

INFORMATION SHEET

PRESIDING: Commissioner Clodfelter, Presiding; Chair Mitchell and Commissioners Brown-Bland, and Gray

PLACE: Dobbs Building, Room 2115, Raleigh, NC

DATE: Monday, September 9, 2019

TIME: 2:00 p.m. to 2:06 p.m.

DOCKET NO.: E-2, Sub 1205

COMPANIES: Duke Energy Progress, LLC

DESCRIPTION: Application of Duke Energy Progress, LLC, for Approval of Renewable Energy and Energy Efficiency Portfolio Standard Cost Recovery Rider Pursuant to N.C.G.S. § 62-133.8 and NCUC Rule R8-67

VOLUME NUMBER:

APPEARANCES

Please see attached.

WITNESSES

Please see attached.

EXHIBITS

Please see attached.

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TRANSCRIPT COPIES ORDERED: Fennell and Smith

CONFIDENTIAL EXHIBITS: Fennell and Smith

TRANSCRIPT PAGES: 20

PREFILED PAGES: 76

TOTAL PAGES: 96

REPORTED BY: Kim Mitchell

DATE FILED: October 4, 2019

FILED

OCT 04 2019

Clerk's Office
N.C. Utilities Commission

1 PLACE: Dobbs Building, Raleigh, North Carolina
2 DATE: Monday, September 9, 2019
3 TIME: 2:00 p.m. - 2:06 p.m.
4 DOCKET NO: E-2, Sub 1205
5 BEFORE: Commissioner Daniel G. Clodfelter, Presiding
6 Chair Charlotte A. Mitchell
7 Commissioner ToNola D. Brown-Bland
8 Commissioner Lyons Gray
9
10
11

12 **IN THE MATTER OF:**

13 Application of Duke Energy Progress, LLC,
14 for Approval of Renewable Energy and Energy Efficiency
15 Portfolio Standard Cost Recovery Rider Pursuant to
16 N.C.G.S. § 62-133.8 and NCUC Rule R8-67
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1 A P P E A R A N C E S:

2 FOR DUKE ENERGY PROGRESS, LLC:

3 Robert W. Kaylor, Esq.

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5 353 E. Six Forks Road, Suite 260

6 Raleigh, North Carolina 27609

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16 Regulatory Counsel

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18 Raleigh, North Carolina 27609

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21 Heather Fennell, Esq.

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NORTH CAROLINA UTILITIES COMMISSION

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Application of

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*Confidential filed under seal

NORTH CAROLINA UTILITIES COMMISSION

APPEARANCE SLIP

DATE: Sept 9, 2019 DOCKET NO.: E-2, Sub 1205

ATTORNEY NAME and TITLE: Robert W. Kaylor

FIRM NAME: Law Office of Robert W. Kaylor, P.A.

ADDRESS: 353 E. Six Forks Rd. Ste 260

CITY: Raleigh STATE: NC ZIP CODE: 27609

APPEARING FOR: Duke Energy Progress, LLC

APPLICANT: COMPLAINANT: INTERVENOR:

PROTESTANT: RESPONDENT: DEFENDANT:

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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
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CITY Raleigh ZIP 27609

APPEARING FOR: Carolina Utility Customers Association, Inc.

APPLICANT	COMPLAINANT	INTERVENER
PROTESTANT	RESPONDENT	DEFENDANT

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Signature: _____

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Signature: _____

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE: 9/9/2019 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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SIGNATURE: _____

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1A

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1205



In the Matter of:)
)
 Application of Duke Energy Progress, LLC)
 for Approval of Renewable Energy and)
 Energy Efficiency Portfolio Standard)
 (REPS) Compliance Report and Cost)
 Recovery Rider Pursuant to N.C. Gen. Stat.)
 62-133.8 and Commission Rule R8-67)

**APPLICATION FOR APPROVAL
 OF REPS COST RECOVERY
 RIDER AND 2018 REPS
 COMPLIANCE REPORT**

Duke Energy Progress, LLC (“DEP” or the “Company”), pursuant to N.C. Gen. Stat. § 62-133.8 and Rule R8-67 of the Rules and Regulations of the North Carolina Utilities Commission (“Commission”), hereby makes this Application (1) for approval of its 2018 Renewable Energy Portfolio Standard (“REPS”) Compliance Report, and (2) to implement a monthly charge to recover the incremental costs associated with compliance with the REPS. In support of this Application, the Company respectfully shows the following:

1. The Company is a public utility operating in the states of North Carolina and South Carolina where it is engaged in the generation, transmission, distribution, and sale of electricity for compensation. Its general offices are located at 410 South Wilmington Street, Raleigh, North Carolina, and its mailing address is Post Office Box 1551, Raleigh, North Carolina 27602.

2. The attorneys for the Company, to whom all communications and pleadings should be addressed, are:

Kendrick C. Fentress
 Associate General Counsel
 Duke Energy Corporation
 P.O. Box 1551

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JUN 11 2019

Raleigh, North Carolina 27602
919.546.6733
Kendrick.Fentress@duke-energy.com

Robert W. Kaylor
Law Office of Robert W. Kaylor, P.A.
353 E. Six Forks Road, Suite 260
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3. N.C. Gen. Stat. § 62-133.8 requires North Carolina’s electric power suppliers to supply six (6) percent of their North Carolina retail kilowatt hours (“kWh”) from “renewable resources,” as that term is defined by N.C. Gen. Stat. § 62-133.8(a)(8), for calendar year 2018. Further, N.C. Gen. Stat. § 62-133.8(d) requires that the electric power suppliers also obtain 0.14 percent of their North Carolina retail kWh from solar photovoltaic or thermal solar resources in 2017. Further, N.C. Gen. Stat. § 62-133.8(e) and (f) require that the electric power suppliers also obtain their allocated share of the state-wide requirement of 0.14 percent of the total North Carolina retail kWh sold from swine waste resources and 900,000 megawatt hours (“MWh”) of the total electric power sold to North Carolina retail customers from poultry waste resources, respectively, in 2017.¹

4. N.C. Gen. Stat. § 62-133.8(h) provides that the electric public utilities shall be allowed to recover the incremental costs² associated with complying with N.C.

