

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

	2015	2017	2018
ASSUMPTIONS:			
ACQUISITION COSTS	\$ 349,822 (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)		
AFTER TAX COST OF CAPITAL		34.01% (b)	23.00% (c)
AMORTIZATION RATE		6.6169% (b)	6.4416% (d)
FIRST YEAR AMORTIZATION RATE			
WEIGHTED INTEREST RATE			1.9442% (d)
WEIGHTED NET OF TAX EQUITY RATE			5.1460% (d)
NG RETAIL ALLOCATION FACTOR		61.33723% (b)	61.52780% (e)

BASED ON 2018 TEST YEAR ACTUALS

	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (Col B)	TAX ANNUAL AMORTIZATION (Col C)	TAX DEPR. MINUS BOOK AMOR. (Col D)	ANNUAL DEPR. 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 (Col I)	EQUITY (Col J)	INCOME TAXES (Col K)	NC RETAIL REVENUE (Col L)	NC RETAIL REVENUE PRES VALUE (Col M)	ESTIMATED NC RETAIL REVENUE (Col N)	NC RETAIL REVENUE TRUE-UP AMOUNT (Col O)	LEVELIZED NC RETAIL REVENUE (Col P)	CURRENT MONTH DEFERRAL (Col Q) (L - P)	CUMULATIVE DEFERRAL PLUS INTEREST (Col R)	DEFERRAL PRESENT VALUE (Col S)
Boq Balance July 31, 2015	\$ 210,847																		
2015			\$ 10,642	\$ 7,338	\$ 2,580	\$ 2,580	\$ 3,204	\$ 207,955	\$ 1,681	\$ 4,684	\$ 2,540	\$ 12,290				\$ 8,500	\$ 3,790	\$ 3,653	
2016			\$ 20,158	\$ 12,408	\$ 4,291	\$ 6,871	\$ 7,732	\$ 193,051	\$ 4,275	\$ 10,761	\$ 5,690	\$ 28,458				\$ 18,824	\$ 6,634	\$ 13,972	
2017			\$ 18,345	\$ 10,818	\$ 240	\$ 7,111,820	\$ 7,826	\$ 187,477	\$ 4,027	\$ 10,135	\$ 5,223	\$ 27,211				\$ 19,748	\$ 7,465	\$ 16,067	
2018 January	\$ 181,431	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 7,283	\$ 654	\$ 184,561	\$ 330	\$ 831	\$ 255	\$ 2,071		\$ 1,086	\$ 85	\$ 1,518	\$ 553	\$ 18,722	
February	\$ 190,777	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 7,453	\$ 654	\$ 193,736	\$ 329	\$ 828	\$ 254	\$ 2,065		\$ 1,080	\$ 83	\$ 1,518	\$ 547	\$ 19,370	
March	\$ 191,122	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 7,624	\$ 654	\$ 192,911	\$ 312	\$ 804	\$ 247	\$ 2,017		\$ 1,074	\$ 43	\$ 1,518	\$ 499	\$ 19,863	
April	\$ 189,468	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 7,795	\$ 654	\$ 182,096	\$ 295	\$ 781	\$ 240	\$ 1,970		\$ 1,068	\$ 27	\$ 1,518	\$ 452	\$ 20,545	
May	\$ 188,814	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 7,966	\$ 654	\$ 181,291	\$ 264	\$ 776	\$ 239	\$ 1,964		\$ 1,062	\$ 27	\$ 1,518	\$ 446	\$ 21,103	
June	\$ 188,160	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 8,137	\$ 654	\$ 180,430	\$ 292	\$ 774	\$ 238	\$ 1,958		\$ 1,056	\$ 27	\$ 1,518	\$ 440	\$ 21,659	
July	\$ 187,506	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 8,307	\$ 654	\$ 179,611	\$ 291	\$ 771	\$ 237	\$ 1,952		\$ 1,050	\$ 27	\$ 1,518	\$ 434	\$ 22,212	
August	\$ 186,851	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 8,478	\$ 654	\$ 178,786	\$ 290	\$ 767	\$ 236	\$ 1,946		\$ 1,045	\$ 27	\$ 1,518	\$ 428	\$ 22,761	
September	\$ 186,197	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 8,649	\$ 654	\$ 177,961	\$ 289	\$ 763	\$ 235	\$ 1,940		\$ 1,039	\$ 27	\$ 1,518	\$ 422	\$ 23,308	
October	\$ 185,543	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 8,820	\$ 654	\$ 177,136	\$ 287	\$ 760	\$ 233	\$ 1,934		\$ 1,033	\$ 27	\$ 1,518	\$ 416	\$ 23,852	
November	\$ 184,889	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 8,991	\$ 654	\$ 176,311	\$ 286	\$ 756	\$ 232	\$ 1,929		\$ 1,027	\$ 27	\$ 1,518	\$ 410	\$ 24,392	
December	\$ 184,235	7.700%	\$ 1,381	\$ 727	\$ 171	\$ 9,162	\$ 654	\$ 175,486	\$ 284	\$ 753	\$ 231	\$ 1,923		\$ 1,021	\$ 27	\$ 1,518	\$ 404	\$ 24,929	

Notes:

- (a) Based on the assumptions as filed with the Commission on June 22, 2016 on Docket E-2, Sub 1110.
(b) Based on the assumptions as filed with the Commission under Docket E-2, Sub 1178.
(c) The composite tax rate was updated on January 1, 2018 to reflect the reduction in the federal tax rate based on the passage of the Tax Cuts and Jobs Act of 2017. See Exhibit J-TU - Cost of Capital.
(d) After tax cost of capital and weighted annual interest and after tax equity rates were updated for DEPs last general rate case. See Exhibit J-TU - Cost of Capital.
(e) From Exhibit HTU: Demand Allocator to NG Retail from 2018 Cost of Service study

Latest Levelized Payment Calculations			
	2017	Future	
	Ending	Revenue Streams	Total
	Deferral	2018	
Net present value	\$ 16,973	\$ 206,470	\$ 223,444
Annual payment	\$ 1,354	\$ 18,836	\$ 19,219
Monthly payment	\$ 115	\$ 1,403	\$ 1,518

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

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

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

Line No.	Plant	Retirement Date (Col A)	Calculation of Remaining Life (months) at 7/31/2015 (Col B)	Revised based on Rate Case Proceeding under Docket E-2, Sub 1142	
				Retirement Date (Col C)	Calculation of Remaining Life (months) at 12/31/2017 (Col D)
1	Closing Date of Purchase		7/31/2015		
	<u>Generating Plant Description:</u>				
2	Roxboro Unit 4 (including Roxboro Common)	6/20/2035	238.67	6/20/2033 (a)	185.67
3	Mayo Plant	6/20/2035	238.67	6/20/2035	209.67
4	Brunswick Unit 1	9/8/2036	253.27	9/8/2036	224.27
5	Brunswick Unit 2	12/27/2034	232.90	12/27/2034	203.90
6	Harris Plant	10/24/2046	374.80	10/24/2046	345.80

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

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

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

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

EXHIBIT C-10 -TU
DOCKET E-2, SUB 1207

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

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

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

EXHIBIT C-11-TU
DOCKET E-2, SUB 1207

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

Line No.			Gross Depreciable Plant at Acquisition (Col A) (a)	Cost of Removal Percentage (Col B) (b)	Estimated Cost of Removal Cost (Col C)	NC Retail Share of Cost of Removal (Col D)	NC Retail				Book Depreciation Expense (Col H)
							End of Period Investment Balance at 12/31/ 2017 (Col E) (c)	Total Costs Subject to Recovery (Col F)	Remaining Asset Life (months) (Col G) (d)		
	Estimated				= 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	\$ 223,777	\$ 224,160	345.80	\$ 7,779	
5	Mayo		\$ 178,639	0.2632%	\$ 470	\$ 288	\$ 41,104	\$ 41,393	209.67	\$ 2,369	
6	Roxboro combined (including common)		\$ 72,950	0.1800%	\$ 131	\$ 81	\$ 5,122	\$ 5,203	185.67	\$ 336	
	Actual										
1	NC Retail Allocation Factor	61.52780% (f)									
2	Brunswick 1 (including common)		\$ 273,020	0.0777%	\$ 212	\$ 131	\$ 53,077	\$ 53,208	224.27	\$ 2,847	
3	Brunswick 2		\$ 218,790	0.0729%	\$ 159	\$ 98	\$ 51,759	\$ 51,857	203.90	\$ 3,052	
4	Harris		\$ 895,848	0.0697%	\$ 624	\$ 384	\$ 223,777	\$ 224,161	345.80	\$ 7,779	
5	Mayo		\$ 178,639	0.2632%	\$ 470	\$ 289	\$ 41,104	\$ 41,394	209.67	\$ 2,369	
6	Roxboro combined (including common)		\$ 72,950	0.1800%	\$ 131	\$ 81	\$ 5,122	\$ 5,203	185.67	\$ 336	

Notes:

- (a) From Exhibit C-7-E: Plant Costs, Line 1 - 5.
- (b) From Exhibit C-10-E: Composite Depreciation Rates, Column B
- (c) From Exhibit C-1-E to C-6-E, Column A, NC Retail Investment balance as of 2017.
- (d) From Exhibit C-8-E: Calculation of Remaining Life, Column C.
- (e) From Exhibit I-E: Demand Allocator to NC Retail from 2017 cost of service study as adjusted for NCEMPA Purchase
- (f) From Exhibit I-E: Demand Allocator to NC Retail from 2018 cost of service study as adjusted for NCEMPA Purchase