¹ Both the Poultry Waste and Swine Waste Set-Aside requirements established by N.C. Gen. Stat. § 62-133.8 have been modified by Commission order pursuant to N.C. Gen. Stat. § 62-133.8(i)(2), as discussed herein.

² “Incremental costs” are defined as (1) all reasonable and prudent costs incurred by an electric utility to meet the solar and renewable generation requirements of the statute that are in excess of the utility’s avoided costs, and (2) costs associated with research that encourages the development of renewable energy, energy efficiency, or improved air quality, provided those research costs do not exceed one million dollars (\$1,000,000) per year.

Gen. Stat. § 62-133.8 through an annual rider not to exceed the following per-account charges:

<u>Customer Class</u>	<u>2008-2011</u>	<u>2012-2014</u>	<u>2015 and thereafter</u>
Residential per account	\$ 10.00	\$ 12.00	\$ 27.00
Commercial per account	\$ 50.00	\$ 150.00	\$ 150.00
Industrial per account	\$ 500.00	\$ 1,000.00	\$1,000.00

The statute provides that the Commission shall ensure that the incremental costs to be recovered from individual customers on a per-account basis are in the same proportion as the per-account annual charges for each customer class set out in the chart above.

5. Rule R8-67(c) requires the Commission to conduct an annual proceeding for each electric public utility to review the utility's costs to comply with N. C. Gen. Stat. § 62-133.8 and establish the electric public utility's annual rider to recover such costs in a timely manner. The Commission shall also establish an experience modification factor ("EMF") to collect the difference between the electric public utility's actual reasonable and prudent REPS costs incurred during the test period and the actual revenues incurred during the test period. Rule R8-67(c) further provides that the Commission shall consider each electric public utility's REPS compliance report at the hearing provided for in Rule R8-67(e) and shall determine whether the electric public utility has complied with N.C. Gen. Stat. § 62-133.8(b), (d), (e) and (f).

6. According to Rules R8-67(c) and (e), the electric public utility is to file its application for recovery of its REPS costs, as well as its REPS compliance report, at the same time it files the information required by Rule R8-55, and the Commission is to conduct an annual rider hearing as soon as practicable after the hearing required by Rule R8-55.

7. Pursuant to the provisions of N.C. Gen. Stat. § 62-133.8 and Commission Rule R8-67(e), DEP requests the Commission to establish a rider to recover its reasonable and prudent forecasted REPS compliance costs to be incurred during the rate period. As provided in Rule R8-67(e), the Company requests to credit to DEP's retail customers, through the EMF, \$1,246,365 of REPS costs over-collected and other credits for the period April 1, 2018 through March 31, 2019 ("EMF Period") and collect from DEP's retail customers \$43,246,220 for REPS costs to be incurred during the rate period from December 1, 2019 through November 30, 2020 ("Billing Period"). The REPS rider and EMF will be in effect for the twelve-month period December 1, 2019 through November 30, 2020.

8. Pursuant to the provisions of N.C. Gen. Stat. § 62-133.8 and Rule R8-67, DEP requests Commission approval of the annual billing statements, including both the REPS monthly charge and the EMF monthly charge, for each customer class as follows:

Customer Class	REPS Monthly Charge (excl. regulatory fee)	Monthly EMF (excl. regulatory fee)	Total REPS Monthly Charge (excl. regulatory fee)	Total REPS Monthly Charge (incl. regulatory fee)
Residential	\$ 1.39	\$ 0.04	\$ 1.43	\$ 1.43
General ³	\$ 8.84	\$ (0.73)	\$ 8.11	\$ 8.12
Industrial	\$ 63.07	\$ (4.48)	\$ 58.59	\$ 58.67

The calculation of these rates is set forth in Exhibit No. 4 of the direct testimony of Veronica I. Williams filed with this Application.

9. Pursuant to Commission Rule R8-67(e)(8), DEP requests approval to defer the difference between actual reasonable and prudently incurred incremental costs and

³ Duke Energy Progress' General Service rate schedule generally covers the class of customers intended to be captured by the "Commercial" class included within N.C. Gen. Stat. § 62-133.8. The Company does not have a rate schedule for "Commercial" customers.

the related revenues realized under rates in effect. FERC account 182.3, "Other Regulatory Assets," will be used to defer these costs until recovered.

10. Further, pursuant to the provisions of N.C. Gen. Stat. § 62-133.8 and Commission Rule R8-67(c), the Company requests Commission approval of its 2018 REPS Compliance Report, attached as an exhibit to the direct testimony of Travis E. Payne filed in support of this Application. As described by Mr. Payne's testimony, and illustrated in DEP's 2018 REPS Compliance Report, the Company has complied with the requirements of N.C. Gen. Stat. § 62-133.8(b) and (d) for 2018. In its October 8, 2018 *Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief*, in Docket No. E-100, Sub 113, the Commission lowered the 2018 Poultry Waste Set-Aside Requirement (N.C. Gen. Stat. § 62-133.8(f)) to 300,000 MWh and delayed by one year the scheduled increases in that requirement. The Commission also lowered the Swine Waste Set-Aside Requirement for DEP, Duke Energy Carolinas, LLC and Dominion Energy North Carolina to 0.02% of prior-year retail sales, delaying the scheduled increase to 0.07% of prior-year retail sales to begin in calendar year 2019, and delaying future increases by one year.⁴ The Company has complied with these modified Poultry Waste and Swine Waste Set-Aside Requirements.

⁴ In its *Order Modifying the Poultry and Swine Waste Set-Aside and Granting Other Relief* issued in Docket No. E-100, Sub 113 (November 29, 2012), the Commission eliminated the Swine Waste Set-Aside Requirement for 2012 and delayed for one year the Poultry Waste Set-Aside Requirement. In its March 26, 2014, *Final Order Modifying the Poultry and Swine Waste Set-Aside Requirements and Providing Other Relief*, the Commission delayed the Swine and Poultry Waste Set-Aside Requirements for an additional year. In its November 13, 2014 *Order Modifying the Swine Waste Set-Aside Requirement and Providing Other Relief*, the Commission directed that Swine Waste Set-Aside Requirement remain at 0.07 percent for the years 2015-2016. Subsequently, in its December 1, 2015 *Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief*, the Commission directed that the Swine Waste Set-Aside Requirement for 2015 be delayed an additional year and that the 2015 Poultry Waste Set-Aside Requirement would be the same as the 2014 level. In its October 17, 2016 *Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief*, the Commission directed that the 2016

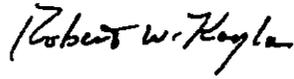
11. The information and data required to be filed under Commission Rule R8-67 is contained in the direct testimony and exhibits of witnesses Payne and Williams, which are being filed simultaneously with this Application and incorporated herein by reference.