EXHIBIT D-TU
DOCKET E-2, SUB 1207

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

Line No.	For the Year to Date												Year to Date		
	January Amount (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	Net Nuclear Fuel Inventory excluding CWIP	\$ 41,595	\$ 44,656	\$ 47,151	\$ 49,297	\$ 50,522	\$ 51,145	\$ 51,287	\$ 51,124	\$ 50,819	\$ 50,350	\$ 49,761	\$ 49,082	\$ 49,082 (a)	
2	Deferred Tax Asset (Liability) on Net Nuclear Fuel Inventory	\$ (1,313)	\$ (1,245)	\$ (1,206)	\$ (1,185)	\$ (1,149)	\$ (1,117)	\$ (1,072)	\$ (1,015)	\$ (966)	\$ (908)	\$ (845)	\$ (778)	\$ (778) (b)	
3	Materials and Supplies Inventory	\$ 61,044	\$ 61,166	\$ 61,111	\$ 60,958	\$ 60,870	\$ 60,812	\$ 60,808	\$ 60,790	\$ 60,771	\$ 60,754	\$ 60,705	\$ 60,664	\$ 60,664 (c)	
4	Dry Cask Storage	\$ 3,554	\$ 3,554	\$ 3,567	\$ 3,575	\$ 3,580	\$ 3,584	\$ 3,587	\$ 3,589	\$ 3,585	\$ 3,582	\$ 3,578	\$ 3,578	\$ 3,578 (d)	
5	Total average system investment for the rate period	(Line 1 + Line 2 + Line 3 + Line 4)	\$ 104,880	\$ 108,131	\$ 110,623	\$ 112,655	\$ 113,824	\$ 114,425	\$ 114,609	\$ 114,469	\$ 114,210	\$ 113,778	\$ 113,200	\$ 112,544	\$ 112,544
6	Allocated to NC retail	(Line 5 x 61.52780%)	\$ 64,530	\$ 66,530	\$ 68,064	\$ 69,314	\$ 70,033	\$ 70,403	\$ 70,517	\$ 70,442	\$ 70,271	\$ 70,005	\$ 69,649	\$ 69,246	\$ 69,246 (e)
7	Rate base pre-tax cost of capital - discounted year to date rate		0.7375%	1.4804%	2.2073%	2.9175%	3.6327%	4.3528%	5.0779%	5.8081%	6.5434%	7.2837%	8.0292%	8.7800%	8.7800% (f)
8	Total Year to Date NC retail revenues required for financing costs on above investment (Line 6 x Line 7)		\$ 476	\$ 985	\$ 1,502	\$ 2,022	\$ 2,544	\$ 3,054	\$ 3,581	\$ 4,091	\$ 4,598	\$ 5,099	\$ 5,592	\$ 6,080	\$ 6,080
9	Year to Date NC retail pre-tax return on deferred tax assets related to NCEMPA's nuclear decommissioning funds		\$ 74	\$ 149	\$ 225	\$ 300	\$ 377	\$ 456	\$ 537	\$ 619	\$ 704	\$ 791	\$ 879	\$ 970	\$ 970 (g)
10	Total Year to Date NC retail revenues required for financing costs	(Line 8 + Line 9)	\$ 550	\$ 1,134	\$ 1,727	\$ 2,322	\$ 2,921	\$ 3,520	\$ 4,117	\$ 4,711	\$ 5,302	\$ 5,890	\$ 6,472	\$ 7,050	\$ 7,050
11	Current Month NC retail revenues required for financing costs		\$ 550	\$ 585	\$ 693	\$ 795	\$ 889	\$ 969	\$ 997	\$ 993	\$ 991	\$ 988	\$ 982	\$ 978	

Notes:

- (a) From Exhibit D1-A-TU: Actual Net Nuclear Fuel year to date average balances, Column E, Line 2 - Line 13
(b) From Exhibit D1-B-TU: Accumulated Deferred Taxes on Nuclear Fuel year to date average balances, Column I, Line 2 - Line 13
(c) From Exhibit D-2-TU: Actual Material and Supplies year to date average balances, Column F, Line 2 - Line 13
(d) From Exhibit D-4-TU: Actual Dry Cask Storage year to date average balances, Column C, Line 2 - Line 13
(e) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 cost of service study of: 61.52780%
(f) From Exhibit J-TU: Cost of Capital, discounted before tax rate:
Annual rate applicable for January 1, 2018 - March 15, 2018, Column H, Line 3 9.2175%
Annual rate applicable for March 16, 2018 - March 15, 2019, Column M, Line 3 8.6740%
(g) From Exhibit D-3: Deferred tax asset, Column L

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

DUKE ENERGY PROGRESS

NCEMPA GENERATION ASSET PURCHASE

ACTUAL NET NUCLEAR FUEL BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2018

(EXCLUDES NUCLEAR FUEL CWIP BALANCES)

(Thousands of Dollars)

Line No.			Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col C)	Total (Col D)	Year to Date Average (Col E)
Current Test Year: Calendar 2018							
1	2017	December	\$ 11,113	\$ 20,382	\$ 7,428	\$ 38,923	(a)
2	2018	January	\$ 17,954	\$ 19,569	\$ 6,744	\$ 44,266	\$ 41,595
3	2018	February	\$ 25,875	\$ 18,874	\$ 6,029	\$ 50,778	\$ 44,656
4	2018	March	\$ 25,831	\$ 18,023	\$ 10,782	\$ 54,636	\$ 47,151
5	2018	April	\$ 25,259	\$ 17,207	\$ 15,418	\$ 57,883	\$ 49,297
6	2018	May	\$ 24,461	\$ 16,354	\$ 15,832	\$ 56,648	\$ 50,522
7	2018	June	\$ 23,732	\$ 15,720	\$ 15,433	\$ 54,885	\$ 51,145
8	2018	July	\$ 22,929	\$ 14,952	\$ 14,394	\$ 52,275	\$ 51,287
9	2018	August	\$ 22,125	\$ 14,100	\$ 13,601	\$ 49,826	\$ 51,124
10	2018	September	\$ 21,624	\$ 13,509	\$ 12,938	\$ 48,071	\$ 50,819
11	2018	October	\$ 20,826	\$ 12,676	\$ 12,154	\$ 45,657	\$ 50,350
12	2018	November	\$ 20,045	\$ 11,855	\$ 11,387	\$ 43,287	\$ 49,761
13	2018	December	\$ 19,268	\$ 11,048	\$ 10,614	\$ 40,930	\$ 49,082
14	Balance as of December 31, 2018		\$ 19,268	\$ 11,048	\$ 10,614	\$ 40,930	

Notes:

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

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

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

ADIT Expense (Income) Associated with Nuclear Fuel					ADIT Asset (Liability) Balance Associated with Nuclear Fuel					Year to Date	
Line No.		Brunswick 1 (Col A) (a)	Brunswick 2 (Col B) (b)	Harris (Col C) (c)	Total (Col D) (d)	Brunswick 1 (Col E)	Brunswick 2 (Col F)	Harris (Col G)	Total (Col H)	Average (Col I)	
Current Test Year: Calendar 2018											
1						Beginning Balance, January 1, 2018	\$ (275)	\$ (1,615)	\$ 494	\$ (1,397)	(f)
2	2018 January	\$ (39)	\$ (91)	\$ (37)	\$ (167)	\$ (236)	\$ (1,524)	\$ 531	\$ (1,229)	\$ (1,313)	
3	2018 February	\$ (13)	\$ (63)	\$ (45)	\$ (121)	\$ (223)	\$ (1,461)	\$ 576	\$ (1,109)	\$ (1,245)	
4	2018 March	\$ 143	\$ (100)	\$ (63)	\$ (20)	\$ (365)	\$ (1,362)	\$ 638	\$ (1,089)	\$ (1,206)	
5	2018 April	\$ 18	\$ (91)	\$ 88	\$ 15	\$ (384)	\$ (1,270)	\$ 551	\$ (1,104)	\$ (1,185)	
6	2018 May	\$ (35)	\$ (100)	\$ (4)	\$ (139)	\$ (349)	\$ (1,170)	\$ 555	\$ (965)	\$ (1,149)	
7	2018 June	\$ (18)	\$ (49)	\$ 30	\$ (38)	\$ (331)	\$ (1,122)	\$ 525	\$ (927)	\$ (1,117)	
8	2018 July	\$ (36)	\$ (80)	\$ (54)	\$ (170)	\$ (295)	\$ (1,041)	\$ 580	\$ (757)	\$ (1,072)	
9	2018 August	\$ (35)	\$ (100)	\$ (63)	\$ (199)	\$ (259)	\$ (941)	\$ 643	\$ (558)	\$ (1,015)	
10	2018 September	\$ 35	\$ (39)	\$ (33)	\$ (38)	\$ (295)	\$ (903)	\$ 675	\$ (522)	\$ (986)	
11	2018 October	\$ (34)	\$ (95)	\$ (61)	\$ (191)	\$ (260)	\$ (808)	\$ 736	\$ (332)	\$ (908)	
12	2018 November	\$ (31)	\$ (93)	\$ (57)	\$ (180)	\$ (230)	\$ (715)	\$ 793	\$ (152)	\$ (845)	
13	2018 December	\$ (30)	\$ (89)	\$ (58)	\$ (177)	\$ (200)	\$ (625)	\$ 851	\$ 26	\$ (778)	
						Accumulated Deferred Tax					
						Asset (Liability) as of					
14	Total deferred tax expense	\$ (75)	\$ (990)	\$ (358)	\$ (1,423)	December 31, 2018	\$ (200)	\$ (625)	\$ 851	\$ 26	

Notes:

- (a) Calculated as Column A from Exhibit D-1C-TU times the composite tax rate (e)
(b) Calculated as Column B from Exhibit D-1C-TU times the composite tax rate (e)
(c) Calculated as Column C from Exhibit D-1C-TU times the composite tax rate (e)
(d) Calculated as Column D from Exhibit D-1C-TU times the composite tax rate (e)
(e) Composite tax rate from Exhibit J-TU, Column M, Line 11 23.50%
(f) Based on ending balances as of December 31, 2017 as filed with the Commission on Exhibit D-1B-TU under Docket E-2, Sub 1176.

EXHIBIT D1-C-TU
DOCKET E-2, SUB 1207

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

Line No.	TAX DEPRECIATION EXPENSE MINUS BOOK AMORTIZATION				TAX BASIS AMORTIZATION EXPENSE ON NUCLEAR FUEL				BOOK AMORTIZATION EXPENSE ON NUCLEAR FUEL				
	Brunswick 1	Brunswick 2	Harris	Total	Brunswick 1	Brunswick 2	Harris	Total	Brunswick 1	Brunswick 2	Harris	Total	
	(Col A)	(Col B)	(Col C)	(Col D)	(Col E)	(Col F)	(Col G)	(Col H)	(Col I)	(Col J)	(Col K)	(Col L)	
Current Test Year Calendar 2018													
1	2018 January	\$ (167)	\$ (387)	\$ (159)	\$ (713)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 818	\$ 814	\$ 684	\$ 2,315
2	2018 February	\$ (56)	\$ (268)	\$ (190)	\$ (514)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 707	\$ 695	\$ 715	\$ 2,118
3	2018 March	\$ 607	\$ (424)	\$ (267)	\$ (84)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 44	\$ 851	\$ 792	\$ 1,688
4	2018 April	\$ 79	\$ (389)	\$ 373	\$ 82	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 572	\$ 816	\$ 152	\$ 1,540
5	2018 May	\$ (147)	\$ (425)	\$ (18)	\$ (591)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 788	\$ 852	\$ 543	\$ 2,193
6	2018 June	\$ (78)	\$ (207)	\$ 126	\$ (160)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 729	\$ 634	\$ 399	\$ 1,762
7	2018 July	\$ (151)	\$ (341)	\$ (231)	\$ (724)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 802	\$ 768	\$ 758	\$ 2,328
8	2018 August	\$ (153)	\$ (425)	\$ (268)	\$ (847)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 804	\$ 852	\$ 793	\$ 2,450
9	2018 September	\$ 150	\$ (164)	\$ (138)	\$ (152)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 501	\$ 591	\$ 683	\$ 1,755
10	2018 October	\$ (147)	\$ (406)	\$ (259)	\$ (812)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 788	\$ 833	\$ 784	\$ 2,414
11	2018 November	\$ (130)	\$ (395)	\$ (242)	\$ (767)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 781	\$ 822	\$ 766	\$ 2,369
12	2018 December	\$ (127)	\$ (380)	\$ (248)	\$ (755)	\$ 651	\$ 427	\$ 525	\$ 1,603	\$ 778	\$ 807	\$ 773	\$ 2,358
13	Total for the Test Period	\$ (321)	\$ (4,211)	\$ (1,522)	\$ (6,054)	\$ 7,811	\$ 5,123	\$ 6,298	\$ 19,232	\$ 8,132	\$ 9,334	\$ 7,820	\$ 25,286

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

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
ACTUAL MATERIALS AND SUPPLIES BALANCE BY GENERATING UNIT for TEST YEAR ENDED DECEMBER 2018
(Thousands of Dollars)

Line No.		Brunswick Common (Col A) (a)	Harris (Col B)	Mayo (Col C)	Roxboro Common (Col D) (b)	Total (Col E)	Year to Date Average (Col F)
Current Test Year: Calendar 2018							
1	2017 December	\$ 35,582	\$ 21,274	\$ 2,441	\$ 1,566	\$ 60,864	(c)
2	2018 January	\$ 35,942	\$ 21,284	\$ 2,437	\$ 1,561	\$ 61,225	\$ 61,044
3	2018 February	\$ 36,070	\$ 21,339	\$ 2,435	\$ 1,565	\$ 61,409	\$ 61,166
4	2018 March	\$ 35,675	\$ 21,272	\$ 2,438	\$ 1,560	\$ 60,945	\$ 61,111
5	2018 April	\$ 35,819	\$ 20,597	\$ 2,432	\$ 1,551	\$ 60,399	\$ 60,968
6	2018 May	\$ 35,785	\$ 20,605	\$ 2,434	\$ 1,554	\$ 60,378	\$ 60,870
7	2018 June	\$ 35,702	\$ 20,809	\$ 2,400	\$ 1,554	\$ 60,466	\$ 60,812
8	2018 July	\$ 35,963	\$ 20,836	\$ 2,417	\$ 1,563	\$ 60,778	\$ 60,808
9	2018 August	\$ 36,001	\$ 20,662	\$ 2,421	\$ 1,563	\$ 60,648	\$ 60,790
10	2018 September	\$ 35,984	\$ 20,636	\$ 2,416	\$ 1,566	\$ 60,602	\$ 60,771
11	2018 October	\$ 36,089	\$ 20,540	\$ 2,416	\$ 1,538	\$ 60,583	\$ 60,754
12	2018 November	\$ 35,692	\$ 20,538	\$ 2,402	\$ 1,530	\$ 60,162	\$ 60,705
13	2018 December	\$ 35,817	\$ 20,429	\$ 2,402	\$ 1,528	\$ 60,175	\$ 60,664
14	Balance as of December 31, 2018	\$ 35,817	\$ 20,429	\$ 2,402	\$ 1,528	\$ 60,175	

Notes:

- (a) Material and supplies inventory is not assigned or at the generating unit level. All inventory is assigned to Brunswick Common. Approximately 18.33% of the inventory assigned to Brunswick Common has been captured under this rider.
- (b) Material and supplies inventory is not assigned or at the generating unit level. All inventory that could be used at the four generating units at Roxboro is assigned to the Roxboro Common. Approximately 3.77% of the inventory assigned to Roxboro Common has been captured under this rider.
- (c) Based on ending balances as of December 31, 2017 as filed with the Commission on Exhibit D-2-TU under Docket E-2, Sub 1176.

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

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

ASSUMPTIONS:	2015	2016	2017	2018
DECOMMISSIONING FUNDS TRANSFERRED	\$ 287,077 (a)			
TAX LIFE USED FOR ACQUIRED NCEMPA ASSETS	15 (b)			
COMPOSITE TAX RATE		34.59% (c)	34.01% (d)	-23.50% (e)
AFTER TAX COST OF CAPITAL	-	6.6071% (c)	6.6189% (d)	6.4416% (f)
WEIGHTED ANNUAL INTEREST RATE				1.9440% (g)
WEIGHTED ANNUAL NET OF TAX EQUITY RATE				5.1480% (g)
NC RETAIL ALLOCATION FACTOR		60.60076% (c)	61.33723% (d)	61.52780% (h)

REVISIONS BASED ON TEST YEAR

YEAR	NC RETAIL END OF PERIOD INVESTMENT BALANCE (Col A)	MACRS RATE FOR 15 YR PROPERTY (b) (Col B)	ANNUAL REDUCTION IN TAX DEPRECIATION (Col C)	TAX DEPR. NOT ALLOWED CURRENTLY (Col D)	ANNUAL DEF. TAXES FOR NON DEDUCTIBLE (Col E)	DEFERRED TAX ASSET BALANCE (Col F)	AVERAGE INVESTMENT FOR THE YEAR (Col G)	COST OF CAPITAL INTEREST EQUITY (Col H)	INCOME TAXES (Col I)	NC RETAIL REVENUE (Col J)	YEAR TO DATE NC RETAIL REVENUE (Col L)
Beg Balance July 31, 2015	\$ 173,039										
2015		5.000%	\$ 8,652	\$ 8,652	\$ 3,042	\$ 3,042	\$ 634	\$ 14	\$ 34	\$ 19	\$ 66
2016		9.500%	\$ 16,527	\$ 16,527	\$ 5,717	\$ 8,759	\$ 5,900	\$ 127	\$ 319	\$ 169	\$ 614
2017		8.550%	\$ 15,055	\$ 15,055	\$ 696	\$ 9,455	\$ 10,979	\$ 239	\$ 602	\$ 310	\$ 1,151
2018 January	\$ -	7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 9,721	\$ 9,588	\$ 17	\$ 43	\$ 13	\$ 74
February		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 9,988	\$ 9,855	\$ 18	\$ 44	\$ 14	\$ 76
March		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 10,254	\$ 10,121	\$ 17	\$ 45	\$ 14	\$ 75
April		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 10,520	\$ 10,387	\$ 17	\$ 45	\$ 14	\$ 75
May		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 10,787	\$ 10,654	\$ 17	\$ 46	\$ 14	\$ 77
June		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 11,053	\$ 10,920	\$ 18	\$ 47	\$ 14	\$ 79
July		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 11,320	\$ 11,186	\$ 18	\$ 48	\$ 15	\$ 81
August		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 11,586	\$ 11,453	\$ 19	\$ 49	\$ 15	\$ 83
September		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 11,852	\$ 11,719	\$ 19	\$ 50	\$ 15	\$ 85
October		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 12,119	\$ 11,985	\$ 19	\$ 51	\$ 16	\$ 87
November		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 12,385	\$ 12,252	\$ 20	\$ 53	\$ 16	\$ 89
December		7.700%	\$ 1,133	\$ 1,133	\$ 266	\$ 12,651	\$ 12,518	\$ 20	\$ 54	\$ 17	\$ 90

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

- Notes: (a) From Exhibit C-7-TU
(b) From Exhibit C-9-TU
(c) From Exhibit D-3-TU as filed with the Commission under Docket E-2, Sub 1143
(d) From Exhibit D-3-TU as filed with the Commission under Docket E-2, Sub 1176
(e) From Exhibit J-TU, Column H and Column M, Line 11.
(f) From Exhibit J-TU, Column L, Line 4
(g) From Exhibit J-TU, Column K, Line 1 and Line 2
(h) From Exhibit I-TU

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

DUKE ENERGY PROGRESS

NCEMPA GENERATION ASSET PURCHASE

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

(Thousands of Dollars)

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

Notes:

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

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

EXHIBIT E-TU
DOCKET E-2, SUB 1207

Line No.		For the Month												Year to Date 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	\$ 133,909	\$ 135,104	\$ 136,434	\$ 139,937	\$ 146,852	\$ 152,961	\$ 157,814	\$ 161,791	\$ 164,958	\$ 167,648	\$ 170,075	\$ 172,722	\$ 172,722 (a)
2	Actual accumulated depreciation on actual capital additions to plant in service since the purchase date allocated to purchase from NCEMPA	\$ (2,985)	\$ (3,092)	\$ (3,209)	\$ (3,340)	\$ (3,482)	\$ (3,642)	\$ (3,815)	\$ (3,997)	\$ (4,186)	\$ (4,380)	\$ (4,577)	\$ (4,779)	\$ (4,779) (b)
3	Accumulated deferred income tax asset / (liability) related to capital additions to plant in service	\$ (20,478)	\$ (20,647)	\$ (20,790)	\$ (20,935)	\$ (21,281)	\$ (21,939)	\$ (22,553)	\$ (23,056)	\$ (23,478)	\$ (23,826)	\$ (24,121)	\$ (24,390)	\$ (24,390) (c)
4	Total average net plant in service on capital additions for the test period (Line 1 + Line 2 + Line 3)	\$ 110,446	\$ 111,355	\$ 112,435	\$ 115,662	\$ 122,109	\$ 127,379	\$ 131,446	\$ 134,738	\$ 137,321	\$ 139,442	\$ 141,377	\$ 143,653	\$ 143,553
5	Allocation to NC retail (Line 4 x Line 11)	\$ 87,955	\$ 88,521	\$ 89,178	\$ 91,165	\$ 95,131	\$ 98,374	\$ 100,876	\$ 102,901	\$ 104,491	\$ 105,795	\$ 106,988	\$ 108,325	\$ 108,325
6	Rate base pre-tax cost of capital - discounted year to date rate	0.7375%	1.4804%	2.2073%	2.9175%	3.6327%	4.3528%	5.0779%	5.8081%	6.5434%	7.2837%	8.0292%	8.7800%	8.7800% (d)
7	Total year to date NC retail revenues required for cost of capital on above investments (Line 5 x Line 6)	\$ 501	\$ 1,014	\$ 1,627	\$ 2,076	\$ 2,720	\$ 3,411	\$ 4,107	\$ 4,815	\$ 5,529	\$ 6,249	\$ 6,984	\$ 7,755	\$ 7,755
Incremental operating expenses related to capital additions:														
8	Depreciation expense on actual capital additions for the test year - year to date	\$ 211	\$ 426	\$ 682	\$ 982	\$ 1,316	\$ 1,720	\$ 2,144	\$ 2,574	\$ 3,007	\$ 3,440	\$ 3,873	\$ 4,313	\$ 4,313 (e)
9	Other operating expenses related to capital additions for the test year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Total year to date operating expenses related to capital additions for the test period (Line 8 + Line 9)	\$ 211	\$ 426	\$ 682	\$ 982	\$ 1,316	\$ 1,720	\$ 2,144	\$ 2,574	\$ 3,007	\$ 3,440	\$ 3,873	\$ 4,313	\$ 4,313
11	NC Retail allocation factor	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780%	61.52780% (f)
12	Total year to date operating expenses related to capital additions for the next rate period allocated to NC retail (Line 10 x Line 11)	\$ 130	\$ 262	\$ 420	\$ 604	\$ 810	\$ 1,059	\$ 1,319	\$ 1,583	\$ 1,850	\$ 2,116	\$ 2,383	\$ 2,654	\$ 2,654
13	Total year to date NC retail revenues required for financial and operating expenses related to capital additions since the acquisition date (Line 7 + Line 12)	\$ 631	\$ 1,277	\$ 1,947	\$ 2,681	\$ 3,539	\$ 4,470	\$ 5,426	\$ 6,398	\$ 7,379	\$ 8,365	\$ 9,368	\$ 10,408	\$ 10,408
14	Current Month NC retail revenues required for financial and operating expenses related to capital additions since the acquisition date	\$ 631	\$ 646	\$ 670	\$ 734	\$ 858	\$ 931	\$ 957	\$ 972	\$ 980	\$ 987	\$ 1,002	\$ 1,041	

Notes:

- (a) From Exhibit E-1-TU: Actual Capital year to date average balances, Column O, Line 2 - Line 13
(b) From Exhibit E-2-TU: Actual Depreciation Expense year to date average balances, Column P, Line 2 - Line 13
(c) From Exhibit E-3-TU: Deferred Taxes on Capital Additions year to date average balances, Column E, Line 2 - Line 13
(d) From Exhibit J-TU: Cost of Capital
Annual rate applicable for January 1, 2018 - March 15, 2018, Column H, Line 3 9.2175%
Annual rate applicable for March 16, 2018 - March 15, 2019, Column M, Line 3 8.6740%
(e) From Exhibit E-2-TU: Actual Depreciation Expense, Column H, Line 2 - Line 13
(f) From Exhibit H-TU: Demand Allocator to NC Retail from 2016 cost of service study 61.52780%

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

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

Line No.	ACTUAL CAPITAL ADDITIONS FOR THE MONTH								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 2018																	
								Beginning Balance as of January 1, 2018									
								\$ 45,082	\$ 30,680	\$ 44,839	\$ 3,335	\$ 4,118	\$ 4,415	\$ 132,579			
2	2018 January	\$ 1,406	\$ 285	\$ 915	\$ 35	\$ (9)	\$ 16	\$ 2,660	\$ 46,501	\$ 30,974	\$ 45,853	\$ 3,370	\$ 4,109	\$ 4,430	\$ 135,238	\$ 133,909	
3	2018 February	\$ 1,774	\$ 133	\$ 340	\$ 0	\$ 5	\$ 5	\$ 2,256	\$ 48,274	\$ 31,107	\$ 46,193	\$ 3,370	\$ 4,114	\$ 4,436	\$ 137,495	\$ 135,104	
4	2018 March	\$ 3,222	\$ (267)	\$ (29)	\$ 0	\$ (0)	\$ 3	\$ 2,930	\$ 51,497	\$ 30,840	\$ 46,164	\$ 3,371	\$ 4,114	\$ 4,439	\$ 140,424	\$ 138,434	
5	2018 April	\$ 12,781	\$ (93)	\$ 770	\$ 41	\$ 2	\$ 25	\$ 13,525	\$ 64,278	\$ 30,747	\$ 46,834	\$ 3,411	\$ 4,118	\$ 4,463	\$ 153,949	\$ 139,937	
6	2018 May	\$ 908	\$ 2,928	\$ 16,821	\$ 0	\$ 8,023	\$ (3)	\$ 27,477	\$ 65,186	\$ 33,374	\$ 62,858	\$ 3,412	\$ 12,138	\$ 4,461	\$ 181,426	\$ 148,862	
7	2018 June	\$ 5,655	\$ 22	\$ 1,045	\$ 307	\$ 1,154	\$ 4	\$ 8,188	\$ 70,841	\$ 33,374	\$ 63,901	\$ 3,719	\$ 13,292	\$ 4,464	\$ 189,612	\$ 162,981	
8	2018 July	\$ 1,109	\$ 334	\$ 733	\$ 8	\$ (22)	\$ 12	\$ 2,175	\$ 71,950	\$ 33,730	\$ 64,634	\$ 3,727	\$ 13,270	\$ 4,476	\$ 191,787	\$ 167,814	
9	2018 August	\$ 1,227	\$ 91	\$ 470	\$ 3	\$ 29	\$ (2)	\$ 1,818	\$ 73,177	\$ 33,822	\$ 65,104	\$ 3,730	\$ 13,299	\$ 4,474	\$ 193,605	\$ 161,791	
10	2018 September	\$ (299)	\$ 83	\$ 396	\$ 0	\$ (27)	\$ 2	\$ 135	\$ 72,878	\$ 33,885	\$ 65,500	\$ 3,730	\$ 13,272	\$ 4,475	\$ 193,740	\$ 164,868	
11	2018 October	\$ 155	\$ 63	\$ 204	\$ -	\$ 65	\$ 40	\$ 528	\$ 73,033	\$ 33,948	\$ 65,704	\$ 3,730	\$ 13,338	\$ 4,515	\$ 194,268	\$ 167,648	
12	2018 November	\$ 1,714	\$ 162	\$ 359	\$ 234	\$ 20	\$ 25	\$ 2,514	\$ 74,748	\$ 34,110	\$ 66,063	\$ 3,963	\$ 13,358	\$ 4,540	\$ 196,782	\$ 170,075	
13	2018 December	\$ 1,975	\$ 47	\$ 322	\$ 197	\$ 786	\$ 4,369	\$ 7,696	\$ 76,722	\$ 34,157	\$ 66,385	\$ 4,161	\$ 14,144	\$ 8,909	\$ 204,477	\$ 172,722	
								Capital Additions as of December 31, 2018									
								\$ 76,722	\$ 34,157	\$ 66,385	\$ 4,161	\$ 14,144	\$ 8,909	\$ 204,477			
\$ 14,000	Total capital additions	\$ 31,630	\$ 3,477	\$ 21,446	\$ 628	\$ 10,028	\$ 4,494	\$ 71,899									

Notes:

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

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

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

DEPRECIATION EXPENSE ON ACTUAL CAPITAL ADDITIONS BY MONTH										Year to Date Total (Col H)
Line No.			Brunswick 1 (Col A) (a)	Brunswick 2 (Col B)	Harris (Col C)	Mayo (Col D)	Roxboro 4 (Col E)	Roxboro Common (Col F)	Total (Col G)	
Current Test Year: Calendar 2018										
1										
2	2018	January	\$ 94	\$ 45	\$ 50	\$ 8	\$ 2	\$ 10	\$ 211	\$ 211
3	2018	February	\$ 97	\$ 46	\$ 52	\$ 9	\$ 2	\$ 10	\$ 216	\$ 426
4	2018	March	\$ 113	\$ 57	\$ 64	\$ 9	\$ 4	\$ 11	\$ 256	\$ 682
5	2018	April	\$ 132	\$ 67	\$ 75	\$ 9	\$ 5	\$ 11	\$ 300	\$ 982
6	2018	May	\$ 165	\$ 67	\$ 76	\$ 10	\$ 5	\$ 11	\$ 333	\$ 1,315
7	2018	June	\$ 165	\$ 75	\$ 126	\$ 10	\$ 16	\$ 11	\$ 404	\$ 1,720
8	2018	July	\$ 181	\$ 75	\$ 128	\$ 11	\$ 19	\$ 11	\$ 425	\$ 2,144
9	2018	August	\$ 183	\$ 76	\$ 129	\$ 11	\$ 19	\$ 11	\$ 429	\$ 2,574
10	2018	September	\$ 186	\$ 76	\$ 130	\$ 11	\$ 19	\$ 11	\$ 433	\$ 3,007
11	2018	October	\$ 185	\$ 76	\$ 130	\$ 11	\$ 19	\$ 11	\$ 433	\$ 3,440
12	2018	November	\$ 186	\$ 76	\$ 131	\$ 11	\$ 19	\$ 11	\$ 434	\$ 3,873
13	2018	December	\$ 190	\$ 77	\$ 132	\$ 11	\$ 19	\$ 11	\$ 439	\$ 4,313
14	Total Depreciation Expense		\$ 1,879	\$ 811	\$ 1,224	\$ 119	\$ 149	\$ 132	\$ 4,313	