WHEREFORE, the Company respectfully requests:

That consistent with this Application, the Commission approve the Company's 2018 REPS Compliance Report and allow the Company to implement the rate riders as set forth above.

Swine Waste Set-Aside Requirement be delayed an additional year and that the 2016 Poultry Waste Set-Aside Requirement remain at the same level as the 2015 requirement and delayed by one year the scheduled increases in that requirement. In its October 16, 2017 *Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief*, in Docket No. E-100, Sub 113, the Commission directed that the 2017 Swine Waste Set-Aside Requirement be delayed an additional year and that the 2017 Poultry Waste Set-Aside Requirement (N.C. Gen. Stat. § 62-133.8(f)) remain at the same level as the 2016 requirement, which the Commission had previously approved at 170,000 MWh, and delayed by one year the scheduled increases in that requirement. In its October 8, 2018 *Order Modifying the Swine and Poultry Waste Set-Aside Requirements And Providing Other Relief* in Docket No. E-100, Sub 113, the Commission modified the 2018 Swine Waste Set-Aside Requirement for electric public utilities to 0.02% and delayed by one year the scheduled increases to the requirement. The Commission also modified the 2018 Poultry Waste Set-Aside Requirement to 300,000 MWh, and delayed by one year the scheduled increases in the requirement.

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



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COUNSEL FOR DUKE ENERGY PROGRESS, LLC

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Jun 11 2019

* full version previously
filed on the docket.
Ktm

I/A

PAYNE EXHIBIT NO. 1
REDACTED VERSION

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1205

In the Matter of)	
)	DUKE ENERGY PROGRESS,
Application of Duke Energy Progress, LLC for)	LLC 2018 RENEWABLE
Approval of Renewable Energy and Energy)	ENERGY & ENERGY
Efficiency Portfolio Standard Compliance Report)	EFFICIENCY PORTFOLIO
and Rider Pursuant to N.C. Gen. Stat. § 62-133.8)	STANDARD COMPLIANCE
and Commission Rule R8-67(c))	REPORT

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Jun 11 2019

Compliance Costs

Line No.	Renewable Resource	RECs only	EMF Period			RECs	Billing Period			RECs
			Total Units <i>Note 3</i>	Cost per Unit	Total Cost		Total Units <i>Note 3</i>	Cost per Unit	Total Cost	
250										
251										
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255										
256										
257										
258										
259										
260										
261	Other Incremental Cost (see Payne Exhibit No. 3 for Incremental Cost worksheet)				\$ 1,631,233			\$ 1,721,000		
262	Billing Period estimated credits for receipts related to contracts (see Payne Exhibit No. 3)				\$ -	Note 1		\$ (700,000)	Note 1	
263	Solar Rebate Program (see Payne Exhibit No. 3 for cost detail)				\$ 281,211			\$ 1,220,856		
264	Research (see Payne Exhibit No. 3 for Research cost detail)				\$ 923,051			\$ 900,000		
265	Total Research and Other Incremental Cost				\$ 2,835,495			\$ 3,141,856		
266	Total REPS Cost - to Williams Exhibit No. 1				\$ 221,506,130			\$ 228,016,561		
267	EMF Period actual credits for receipts related to contracts - to Williams Exhibit No. 4 - footnote (2)				\$ (758,000)	Note 1				

Payne Exhibit No. 3

REDACTED VERSION

DUKE ENERGY PROGRESS, LLC
Docket No. E-2, Sub 1205

Payne Exhibit No. 2
Page 11 of 11
June 11, 2019

Compliance Costs

Line No.	Renewable Resource	EMF Period				Billing Period				
		RECs only	Total Units <i>Note 3</i>	Cost per Unit	Total Cost	RECs	Total Units <i>Note 3</i>	Cost per Unit	Total Cost	RECs

Notes:

Note 1: EMF Period contract receipts are not included in the under/overcollection calculation on Williams Exhibit No. 2, instead they are credited directly to customer class on Williams Exhibit No. 4. Estimated contract receipts are included in Billing Period total other incremental cost as a reduction in REPS charges proposed for the Billing Period.

Note 2: The revenue requirements associated with each of the Company's solar generating facilities were included in total in the Company's base rate case in Docket No. E-2, Sub 1142. The Commission accepted DEP's conclusion that the facility costs included in its proposed base rates were prudently incurred and approved recovery through base rates. Annual levelized costs are no longer calculated and reported in this exhibit.

Note 3: Total units refers to MWhs for bundled energy and REC purchases or to RECs for purchases denoted as RECs only.

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REDACTED VERSION

EMF Period	Billing Period
April 1, 2018 - March 31, 2019	December 1, 2019 - November 30, 2020

Line No. Incremental Cost Worksheet:

Labor by activity:

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20	Total Other Incremental Cost	\$	1,631,233	\$	1,721,000
	Solar Rebate Program Cost Detail (recovery in REPS pursuant to G.S. 62-155(f)): (1)				
21	Annual Amortization of Incentives Provided to Customers, plus return on unamortized balance		265,607		1,186,097
22	Annual Amortization of Program Administrative Labor Costs, plus return on unamortized balance				
23	Annual Amortization of Program Administrative Contract Labor & Other Administrative Costs, plus return on unamortized balance				
24	Total Solar Rebate Program Cost	\$	281,211	\$	1,220,856

(1) All annual Solar Rebate Program costs reflect amortization of incurred costs over 20 years, including a return on the unamortized balance.

REDACTED VERSION

EMF Period	Billing Period
April 1, 2018 - March 31, 2019	December 1, 2019 - November 30, 2020

Line No. Incremental Cost Worksheet:

Research Cost Detail:			
25	Alliance for Sustainable Energy - Solar Impact Analysis		
26	CAPER - Smart Battery Gauge		
27	Clemson University - Small DG Interface Testing		
28	Coalition for Renewable Natural Gas Membership		
29	DER Risks to Transformers and Transmission		
30	EPRI Membership		
31	EPRI - Inverter Onboard Islanding Detection Case Study Project		
32	ETO - Mitigation of Transformer High Inrush Current		
33	FREEDM Center - NCSU		
34	IEEE 1547 Conformity Assessment Pilot Project		
35	Marshall Solar Site Storage Integration and Controller Design		
36	NCSU - ETO - Grid-forming Battery Energy Storage System Characterization & Testing		
37	NCSU - Interactions of PV Installations with Distribution Systems		
38	PNNL - Dynamic Var Compensator Pilot		
39	Research Triangle Institute - Biogas Utilization in NC		
40	Rocky Mountain Institute - eLab		
41	Swine Extrusion/Poultry Mortality - NC State Natural Resources Foundation		
42	UNCC - Evaluation of Fault Scenarios and Mitigation Techniques		
43	UNCC - Hardware Cyber Security for DER Inverters		
44	Total Research Cost	\$	923,051 \$ 900,000

REDACTED VERSION

Line No.	Incremental Cost Worksheet:	EMF Period		Billing Period	
		April 1, 2018 - March 31, 2019		December 1, 2019 - November 30, 2020	
45	Total Other Incremental Cost	\$	1,631,233	\$	1,721,000
46	Projected credits for receipts related to contract amendments/liquidated damages, etc			\$	(700,000)
47	Total Other Incremental Cost and other credits	\$	1,631,233	\$	1,021,000
48	Total Solar Rebate Program Cost		281,211	\$	1,220,856
49	Total Research Cost		923,051	\$	900,000
50	Grand Total - Other Incremental, Solar Rebate Program, and Research Cost, other credits	\$	2,835,495	\$	3,141,856
51	EMF Period actual credits for receipts related to contracts - see Note 1	\$	(758,000)		
52	Net Other Incremental, Solar Rebate Program and Research Cost	\$	2,077,495	\$	3,141,856

Note 1: EMF Period contract receipts are not included in the under/overcollection calculation on Williams Exhibit No. 2, instead they are credited directly to customer class on Williams Exhibit No. 4. Estimated contract receipts are included in Billing Period total other incremental cost as a reduction in REPS charges proposed for the Billing Period.

I/A

PAYNE CONFIDENTIAL EXHIBIT NOS. 4 - 14

DOCKET NO. E-2, SUB 1205

CONFIDENTIAL – FILED UNDER SEAL



EIA

Office of Research Contracts

3040 Cornwallis Road ■ PO Box 12194 ■ Research Triangle Park, NC 27709-2194 ■ USA
Telephone 919.541.6000 ■ Fax 919.541.7148 ■ www.rti.org

October 16, 2018

Mr. Travis Payne
Business Development Manager Distributed Energy Resources
Duke Energy Corporation

Dear Mr. Payne,

RTI is pleased to conduct a study titled "Biogas Utilization in North Carolina: Opportunities and Impact Analysis" with grant funding of \$250,000 per year for two years from Duke Energy. The objectives of the study will be to:

- a. Determine the potential bioenergy/biogas resources available in North Carolina
- b. Identify the most beneficial and optimum utilization of resources to maximize economic, environmental and societal advantages.

RTI will collaborate with Duke University, East Carolina University, North Carolina State University and University of North Carolina at Chapel Hill to carry out the tasks based on recommendations laid out in the NC Department of Environmental Quality's Energy Policy Council Report. The following will be the deliverables from this study:

- 1. Bioenergy/Biogas inventory for North Carolina
- 2. Impact analysis for various products from biogas
- 3. Decision-support tool
- 4. Optimal resource utilization plan

A preliminary budget breakdown is shown in Table 1. The budget splits between the subcontractors will be finalized during sub-award negotiations.

	Year 1	Year 2
RTI	\$25,000	\$25,000
<i>Sub-Contractors</i>		
Duke University		
East Carolina University		
NC State University		
<i>Total Sub-Contractors</i>	<i>\$225,000</i>	<i>\$225,000</i>
Total Grant Award	\$250,000	\$250,000

If this is acceptable to you, we would be pleased to authorize this effort as a grant pursuant to RTI's standard terms and conditions ([http://www.rti.org/contracts/RTI's Standard Terms and Conditions](http://www.rti.org/contracts/RTI%20Standard%20Terms%20and%20Conditions)). Please note that any reference to a "fixed price contract" in the incorporated terms and conditions is hereby replaced with the term "grant."

If acceptable, please sign and return this offer letter at your earliest convenience. We plan to commence this two-year period of performance upon your acceptance of this offer and will submit an invoice for Year 1 promptly.



Office of Research Contracts

3040 Cornwallis Road ■ PO Box 12194 ■ Research Triangle Park, NC 27709-2194 ■ USA
Telephone 919.541.6000 ■ Fax 919.541.7148 ■ www.rti.org

Thank you for your consideration. If you have any questions regarding this submission, please contact me at kay@rti.org or 919.541.7182.

Sincerely,

A handwritten signature in cursive script that reads "Kate Hayes".

Kate Hayes
Senior Contracting Officer

DUKE ENERGY CORPORATION : ACCEPTANCE

A handwritten signature in cursive script that reads "David B. Johnson".