ACCUMULATED DEPRECIATION								Year to Date
Brunswick 1 (Col.I) (a)	Brunswick 2 (Col.J)	Harris (Col.K)	Mayo (Col.L)	Roxboro 4 (Col.M)	Roxboro Common (Col.N)	Total (Col.O)	Average (Col.P)	
Beginning Balance as of January 1, 2018								
\$ (1,236)	\$ (709)	\$ (649)	\$ (118)	\$ (16)	\$ (151)	\$ (2,879)		
\$ (1,330)	\$ (754)	\$ (700)	\$ (127)	\$ (18)	\$ (162)	\$ (3,090)	\$ (2,985)	
\$ (1,427)	\$ (800)	\$ (751)	\$ (135)	\$ (20)	\$ (172)	\$ (3,306)	\$ (3,092)	
\$ (1,540)	\$ (857)	\$ (815)	\$ (145)	\$ (24)	\$ (182)	\$ (3,562)	\$ (3,209)	
\$ (1,672)	\$ (923)	\$ (890)	\$ (154)	\$ (29)	\$ (194)	\$ (3,862)	\$ (3,340)	
\$ (1,837)	\$ (990)	\$ (966)	\$ (164)	\$ (34)	\$ (205)	\$ (4,195)	\$ (3,482)	
\$ (2,003)	\$ (1,064)	\$ (1,052)	\$ (173)	\$ (51)	\$ (216)	\$ (4,589)	\$ (3,642)	
\$ (2,184)	\$ (1,139)	\$ (1,220)	\$ (184)	\$ (70)	\$ (227)	\$ (5,024)	\$ (3,815)	
\$ (2,367)	\$ (1,215)	\$ (1,350)	\$ (184)	\$ (89)	\$ (238)	\$ (5,453)	\$ (3,997)	
\$ (2,554)	\$ (1,291)	\$ (1,480)	\$ (205)	\$ (108)	\$ (249)	\$ (5,866)	\$ (4,186)	
\$ (2,739)	\$ (1,367)	\$ (1,610)	\$ (216)	\$ (127)	\$ (260)	\$ (6,319)	\$ (4,380)	
\$ (2,925)	\$ (1,443)	\$ (1,741)	\$ (226)	\$ (146)	\$ (272)	\$ (6,753)	\$ (4,577)	
\$ (3,114)	\$ (1,520)	\$ (1,873)	\$ (237)	\$ (165)	\$ (283)	\$ (7,192)	\$ (4,779)	
Accumulated Depreciation as of December 31, 2018								
\$ (3,114)	\$ (1,520)	\$ (1,873)	\$ (237)	\$ (165)	\$ (283)	\$ (7,192)		

Notes:

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

(b) Based on ending balances as of December 31, 2017 as filed with the Commission on Exhibit E-2-TU under Docket E-2, Sub 1143.

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

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

Line No.		Vintage Year				Total (Col D)	Year to Date Average (Col E)
		2018 (a) (Col A)	2017 (b) (Col A)	2016 (c) (Col B)	2015 (d) (Col C)		
	Deferred Tax Asset / (Liability) Balance						
1	Deferred Taxes December 31, 2017	\$ -	\$ (7,127)	\$ (10,131)	\$ (3,002)	\$ (20,261)	
2	Deferred Taxes - January 2018	\$ -	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (20,695)	\$ (20,478)
3	Deferred Taxes - February	\$ (290)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (20,985)	\$ (20,647)
4	Deferred Taxes - March	\$ (525)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (21,220)	\$ (20,790)
5	Deferred Taxes - April	\$ (820)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (21,514)	\$ (20,935)
6	Deferred Taxes - May	\$ (2,196)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (22,891)	\$ (21,261)
7	Deferred Taxes - June	\$ (5,315)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (26,009)	\$ (21,939)
8	Deferred Taxes - July	\$ (6,153)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (26,848)	\$ (22,553)
9	Deferred Taxes - August	\$ (6,389)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,084)	\$ (23,056)
10	Deferred Taxes - September	\$ (6,584)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,279)	\$ (23,478)
11	Deferred Taxes - October	\$ (6,609)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,304)	\$ (23,826)
12	Deferred Taxes - November	\$ (6,666)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,361)	\$ (24,121)
13	Deferred Taxes - December 2018	\$ (6,926)	\$ (7,561)	\$ (10,131)	\$ (3,002)	\$ (27,621)	\$ (24,390)

Notes:

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

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

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

DEFERRED TAX BALANCES

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2018 - with 21% Federal tax rate (a)	10%	9%	13%	10%	9%	9%	
	Capital Additions							
2	Gross Capital Additions as of January	\$ 1,408	\$ 295	\$ 915	\$ 35	\$ (9)	\$ 16	\$ 2,660 (b)
3	Gross Capital Additions as of February (cumulative)	\$ 3,182	\$ 427	\$ 1,254	\$ 35	\$ (4)	\$ 21	\$ 4,916 (b)
4	Gross Capital Additions as of March (cumulative)	\$ 6,404	\$ 160	\$ 1,226	\$ 35	\$ (4)	\$ 24	\$ 7,846 (b)
5	Gross Capital Additions as of April (cumulative)	\$ 19,185	\$ 67	\$ 1,995	\$ 76	\$ (2)	\$ 49	\$ 21,371 (b)
6	Gross Capital Additions as of May (cumulative)	\$ 20,093	\$ 2,694	\$ 17,917	\$ 76	\$ 8,020	\$ 46	\$ 48,847 (b)
7	Gross Capital Additions as of June (cumulative)	\$ 25,748	\$ 2,716	\$ 18,962	\$ 383	\$ 9,174	\$ 50	\$ 57,033 (b)
8	Gross Capital Additions as of July (cumulative)	\$ 26,858	\$ 3,050	\$ 19,695	\$ 392	\$ 9,152	\$ 61	\$ 59,208 (b)
9	Gross Capital Additions as of August (cumulative)	\$ 28,085	\$ 3,142	\$ 20,165	\$ 395	\$ 9,181	\$ 59	\$ 61,026 (b)
10	Gross Capital Additions as of September (cumulative)	\$ 27,786	\$ 3,205	\$ 20,561	\$ 395	\$ 9,154	\$ 61	\$ 61,161 (b)
11	Gross Capital Additions as of October (cumulative)	\$ 27,941	\$ 3,268	\$ 20,765	\$ 395	\$ 9,220	\$ 100	\$ 61,689 (b)
12	Gross Capital Additions as of November (cumulative)	\$ 29,655	\$ 3,430	\$ 21,124	\$ 628	\$ 9,240	\$ 125	\$ 64,203 (b)
13	Gross Capital Additions as of December (cumulative)	\$ 31,630	\$ 3,477	\$ 21,446	\$ 826	\$ 10,026	\$ 4,494	\$ 71,899 (b)
14	Balance at December 31, 2017	\$ 31,630	\$ 3,477	\$ 21,446	\$ 826	\$ 10,026	\$ 4,494	\$ 71,899
	Deferred Tax Asset / (Liability) Balance							
15	Deferred Taxes as of December 31, 2017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Deferred Taxes as of January 2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	Deferred Taxes as of February (Line 1 x Line 2)	\$ (141)	\$ (27)	\$ (119)	\$ (3)	\$ 1	\$ (1)	\$ (290) (c)
18	Deferred Taxes as of March (Line 1 x Line 3)	\$ (318)	\$ (38)	\$ (163)	\$ (4)	\$ 0	\$ (2)	\$ (525) (c)
19	Deferred Taxes as of April (Line 1 x Line 4)	\$ (640)	\$ (14)	\$ (159)	\$ (4)	\$ 0	\$ (2)	\$ (820) (c)
20	Deferred Taxes as of May (Line 1 x Line 5)	\$ (1,919)	\$ (6)	\$ (259)	\$ (8)	\$ 0	\$ (4)	\$ (2,196) (c)
21	Deferred Taxes as of June (Line 1 x Line 6)	\$ (2,009)	\$ (242)	\$ (2,329)	\$ (8)	\$ (722)	\$ (4)	\$ (5,315) (c)
22	Deferred Taxes as of July (Line 1 x Line 7)	\$ (2,575)	\$ (244)	\$ (2,465)	\$ (38)	\$ (826)	\$ (4)	\$ (6,153) (c)
23	Deferred Taxes as of August (Line 1 x Line 8)	\$ (2,686)	\$ (275)	\$ (2,560)	\$ (39)	\$ (824)	\$ (6)	\$ (6,389) (c)
24	Deferred Taxes as of September (Line 1 x Line 9)	\$ (2,808)	\$ (283)	\$ (2,621)	\$ (39)	\$ (826)	\$ (5)	\$ (6,584) (c)
25	Deferred Taxes as of October (Line 1 x Line 10)	\$ (2,779)	\$ (288)	\$ (2,673)	\$ (39)	\$ (824)	\$ (5)	\$ (6,609) (c)
26	Deferred Taxes as of November (Line 1 x Line 11)	\$ (2,794)	\$ (294)	\$ (2,699)	\$ (39)	\$ (830)	\$ (9)	\$ (6,666) (c)
27	Deferred Taxes as of December 2018 (Line 1 x Line 12)	\$ (2,966)	\$ (309)	\$ (2,746)	\$ (63)	\$ (832)	\$ (11)	\$ (6,926) (c)
28	Deferred Tax Balance at December 31, 2018	\$ (2,966)	\$ (309)	\$ (2,746)	\$ (63)	\$ (832)	\$ (11)	\$ (6,926)