Name David B. Johnson

Title Director

Date 10/23/18

II/A

PAYNE CONFIDENTIAL EXHIBIT NOS. 16 - 18

DOCKET NO. E-2, SUB 1205

CONFIDENTIAL – FILED UNDER SEAL

Compliance Costs

Line No.	Renewable Resource	EMF Period April 1, 2018 - March 31, 2019			Billing Period December 1, 2019 - November 30, 2020		
		RECs only	Total Units <small>Note 3</small>	Cost per Unit	RECs	Total Units <small>Note 3</small>	Cost per Unit
250							
251							
252							
253							
254							
255							
256							
257							
258							
259							
260	Total Units and Cost for Energy and REC purchases						
261	Other Incremental Cost (see Payne Exhibit No. 3 for Incremental Cost worksheet)			\$ 1,631,233			\$ 1,721,000
262	Billing Period estimated credits for receipts related to contracts (see Payne Exhibit No. 3)			\$ -	Note 1		\$ (700,000) Note 1
263	Solar Rebate Program (see Payne Exhibit No. 3 for cost detail)			\$ 281,211			\$ 1,220,856
264	Research (see Payne Exhibit No. 3 for Research cost detail)			\$ 923,051			\$ 900,000
265	Total Research and Other Incremental Cost			\$ 2,835,495			\$ 3,141,856
266	Total REPS Cost - to Williams Exhibit No. 1			\$ 222,297,275			\$ 228,016,561
267	EMF Period actual credits for receipts related to contracts - to Williams Exhibit No.4 - footnote (2)			\$ (758,000)	Note 1 Payne Exhibit No.3		

Compliance Costs

Line No.	Renewable Resource	EMF Period April 1, 2018 - March 31, 2019				Billing Period December 1, 2019 - November 30, 2020			
		RECs only	Total Units <small>Note 3</small>	Cost per Unit	Total Cost	RECs	Total Units <small>Note 3</small>	Cost per Unit	Total Cost

Notes:

Note 1: EMF Period contract receipts are not included in the under/overcollection calculation on Williams Exhibit No. 2, instead they are credited directly to customer class on Williams Exhibit No. 4. Estimated contract receipts are included in Billing Period total other incremental cost as a reduction in REPS charges proposed for the Billing Period.

Note 2: The revenue requirements associated with each of the Company's solar generating facilities were included in total in the Company's base rate case in Docket No. E-2, Sub 1142. The Commission accepted DEP's conclusion that the facility costs included in its proposed base rates were prudently incurred and approved recovery through base rates. Annual levelized costs are no longer calculated and reported in this exhibit.

Note 3: Total units refers to MWhs for bundled energy and REC purchases or to RECs for purchases denoted as RECs only.

I/A

REDACTED VERSION

DUKE ENERGY PROGRESS, LLC
 Docket No. E-2, Sub 1205
 Compliance Costs for the EMF Period April 1, 2018 to March 31, 2019

Williams Exhibit No. 1
 Page 1 of 2
 June 11, 2019

Line No.	Renewable Resource	RECs - Payne Exhibit No. 2	MWh (Energy)	Total Cost - Payne Exhibit No. 2	Avoided Cost	Incremental Cost	-Avoided Cost Recovered in Fuel Cost Adjustment Rider
1	[REDACTED]						
2							
3							
4							
5							
6							
7							
8	Other Incremental cost			\$ 1,631,233		\$ 1,631,233 (f)	
9	Solar Rebate Program			\$ 281,211	Payne Exhibit No. 2	\$ 281,211 (g)	
10	Research			\$ 923,051		\$ 923,051 (h)	
11	Total			\$ 221,506,130 Payne Exhibit No. 2		\$ 36,616,233 (below)	
	Incremental cost category					Incremental Cost	Percent of Total Incremental Cost
12	[REDACTED]						
13							
14	Total					\$ 36,616,233 (above)	100.00%
	Allocate estimated incremental cost of solar resources between solar compliance requirement and general compliance requirement:						
15	[REDACTED]						
16							
17							
18							
19							
20							

DUKE ENERGY PROGRESS, LLC
 Docket No. E-2, Sub 1205
 Compliance Cost for the Billing Period December 1, 2019 to November 30, 2020

Williams Exhibit No. 1
 Page 2 of 2
 June 11, 2019

Line No.	Renewable Resource	RECs - Payne Exhibit No. 2	MWh (Energy)	Total Cost - Payne Exhibit No. 2	Avoided Cost	Incremental Cost	Avoided Cost Recovered in Fuel Cost Adjustment Rider
1	[REDACTED]						
2							
3							
4							
5							
6							
7							
8							
9	Other Incremental cost			\$ 1,721,000	[REDACTED]	\$ 1,721,000	(g)
10	Estimated receipts related to contract performance			\$ (700,000)	Payne Exhibit No. 2	\$ (700,000)	(h)
11	Solar Rebate Program			\$ 1,220,856		\$ 1,220,856	(i)
12	Research			\$ 900,000		\$ 900,000	(j)
13	Total			\$ 228,016,561 Payne Exhibit No. 2		\$ 43,246,220	
14	Incremental cost category					Incremental Cost - Retail	Percent of Total Incremental Cost
15	[REDACTED]						
16	Total					\$ 43,246,220	100.00%
17	Allocate estimated incremental cost of solar resources between solar compliance requirement and general compliance requirement:						
18	[REDACTED]						
19	[REDACTED]						
20	[REDACTED]						
21	[REDACTED]						
22	[REDACTED]						

EIA

Calculate set-aside and other incremental and research cost per customer class - EMF Period:

Line No.	Customer Class	Total Unadjusted Number of Accounts ⁽¹⁾	Annual Rider Cap per Account Type	Calculated Annual Revenue Cap	Cost Cap Allocation Factor	Allocated Annual Set-aside, Other Incremental, and Research Cost
1	Residential	1,219,245	\$ 27	\$ 32,919,615	51.2%	\$ 8,925,549
2	General	197,172	\$ 150	\$ 29,575,800	46.0%	\$ 8,019,048
3	Industrial	1,808	\$ 1,000	\$ 1,808,000	2.8%	\$ 488,116
4	Totals			\$ 64,303,415	100.0%	\$ 17,432,713

Williams Ex No. 1, Pg 1 Line 12

Calculate general cost per customer class - EMF Period:

Line No.	Customer Class	Number of RECs for General compliance ⁽¹⁾	% of EE REC supplied by Class ⁽²⁾	REC Requirement supplied by EE by class ⁽³⁾⁽¹⁾	Number of General RECs net of EE (c) = (a) - (b)	General Cost Allocation Factor (e) = (c) / (d)	Allocated Annual General Incremental Costs
5	Residential		63.4%			44.1%	\$ 8,467,578
6	General		35.5%			52.1%	\$ 9,990,074
7	Industrial		1.1%			3.8%	\$ 725,868
8	Totals		100.0%			100.0%	\$ 19,183,520

(4)