Notes:

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

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

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

DEFERRED TAX BALANCES

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro - Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2018 - with 21% Federal tax rate (a)	12%	12%	15%	12%	12%	12%	
	Capital Additions							
2	Gross Capital Additions as of January	\$ 1,750	\$ 2,288	\$ 712	\$ 68	\$ 30	(1)	\$ 4,846 (b)
3	Gross Capital Additions as of February (cumulative)	\$ 1,738	\$ 2,306	\$ 1,196	\$ 225	\$ 72	27	\$ 5,562 (b)
4	Gross Capital Additions as of March (cumulative)	\$ 6,567	\$ 2,979	\$ 1,530	\$ 256	\$ 71	34	\$ 11,438 (b)
5	Gross Capital Additions as of April (cumulative)	\$ 5,307	\$ 8,070	\$ 1,757	\$ 246	\$ 92	36	\$ 15,508 (b)
6	Gross Capital Additions as of May (cumulative)	\$ 5,712	\$ 11,693	\$ 2,159	\$ 707	\$ 431	34	\$ 20,737 (b)
7	Gross Capital Additions as of June (cumulative)	\$ 7,407	\$ 13,891	\$ 2,269	\$ 898	\$ 548	60	\$ 25,073 (b)
8	Gross Capital Additions as of July (cumulative)	\$ 8,047	\$ 14,011	\$ 6,809	\$ 932	\$ 2,796	198	\$ 32,793 (b)
9	Gross Capital Additions as of August (cumulative)	\$ 14,220	\$ 14,764	\$ 12,619	\$ 1,057	\$ 2,903	470	\$ 46,033 (b)
10	Gross Capital Additions as of September (cumulative)	\$ 17,448	\$ 16,080	\$ 12,886	\$ 1,119	\$ 2,968	445	\$ 50,946 (b)
11	Gross Capital Additions as of October (cumulative)	\$ 16,846	\$ 16,222	\$ 13,186	\$ 1,126	\$ 2,965	544	\$ 50,890 (b)
12	Gross Capital Additions as of November (cumulative)	\$ 20,382	\$ 16,183	\$ 14,360	\$ 1,220	\$ 3,079	579	\$ 55,803 (b)
13	Gross Capital Additions as of December (cumulative)	\$ 21,085	\$ 16,927	\$ 15,466	\$ 1,353	\$ 3,258	1,055	\$ 59,144 (b)
14	Balance at December 31, 2017	\$ 21,085	\$ 16,927	\$ 15,466	\$ 1,353	\$ 3,258	1,055	\$ 59,144
	Deferred Tax Asset / (Liability) Balance							
15	Deferred Taxes as of December 31, 2017 (Line 1 x Line 12)	\$ (2,446)	\$ (1,942)	\$ (2,154)	\$ (146)	\$ (370)	(69)	\$ (7,127)
16	Deferred Taxes as of January 2018 (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
17	Deferred Taxes as of February (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
18	Deferred Taxes as of March (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
19	Deferred Taxes as of April (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
20	Deferred Taxes as of May (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
21	Deferred Taxes as of June (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
22	Deferred Taxes as of July (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
23	Deferred Taxes as of August (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
24	Deferred Taxes as of September (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
25	Deferred Taxes as of October (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
26	Deferred Taxes as of November (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
27	Deferred Taxes as of December 2018 (Line 1 x Line 13)	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561) (c)
28	Deferred Tax Balance at December 31, 2018	\$ (2,530)	\$ (2,031)	\$ (2,320)	\$ (162)	\$ (391)	(127)	\$ (7,561)

Notes:

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

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

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

DEFERRED TAX BALANCES

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2018 - with 21% Federal tax rate (a)	24%	13%	16%	14%	14%	14%	
	Capital Additions							
2	Gross Capital Additions as of January	\$ 645	\$ 575	\$ 616	\$ 142	\$ 26	\$ 72	\$ 2,075 (b)
3	Gross Capital Additions as of February (cumulative)	\$ 899	\$ 739	\$ 495	\$ 151	\$ 27	\$ 81	\$ 2,391 (b)
4	Gross Capital Additions as of March (cumulative)	\$ 9,002	\$ 959	\$ 1,628	\$ 180	\$ 31	\$ 213	\$ 12,012 (b)
5	Gross Capital Additions as of April (cumulative)	\$ 10,806	\$ 957	\$ 2,315	\$ 501	\$ 133	\$ 287	\$ 14,999 (b)
6	Gross Capital Additions as of May (cumulative)	\$ 14,562	\$ 1,759	\$ 2,563	\$ 569	\$ 135	\$ 1,545	\$ 21,132 (b)
7	Gross Capital Additions as of June (cumulative)	\$ 15,309	\$ 1,783	\$ 3,768	\$ 586	\$ 132	\$ 1,528	\$ 23,104 (b)
8	Gross Capital Additions as of July (cumulative)	\$ 16,396	\$ 3,990	\$ 3,875	\$ 681	\$ 131	\$ 1,530	\$ 26,603 (b)
9	Gross Capital Additions as of August (cumulative)	\$ 17,220	\$ 4,371	\$ 4,114	\$ 748	\$ 189	\$ 1,571	\$ 28,213 (b)
10	Gross Capital Additions as of September (cumulative)	\$ 18,016	\$ 4,886	\$ 5,603	\$ 893	\$ 232	\$ 1,590	\$ 31,220 (b)
11	Gross Capital Additions as of October (cumulative)	\$ 18,583	\$ 5,419	\$ 7,705	\$ 1,176	\$ 233	\$ 1,631	\$ 34,746 (b)
12	Gross Capital Additions as of November (cumulative)	\$ 18,856	\$ 5,468	\$ 18,057	\$ 1,323	\$ 275	\$ 1,819	\$ 45,798 (b)
13	Gross Capital Additions as of December (cumulative)	\$ 20,158	\$ 5,835	\$ 23,516	\$ 1,657	\$ 789	\$ 3,070	\$ 55,025 (b)
14	Balance at December 31, 2016	\$ 20,158	\$ 5,835	\$ 23,516	\$ 1,657	\$ 789	\$ 3,070	\$ 55,025
	Deferred Tax Asset / (Liability) Balance							
15	Deferred Taxes as of December 31, 2017 (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131)
16	Deferred Taxes as of January 2018 (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
17	Deferred Taxes as of February (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
18	Deferred Taxes as of March (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
19	Deferred Taxes as of April (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
20	Deferred Taxes as of May (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
21	Deferred Taxes as of June (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
22	Deferred Taxes as of July (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
23	Deferred Taxes as of August (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
24	Deferred Taxes as of September (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
25	Deferred Taxes as of October (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
26	Deferred Taxes as of November (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
27	Deferred Taxes as of December 2018 (Line 1 x Line 13)	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131) (c)
28	Deferred Tax Balance at December 31, 2018	\$ (4,838)	\$ (759)	\$ (3,763)	\$ (232)	\$ (110)	\$ (430)	\$ (10,131)

Notes:

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

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

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

DEFERRED TAX BALANCES

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col D)	Mayo (Col E)	Roxboro 4 (Col F)	Roxboro Common (Col G)	Total (Col H)
1	Deferred Tax Percentage - 2018 - with 21% Federal tax rate (a)	24%	13%	16%	14%	14%	14%	
	Capital Additions							
2	Gross Capital Additions as of August 31, 2015	\$ (1,165)	\$ (194)	\$ 171	\$ 29	\$ 6	\$ (1)	\$ (1,154) (b)
3	Gross Capital Additions as of September 30, 2015 (cumulative)	\$ (1,147)	\$ 253	\$ 237	\$ 57	\$ 5	\$ (1)	\$ (598) (b)
4	Gross Capital Additions as of October 31, 2015 (cumulative)	\$ (902)	\$ 196	\$ 361	\$ 45	\$ 13	\$ 28	\$ (258) (b)
5	Gross Capital Additions as of November 30, 2015 (cumulative)	\$ 2,658	\$ 7,905	\$ 3,617	\$ 123	\$ 25	\$ 256	\$ 14,584 (b)
6	Gross Capital Additions as of December 31, 2015 (cumulative)	\$ 3,849	\$ 7,918	\$ 5,956	\$ 325	\$ 71	\$ 290	\$ 18,409 (b)
7	Balance at December 31, 2015	\$ 3,849	\$ 7,918	\$ 5,956	\$ 325	\$ 71	\$ 290	\$ 18,409
	Deferred Tax Asset / (Liability) Balance							
8	Deferred Taxes as of December 2017 (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
9	Deferred Taxes as of January 2018 (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
10	Deferred Taxes as of February (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
11	Deferred Taxes as of March (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
12	Deferred Taxes as of April (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
13	Deferred Taxes as of May (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
14	Deferred Taxes as of June (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
15	Deferred Taxes as of July (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
16	Deferred Taxes as of August (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
17	Deferred Taxes as of September (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
18	Deferred Taxes as of October (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
19	Deferred Taxes as of November (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
20	Deferred Taxes as of December 2018 (Line 1 x Line 7)	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002) (c)
21	Deferred Tax Balance at December 31, 2017	\$ (924)	\$ (1,029)	\$ (953)	\$ (45)	\$ (10)	\$ (41)	\$ (3,002)

Notes:

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

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
CALCULATION OF INCREMENTAL OPERATING EXPENSES AND REDUCTION OF OTHER ELECTRIC REVENUE
RESULTING FROM ACQUIRING NCEMPA ASSETS for TEST YEAR ENDED DECEMBER 2018