Williams Ex No. 1, Pg 1 Line 13

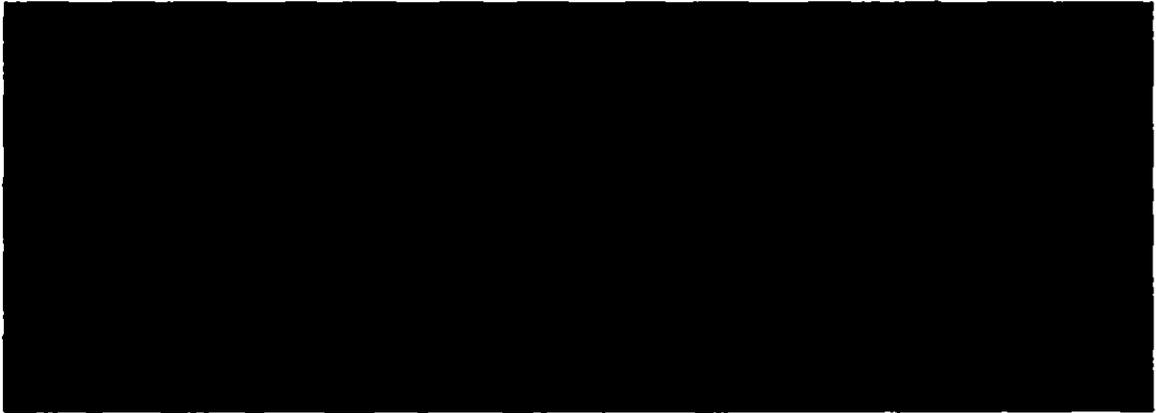
Total cost allocation by customer class - EMF Period:

Line No.	Customer Class	Total Incremental REPS cost by class	% Incremental REPS cost by class
9	Residential	\$ 17,393,127	47.50%
10	General	\$ 18,009,122	49.18%
11	Industrial	\$ 1,213,984	3.32%
12	Total	\$ 36,616,233	100.00%

Williams Ex. No. 1 Pg 1 Line No. 14

Notes:

- (1) Average monthly number of REPS accounts for the EMF Period.
- (2) EE allocated to account type according to actual relative contribution of EE RECs by customer class.
- (3) Limited to 25% of total RECs



DUKE ENERGY PROGRESS, LLC
Docket No. E-2, Sub 1205
Compliance Costs for the EMF Period April 1, 2018 to March 31, 2019

Williams Exhibit No. 2
Page 2 of 2
June 11, 2019

Calculate incremental cost under/(over) collection per customer class - EMF Period:

Line No.	Account Type	Allocated Annual Set-aside and Other Incremental costs	Allocated Annual General Incremental Costs	Total Incremental Costs	Actual NC Retail REPS Revenues Realized - EMF Period	Annual REPS EMF - Under/(Over)-Collection, before Interest	Interest on Over-collection⁽¹⁾	Annual REPS EMF - Under/(Over)-Collection
1	Residential	\$ 8,925,549	\$ 8,467,578	\$ 17,393,127	\$ 16,401,778	\$ 991,349	\$ -	\$ 991,349
2	General	\$ 8,019,048	\$ 9,990,074	\$ 18,009,122	\$ 19,213,014	\$ (1,203,892)	\$ (200,649)	\$ (1,404,541)
3	Industrial	\$ 488,116	\$ 725,868	\$ 1,213,984	\$ 1,278,418	\$ (64,434)	\$ (10,739)	\$ (75,173)
4	Total	\$ 17,432,713	\$ 19,183,520	\$ 36,616,233	\$ 36,893,210	\$ (276,977)	\$ (211,388)	\$ (488,365)

<<< Williams Exhibit No. 2 page 1 >>>

Notes:

(1) Interest calculated at annual rate of 10% for number months from mid-point of EMF period to mid-point of prospective rider billing period.

IIA

REDACTED VERSION

DUKE ENERGY PROGRESS, LLC
 Docket No. E-2, Sub 1205
 Compliance Cost for the Billing Period December 1, 2019 to November 30, 2020

Williams Exhibit No. 3
 Page 1 of 2
 June 11, 2019

Calculate set-aside and other incremental and research cost per customer class - Billing Period:

Line No.	Customer Class	Total Unadjusted Number of Accounts ⁽¹⁾	Annual Rider Cap per Account Type	Calculated Annual Revenue Cap	Cost Cap Allocation Factor	Allocated Annual Set-aside, Other Incremental, and Research Cost
1	Residential	1,234,405	\$ 27	\$ 33,328,935	51.1%	\$ 11,310,110
2	General	200,915	\$ 150	\$ 30,137,250	46.2%	\$ 10,225,580
3	Industrial	1,794	\$ 1,000	\$ 1,794,000	2.7%	\$ 597,599
4	Totals			<u>\$ 65,260,185</u>	100.0%	<u>\$ 22,133,289</u>

Williams Ex No. 1, Pg 2 Line 14

Calculate general cost per customer class - Billing Period:

Line No.	Customer Class	Number of RECs for General compliance ⁽¹⁾	% of EE REC supplied by Class ⁽²⁾	REC Requirement supplied by EE by class ⁽³⁾⁽⁴⁾	Number of General RECs net of EE (e) = (a) - (b)	General Cost Allocation Factor (e) = (c) / (d)	Allocated Annual General Incremental Costs
5	Residential		63.4%			43.9%	\$ 9,268,577
6	General		35.5%			52.5%	\$ 11,084,288
7	Industrial		1.1%			3.6%	\$ 760,066
8	Totals		100.0%			100.0%	\$ 21,112,931

(4)

Williams Ex No. 1, Pg 2 Line 15

Total cost allocation by customer class - Billing Period:

	Total Incremental REPS cost by class	% Incremental REPS cost by class
9 Residential	\$ 20,578,687	47.58%
10 General	\$ 21,309,868	49.28%
11 Industrial	\$ 1,357,665	3.14%
12 Total	<u>\$ 43,246,220</u>	100.00%

Williams Ex No. 1, Pg 2 Line 16

Notes:

- (1) Projected average monthly number of REPS accounts for the Billing Period.
- (2) EE allocated to account type according to actual relative contribution of EE RECs by customer class.
- (3) Limited to 25% of total RECs



DUKE ENERGY PROGRESS, LLC

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Compliance Cost for the Billing Period December 1, 2019 to November 30, 2020