EXHIBIT F-TU
EXHIBIT E-2, SUB 1207

Line No.	Description	FERC Account Number (Col A)	Actual System Incremental Amount (dollars)												Test Year to Date (Col N)
			January (Col B)	February (Col C)	March (Col D)	April (Col E)	May (Col F)	June (Col G)	July (Col H)	August (Col I)	September (Col J)	October (Col K)	November (Col L)	December (Col M)	
1	Roxboro 4 O&M	500-514	\$ 109,809	\$ 194,648	\$ 480,476	\$ 271,694	\$ 257,862	\$ 229,292	\$ 18,227	\$ 182,582	\$ 158,023	\$ 97,197	\$ 95,637	\$ 143,370	\$ 2,229,817 (c)
2	Mayo 1 O&M	500-514	\$ 258,120	\$ 226,770	\$ 184,164	\$ 177,983	\$ 263,369	\$ 293,197	\$ 179,811	\$ 263,808	\$ 311,719	\$ 607,081	\$ 377,597	\$ 570,168	\$ 3,723,578 (c)
3	Brunswick Plant O&M	517-532	\$ 3,427,334	\$ 3,226,204	\$ 8,658,860	\$ 3,271,841	\$ 2,863,184	\$ 2,962,794	\$ 3,073,528	\$ 3,008,990	\$ 3,055,168	\$ 2,848,103	\$ 2,738,482	\$ 2,261,695	\$ 41,396,201 (c)
4	Harris 1 O&M	517-532	\$ 1,679,338	\$ 1,895,568	\$ 2,384,670	\$ 5,398,241	\$ 2,176,800	\$ 1,328,977	\$ 1,768,670	\$ 1,807,522	\$ 1,654,079	\$ 1,463,606	\$ 1,450,379	\$ 1,834,641	\$ 24,862,491 (c)
5	A&G Expenses	929	\$ 1,743,719	\$ 3,894,975	\$ 2,079,892	\$ 2,885,129	\$ 2,828,069	\$ 2,819,023	\$ 2,600,452	\$ 2,714,885	\$ 2,902,361	\$ 2,230,624	\$ 2,409,295	\$ 1,690,694	\$ 30,999,217 (c)
6	Payroll Taxes	408	\$ 311,194	\$ 293,178	\$ 266,856	\$ 358,680	\$ 297,030	\$ 272,838	\$ 274,540	\$ 333,360	\$ 401,876	\$ 226,751	\$ 184,362	\$ 169,478	\$ 3,380,143 (c)
7	General Plant Return	454	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 148,038	\$ 1,618,712 (c)
8	Dispatch Fee	456	\$ 2,613	\$ 2,586	\$ 2,945	\$ 2,817	\$ 2,976	\$ 2,904	\$ 3,048	\$ 3,054	\$ 2,846	\$ 3,004	\$ 3,037	\$ 3,425	\$ 35,255 (c)
9	Auxiliary Power	447	\$ 89,231	\$ 39,403	\$ 52,768	\$ 72,249	\$ 64,554	\$ 30,277	\$ 13,978	\$ 12,634	\$ 58,750	\$ 26,710	\$ 21,882	\$ 20,449	\$ 501,885 (c)
10	Site Representative	456	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 409	\$ 4,908 (c)
11	Property taxes	408	\$ 494,790	\$ 494,790	\$ 494,790	\$ 494,790	\$ 494,790	\$ 494,790	\$ 581,933	\$ 507,239	\$ 507,239	\$ 507,239	\$ 507,239	\$ 507,239	\$ 6,086,872 (d)
12	NCEMPA revenue included in cost of service for a return on coal inventory	454	\$ 18,159	\$ 3,340	\$ 2,467	\$ 5,237	\$ 4,647	\$ 14,251	\$ 9,241	\$ 7,578	\$ 5,138	\$ 3,942	\$ 42	\$ 9,890	\$ 83,972 (c)
13	Incremental nuclear decommissioning costs	403	\$ 215,371	\$ 215,371	\$ 314,475	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 413,580	\$ 4,467,437 (b)
14	Total		\$ 6,489,166	\$ 10,624,278	\$ 15,080,830	\$ 13,500,688	\$ 9,815,309	\$ 9,010,369	\$ 9,085,254	\$ 9,965,285	\$ 9,689,413	\$ 8,666,472	\$ 8,420,169	\$ 8,043,254	\$ 120,390,498
15	Allocated to NC Retail (thousands of dollars) (a)		\$ 5,223	\$ 6,537	\$ 9,279	\$ 8,307	\$ 6,039	\$ 5,544	\$ 5,590	\$ 6,131	\$ 5,962	\$ 5,332	\$ 5,181	\$ 4,949	\$ 74,074

Notes:

- (a) From Exhibit I-TU: Demand Allocator to NC Retail from 2018 cost of service study of 61.52780%
(b) From Exhibit F-1-TU, Line 14 and Line 22
(c) System amounts on lines 1-10 are the amounts that would have been billed to NCEMPA from January - December 2018.
(d) Property taxes are derived based on incremental asset balance and DEP's property tax rate as agreed upon with the governing jurisdictions.

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

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

Line No.		Brunswick 1 (Col A)	Brunswick 2 (Col B)	Harris (Col C)	Robinson (Col D)	Total (Col E)
<u>Decommissioning recovered in existing base rates under E-2, Sub 1043:</u>						
1	NC Retail Nuclear decommissioning expense included in base rates excluding NCEMPA ownership	\$ 2,822,222	\$ -	\$ 93,404	\$ 4,734,151	\$ 7,649,777
2	NC retail allocation factor from last rate case	64.5074%	64.5074%	64.5074%	64.5074%	
3	System Amount excluding NCEMPA's ownership (Line 1 / Line 2)	\$ 4,375,036	\$ -	\$ 144,796	\$ 7,338,927	\$ 11,858,759
4	NC retail allocation factor - 2014 Cost of Service	60.7574%	60.7574%	60.7574%	60.7574%	
5	Reduction in NC retail allocation factor due to purchase from NCEMPA (Line 4 - Line 2)	-3.7500%	-3.7500%	-3.7500%	-3.7500%	
6	NC retail decrement included in rider for reduction in allocation factor (Line 5 * Line 3)	\$ (164,064)	\$ -	\$ (5,430)	\$ (275,210)	\$ (444,703) (a)
<u>Incremental decommissioning cost approved in Docket E-100, Sub 56:</u>						
7	NC Retail Nuclear decommissioning expense from 2015 study including purchase from NCEMPA	\$ 5,316,687	\$ 527,539	\$ 3,085,956	\$ 260,101	\$ 9,190,283
8	NC retail allocation factor used in 2015 study	60.7574%	60.7574%	60.7574%	60.7574%	
9	System Amount including NCEMPA's ownership (Line 7 / Line 8)	\$ 8,750,682	\$ 868,271	\$ 5,079,144	\$ 428,098	\$ 15,126,195
10	NCEMPA's ownership %	18.33%	18.33%	16.17%	0.00%	
11	Incremental decommissioning related to purchase from NCEMPA (Line 9 * Line 10)	\$ 1,604,000	\$ 159,154	\$ 821,298	\$ -	\$ 2,584,452
12	NC retail allocation factor - 2018 Cost of Service	61.5278%	61.5278%	61.5278%	61.5278%	
13	NC retail's incremental nuclear decommissioning expense (Line 11 x Line 12)	\$ 986,906	\$ 97,924	\$ 505,326	\$ -	\$ 1,590,156
14	Monthly system incremental nuclear decommissioning expense (line 11 divided by 12)	\$ 133,667	\$ 13,263	\$ 68,441	\$ -	\$ 215,371
<u>Decommissioning recovered in existing base rates under Docket E-2, Sub 1142:</u>						
15	NC Retail Nuclear decommissioning expense included in base rates	\$ 8,276,237	\$ 2,497,488	\$ 6,386,945	\$ 2,429,615	\$ 19,590,285
16	NC retail allocation factor used in rate case - 2016 Cost of Service	60.6008%	60.6008%	60.6008%	60.6008%	
17	System Amount including NCEMPA's ownership (Line 7 / Line 8)	\$ 13,656,976	\$ 4,121,213	\$ 10,539,374	\$ 4,009,213	\$ 32,326,776
18	NCEMPA's ownership %	18.33%	18.33%	16.17%	0.00%	
19	Incremental decommissioning related to purchase from NCEMPA (Line 9 * Line 10)	\$ 2,503,324	\$ 755,418	\$ 1,704,217	\$ -	\$ 4,962,959
20	NC retail allocation factor - 2018 Cost of Service	61.5278%	61.5278%	61.5278%	61.5278%	
21	NC retail's incremental nuclear decommissioning expense (Line 11 x Line 12)	\$ 1,540,240	\$ 464,792	\$ 1,048,567	\$ -	\$ 3,053,599
22	Monthly system incremental nuclear decommissioning expense (line 11 divided by 12)	\$ 208,610	\$ 62,952	\$ 142,018	\$ -	\$ 413,580

Notes:

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

EXHIBIT G -TU
DOCKET E-2, SUB 1207

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

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

Notes:

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

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

9.2179%

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

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

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

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

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

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

EXHIBIT H-TU
 DOCKET E-2, SUB 1207

Amortization Schedule

Line
 No.