Williams Exhibit No. 3

Page 2 of 2

June 11, 2019

Calculate Total cost to collect by Customer Class - Billing Period:

North Carolina Retail Annual Rider Cost by Account Type

Line No.	North Carolina Retail Only - Billing Period	Allocated Annual Set- aside and Other Incremental costs	Allocated Annual General Incremental Costs	Total Incremental Costs
1	Residential	\$ 11,310,110	\$ 9,268,577	\$ 20,578,687
2	General	\$ 10,225,580	\$ 11,084,288	\$ 21,309,868
3	Industrial	\$ 597,599	\$ 760,066	\$ 1,357,665
4	Total	\$ 22,133,289	\$ 21,112,931	\$ 43,246,220

Williams Exhibit No. 3,
Pg 1, line 4

Williams Exhibit No. 3,
Pg 1, line 8

Williams Exhibit No.
3, Pg 1, line 9

I/A

DUKE ENERGY PROGRESS, LLC
 Docket No. E-2, Sub 1205
 DEP REPS Billing Components proposed to be effective December 1, 2019 - November 30, 2020

Williams Exhibit No. 4
 Page 1 of 1
 June 11, 2019

Calculate DEP NC Retail monthly REPS rider components:

Line No.	Customer Class	Total Projected Number of Accounts - DEP NC Retail ⁽¹⁾	Annual REPS EMF Under/(Over)-Collection	Contract Amendments, Penalties, Change-of-control, Etc. ⁽²⁾	Total EMF costs/(credits)	Monthly EMF Rider	Projected Total Billing Period Incremental Costs	Monthly REPS Rider
1	Residential	1,234,405	\$ 991,349	\$ (388,096)	\$ 603,253	\$ 0.04	\$ 20,578,687	\$ 1.39
2	General	200,915	\$ (1,404,541)	\$ (348,680)	\$ (1,753,221)	\$ (0.73)	\$ 21,309,868	\$ 8.84
3	Industrial	1,794	\$ (75,173)	\$ (21,224)	\$ (96,397)	\$ (4.48)	\$ 1,357,665	\$ 63.07
4			\$ (488,365)	\$ (758,000)	\$ (1,246,365)		\$ 43,246,220	

Williams Ex. No. 2, Pg 2

Williams Ex. No. 3, Pg 2

Compare total annual REPS charges per account to per-account cost caps:

Customer Class	Monthly EMF Rider	Monthly REPS Rider - 12 months	Combined Monthly Rider - 12 months	Regulatory Fee Multiplier	Rider including Regulatory Fee	REPS Rider including Regulatory Fee	Combined Monthly Rider including Regulatory Fee	Combined Annual Rider including Regulatory Fee	Annual Per-Account Cost Cap
5 Residential	\$ 0.04	\$ 1.39	\$ 1.43	1.001402	\$ 0.04	\$ 1.39	\$ 1.43	\$ 17.16	\$ 27.00
6 General	\$ (0.73)	\$ 8.84	\$ 8.11	1.001402	\$ (0.73)	\$ 8.85	\$ 8.12	\$ 97.44	\$ 150.00
7 Industrial	\$ (4.48)	\$ 63.07	\$ 58.59	1.001402	\$ (4.49)	\$ 63.16	\$ 58.67	\$ 704.04	\$ 1,000.00

Notes:

- (1) Projected average monthly number of REPS accounts for the Billing Period.
- (2) Forward EMF Period receipts for contract amendments, penalties, change-of-control, etc

Customer Class	Contract receipts credited by customer class	NC retail portion of EMF Period costs - Williams Exhibit No. 1, Pg 1	Allocation to customer class - Williams Exhibit No. 2, Pg 1	Receipts for contract amendments, penalties, change-of-control, etc.
Residential			51.20%	\$ (388,096)
General			46.00%	\$ (348,680)
Industrial			2.80%	\$ (21,224)
Total contract payments received - EMF Period	\$ (758,000)	\$ (758,000)	100.00%	\$ (758,000)

Payne Exhibit No. 2 100.00%

I/A

DUKE ENERGY PROGRESS, LLC
Docket No. E-2, Sub 1205

Williams Exhibit No. 5
Page No. 1 of 2
June 11, 2019

Worksheet detailing energy efficiency certificate ("EEC") inventory

	<u>EECs</u>	<u>Reference</u>
EECs carried forward at Dec 31, 2012	333,742	2012 Compliance Report - Docket No. E-2, Sub 1032
EECs generated for 2013 per Company's annual update	392,996	2012 Compliance Report - Docket No. E-2, Sub 1043
Less: EECs used for compliance for 2013	274,420	Company workpapers
EECs carried forward at Dec 31, 2013	452,318	2012 Compliance Report - Docket No. E-2, Sub 1043
EECs generated for 2014 per Company's annual update	479,942	Company workpapers
Less: EECs used for compliance for 2014	276,649	2014 Compliance Report - Docket No. E-2, Sub 1071
EECs carried forward at Dec 31, 2014	655,611	2014 Compliance Report - Docket No. E-2, Sub 1071
EECs generated for 2015 per Company's annual update	1,682,467	Company workpapers
EEC inventory balance adjustment to recognize perpetual savings	1,966,773	Company workpapers
EEC inventory balance 2015 adjustment for EM&V results	4,506	Company workpapers
Less: EECs used for compliance for 2015	562,361	2015 Compliance Report - Docket No. E-2, Sub 1109
EECs carried forward at Dec 31, 2015	3,746,996	2015 Compliance Report - Docket No. E-2, Sub 1109
EECs generated for 2016 per Company's annual update	1,854,388	Company workpapers
EEC inventory balance adjustment - conversion to measure life	(123,943)	Company workpapers
EEC inventory balance 2016 adjustment for EM&V results	(83,074)	Company workpapers
Less: EECs used for compliance for 2016	561,829	2016 Compliance Report - Docket No. E-2, Sub 1144
EECs carried forward at Dec 31, 2016	4,832,538	2016 Compliance Report - Docket No. E-2, Sub 1144
EECs generated for 2017 per Company's annual update	2,026,234	Company workpapers
EEC inventory balance 2017 adjustment for EM&V results	(61,225)	Company workpapers
Less: EECs used for compliance for 2017	559,087	2017 Compliance Report - Docket No. E-2, Sub 1175
EECs carried forward at Dec 31, 2017	6,238,460	2017 Compliance Report - Docket No. E-2, Sub 1175
EECs generated for 2018 per Company's annual update	2,182,561	Company workpapers ^(a)
EEC inventory balance 2018 adjustment for EM&V results	2,467	Company workpapers
Less: EECs used for compliance for 2018	920,747	2018 Compliance Report - Docket No. E-2, Sub 1205
EECs carried forward at Dec 31, 2018	<u>7,502,741</u>	2018 Compliance Report - Docket No. E-2, Sub 1205