Calculation of monthly rate of return:				2015 (a)		2016 (b)		2017 (b)		January to March 15th 2018 (c)		March 16th forward 2018 (c)		
	Capitalization Rate (a)(b)	Cost Rate (a)(c)	Effective Income Tax Rate	After Tax Weighted Rate Rate of Return	Effective Income Tax Rate	After Tax Weighted Rate Rate of Return	Effective Income Tax Rate	After Tax Weighted Rate Rate of Return	Effective Income Tax Rate	After Tax Weighted Rate Rate of Return	Capitalization Rate (c)	Cost Rate (c)	Effective Income Tax Rate	After Tax Weighted Rate Rate of Return
1	Long-term debt	47.00%	4.57%	35.1600%	1.3927%	34.5900%	1.4049%	34.01%	1.4174%	23.50%	48.0000%	4.0500%	23.50%	1.4872%
2	Member's equity	53.00%	10.20%		5.4060%		5.4060%		5.4060%		52.0000%	9.9000%		1.4872%
3	After tax overall return				6.7987%		6.8109%		6.8234%		7.0491%			1.4872%
4	Discounted monthly after tax overall return				0.5496%		0.5506%		0.5516%		0.5693%			1.4872%
5	Amortization Period in Months				36		35		23		11			6.5362%
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- (a) From Exhibit J-TU, Cost of Capital as filed under Docket E-2, Sub 1110
 (b) From Exhibit J-TU, Cost of Capital as filed under Docket E-2, Sub 1143
 (c) From Exhibit J-TU, Cost of Capital

DUKE ENERGY PROGRESS
NCEMPA GENERATION ASSET PURCHASE
PRODUCTION DEMAND ALLOCATION FACTORS INCLUDING ADJUSTMENT FOR NCEMPA ADDITIONAL SALES
Retail Per Books Cost of Service Study - 12 Months Ending December 31, 2018

Line No.	Rate Schedule	Summer CP Demand (KW) (Col A)	Ratio of Each Rate Schedule To Total (Col B)	Rate Class	NC Retail Allocation Factors	
					Percent of System (Col C)	Class Percent of Total NC Retail (Col D)
1	NC RES	3,750,145	29.71894%	Residential Class	30.51718%	49.5990%
2	NC RES-TOU	100,728	0.79824%	SGS Class	3.78745%	6.1557%
3	NC SGS	474,027	3.76654%	MGS Class	17.33896%	28.1807% **
4	NC SGS-CLR	3,901	0.03092%	SI Class	0.04362%	0.0709%
5	NC MGS-TOU	1,534,242	12.15646%	LGS Class	9.83610%	15.9644%
6	NC MGS	653,710	5.18048%	TSS Class	0.00448%	0.0073%
7	NC SI	5,504	0.04362%	ALS Class	0.00000%	0.0000%
8	NC LGS	183,991	1.45808%	SLS Class	0.00000%	0.0000%
9	NC LGS-TOU	227,561	1.80338%	SFLS Class	0.00000%	0.0000%
10	NC LGS-RTP	829,637	6.57456%	Total	61.52780%	100.0000%
11	NC TSS	568	0.00448%			
12	NC ALS	-	0.00000%			
13	NC SLS	-	0.00000%			
14	NC SFLS	-	0.00000%			
15	Total NCR	7,764,011	61.52780%			
16	NCEMC (Note 1)	1,780,265	14.10814%	**Allocation of MGS Class between kW and kWh billed customers MGS Class - billed on kWh basis 0.09% 0.0241% Note 2 MGS Class - billed on kW basis 99.91% 28.1566% Note 2 28.1807%		
17	Fayetteville	424,978	3.39782%			
18	FBEMC	65,623	0.51747%			
19	Piedmont EMC	21,254	0.16867%			
20	Haywood EMC	10,208	0.08088%			
21	Tul-Towns	-	0.00000%			
22	Waynesville	-	0.00000%			
23	Winterville	-	0.00000%			
24	Total NCWHS	2,306,354	18.27726%	NC Retail Allocation Factor After the Purchase Total NC Retail Summer CP Demand (Line 15) 7,764,011 61.52780% Total System with NCEMPA retained capacity (Line 47) 12,618,705		
25	NCEMPA	1,310,938	10.38885%			
26	Total NC	11,381,303	90.19391%			
27	SC RES	490,690	3.88659%			
28	SC RET	9,862	0.07816%			
29	SC SGS	69,776	0.55295%			
30	SC SGS-CLR	552	0.00437%			
31	SC MGS-TOU	201,037	1.59317%			
32	SC MGS	118,479	0.93892%			
33	SC SI	3,033	0.02403%			
34	SC LGS	104,339	0.82666%			
35	SC LGS-TOU	36,802	0.29165%			
36	SC LGS-CRTL-TOU	76,758	0.60829%			
37	SC LGS-RTP	80,521	0.63811%			
38	SC TSS	101	0.00080%			
39	SC ALS	-	0.00000%			
40	SC SLS	-	0.00000%			
41	SC SFLS	-	0.00000%			
42	Total SCR	1,191,950	9.44590%			
43	SCWHS (Camden)	45,452	0.36019%			
44	Total SC	1,237,402	9.80605%			
45	Total System with NCEMPA retained capacity	12,618,705	100.00000%			

Note 1: Excludes NCEMC Peaking Capacity

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

EXHIBIT J -TU
DOCKET E-2, SUB 1207

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

	(Col A)	(Col B)	(Col C)	(Col D)	(Col E)	(Col F)	(Col G)	(Col H)	(Col I)	(Col J)	(Col K)	(Col L)	(Col M)		
COST OF CAPITAL APPROVED BY THE NCUC IN DUKE ENERGY PROGRESS' LAST RATE CASE IN DOCKET NO. E-2, SUB 1023 DATED MAY 30, 2013:									COST OF CAPITAL APPROVED BY THE NCUC IN DUKE ENERGY PROGRESS, LLC LAST RATE CASE IN DOCKET NO. E-2, SUB 1142						
Line No.	ITEM	CAPITALIZATION RATIO	APPROVED COST RATE	2017 WEIGHTED COST OF CAPITAL			Applicable for January 1 - March 15, 2018 2018 WEIGHTED COST OF CAPITAL			CAPITALIZATION RATIO	APPROVED COST RATE	Applicable for March 16th forward 2018 WEIGHTED COST OF CAPITAL			
				RATE OF RETURN	AFTER TAX	BEFORE TAX	RATE OF RETURN	AFTER TAX	BEFORE TAX			RATE OF RETURN	AFTER TAX	BEFORE TAX	
1	LONG TERM DEBT	47.00%	4.57%	2.1479%	1.4174%	2.1479%	2.1479%	1.6431%	2.1479%	48.00%	4.05%	1.9440%	1.4872%	1.9440%	
2	COMMON STOCK EQUITY	53.00%	10.20%	5.4060%	5.4060%	8.1900%	5.4060%	5.4060%	7.0700%	52.00%	9.80%	5.1480%	5.1480%	6.7300%	
3	TOTAL	100.00%		7.5539%	6.8234%	10.3379%	7.5539%	7.0491%	9.2179%	100.00%		7.0920%	6.6352%	8.6740%	
4	Discounted annual rate to convert monthly to annual compounding				6.6189%	10.0300%	6.8311%				8.9300%	6.4416%			8.4200%
5	Discounted monthly rate to convert monthly to annual compounding				0.5516%	0.8232%	0.5693%				0.7375%	0.5368%			0.6956%
CALCULATION OF COMPOSITE INCOME TAX RATES:															
6	FEDERAL INCOME TAX RATE			2017 Statutory Rate	State Apportionment Factor	2017 Weighted Tax Rate	2018 Statutory Rate	State Apportionment Factor	2018 Weighted Tax Rate			2018 Statutory Rate	State Apportionment Factor	2018 Weighted Tax Rate	
				35.00%		35.00%	21.00%		21.00%			21.00%		21.00%	
7	STATE INCOME TAX RATE:														
8	NC			3.000%	84.6380%	2.5391%	3.000%	84.6380%	2.5391%			3.000%	84.6380%	2.5391%	
9	SC			5.000%	12.6000%	0.6300%	5.000%	12.6000%	0.6300%			5.000%	12.6000%	0.6300%	
	Weighted state income tax rate					3.1691%			3.1691%					3.1691%	
10	Federal production tax deduction percentage					0.0000%			0.0000%					0.0000%	
11	Total composite federal and state income tax rate					34.01%			23.50%					23.50%	
12	NCUC REGULATORY FEE RATE														
13		January - June		0.140%											
14		July - December		0.140%											

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

	(Col A)	(Col B)	(Col C)	(Col D)	(Col E)
Line No.	Rate Class	Schedule	Billing Metric	Billing Determinants (kWh)	Billing Determinants (kW)
1	Residential Class	RES	kWh Energy Units	12,302,290,710	
2	Residential Class	RES (EC)	kWh Energy Units	3,229,521,884	
3	Residential Class	R-TOU	kWh Energy Units	36,153,135	
4	Residential Class	R-TOU (EC)	kWh Energy Units	17,743,588	
5	Residential Class	R-TOUD	kWh Energy Units	250,580,153	
6	Residential Class	R-TOUD (EC)	kWh Energy Units	173,304,988	
7	Residential Class	R-TOUE	kWh Energy Units	0	
8	Residential Class	R-TOUE (EC)	kWh Energy Units	0	
9	Total Residential			(a) 16,009,594,458	
10	SGS Class	SGS	kWh Energy Units	1,769,718,882	
11	SGS Class	SGS-TOU-CLR	kWh Energy Units	29,703,239	
12	SGS Class	SGS-TOUE	kWh Energy Units	3,072,589	
13	Total SGS			(a) 1,802,494,710	
14	MGS Class	APH-TES	kW Demand Units		4,409
15	MGS Class	CH-TOUE	kWh Energy Units	7,715,061	
16	MGS Class	CSE	kWh Energy Units	1,166,342	
17	MGS Class	CSG	kWh Energy Units	18,810	
18	MGS Class	SGS-TES	kW Demand Units		41,046
19	MGS Class	SGS-TOU	kW Demand Units		19,331,165
20	MGS Class	MGS	kW Demand Units		12,005,716
21	Total MGS			(a) 8,900,213	31,382,336
22	LGS Class	LGS	kW Demand Units		2,512,663
23	LGS Class	LGS-RTP	kW Demand Units		43,897
24	LGS Class	LGS-RTP-TOU	kW Demand Units		11,212,643
25	LGS Class	LGS-TOU	kW Demand Units		3,073,783
26	Total LGS			(a)	16,842,986
27	SI Class	SI	kWh Energy Units	(b) 43,257,472	
28	TSS Class	TFS	kWh Energy Units	179,236	
29	TSS Class	TSS	kWh Energy Units	4,544,063	
30	Total TSS			(b) 4,723,299	
31	Total All Rates			17,868,970,152	48,225,322

NOTES:

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

(a) Source: 2019 Spring Sales Forecast

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

EXHIBIT L
DOCKET E-2, SUB 1207

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

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