Summary workpapers - EECs generated

Update for EECs generated - as of year-end 2018:

	<u>Program year</u>							<u>Total</u>
	<u>2008-2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	
Current view at year-end 2018	1,233,837	923,647	1,219,361	1,533,015	1,817,503	2,028,060	2,182,561	10,937,984
Previously reported current view at year-end 2017	1,233,837	923,647	1,219,361	1,533,015	1,816,862	2,026,234	^(a)	8,752,956
Total Adjustments to previously reported results	0	0	0	0	641	1,826		2,185,028
EM&V and participation adjustments (detail below)	0	0	0	0	641	1,826		2,467
EECs generated 2018 per current view								^(a) 2,182,561
EECs entered in NC-RETS for vintage 2018								2,185,028

Worksheet detailing energy efficiency certificate ("EEC") inventory

Detail for adjustments applicable to 2008 - 2017 results:

Adjustment type	Program	Program year						Total
		2008-2012	2013	2014	2015	2016	2017	
EM&V and participation adjustments:								
Residential Energy Assessment		-	-	-	-	651	3,126	3,777
Residential New Construction		-	-	-	-	(10)	(254)	(264)
Energy Efficiency for Business		-	-	-	-	-	278	278
Small Business Energy Saver		-	-	-	-	-	(434)	(434)
Residential Lighting		-	-	-	-	-	(890)	(890)
Home Energy Improvement		-	-	-	-	-	(1)	(1)
Multi-Family Energy Efficiency		-	-	-	-	-	1	1
Total Adjustments to previously reported results		-	-	-	-	641	1,826	2,467

EM&V reports applicable to results reported above and the time period covered in this docket - filed as Exhibit No. 8 to the testimony of DEP witness Robert Evans in DEP's energy efficiency Docket No. E-2, Sub 1206:

Program Name As Filed	Docket	Report Reference	Effective Date
CIG-DR	E-2, Sub 953	2017 EM&V Report for the Duke Energy Progress Commercial, Industrial, and Governmental Demand Response Automation (D	5/1/2018
Residential New Construction	E-2, Sub 1021	EM&V Report for the Residential New Construction Program Years: 2015-2016	1/1/2016
EnergyWise	E-2, Sub 927	EM&V Report for the EnergyWise Home Program Winter 2017/2018	8/6/2018
Small Business Energy Saver	E-2, Sub 1022	EM&V Report for the Small Business Energy Saver Program Duke Energy Progress and Duke Energy	7/1/2017
Residential Energy Assessment	E-2, Sub 1094	Duke Energy Progress Residential Energy Assessments Program Evaluation Report - Final	4/1/2016
Non-Residential Smart Saver	E-2, Sub 1086	Duke Energy Carolinas and Progress EnergyWise Business Evaluation Report - Final	1/1/2018
Energy Efficiency in Business	E-2, Sub 938	Smart Saver® Non-Residential Custom Program Years 2016-2017 Evaluation Report	12/1/2018
EnergyWise	E-2, Sub 927	EM&V Report for the EnergyWise Home Demand Response Program Summer PY2018	11/30/2018
Energy Efficiency in Education	E-2, Sub 1060	Energy Efficiency Education in Schools Program Year 2017 - 2018 Evaluation Report	8/1/2018

I/A

DUKE ENERGY PROGRESS, LLC
 Docket No. E-2, Sub 1205
 Compliance Costs for the EMF Period April 1, 2018 to March 31, 2019

REDACTED VERSION

Revised Williams Exhibit No. 1
 Page 1 of 2
 July 16, 2019

Line No.	Renewable Resource	RECs - Revised Payne Exhibit No. 2	MWh (Energy)	Total Cost - Revised Payne Exhibit No. 2	Avoided Cost	Incremental Cost	Avoided Cost Recovered in Fuel Cost Adjustment Rider
1							
2							
3							
4							
5							
6							
7							
8	Other Incremental cost			\$ 1,631,233		\$ 1,631,233 (f)	
9	Solar Rebate Program			\$ 281,211	Revised Payne Exhibit No. 2	\$ 281,211 (g)	
10	Research			\$ 923,051		\$ 923,051 (h)	
11	Total			\$ 2,222,297,275	Revised Payne Exhibit No. 2	\$ 37,201,361 (below)	
	Incremental cost category					Incremental Cost	Percent of Total Incremental Cost
12							
13							
14	Total					\$ 37,201,361	100.00%
						(above)	
	Allocate estimated incremental cost of solar resources between solar compliance requirement and general compliance requirement:						
15							
16							
17							
18							
19							
20							

I/A

Calculate set-aside and other incremental and research cost per customer class - EMF Period:

Line No.	Customer Class	Total Unadjusted Number of Accounts ⁽¹⁾	Annual Rider Cap per Account Type	Calculated Annual Revenue Cap	Cost Cap Allocation Factor	Allocated Annual Set-aside, Other Incremental, and Research Cost
1	Residential	1,219,245	\$ 27	\$ 32,919,615	51.2%	\$ 9,225,134
2	General	197,172	\$ 150	\$ 29,575,800	46.0%	\$ 8,288,207
3	Industrial	1,808	\$ 1,600	\$ 1,808,000	2.8%	\$ 504,500
4	Totals			\$ 64,303,415	100.0%	\$ 18,017,841

Calculate general cost per customer class - EMF Period:

Line No.	Customer Class	Number of RECs for General compliance ⁽²⁾	% of EE REC supplied by Class ⁽³⁾	REC Requirement supplied by EE by class ^{(3)(b)}	Number of General RECs net of EE ^{(c) = (a) - (b)}	General Cost Allocation Factor ^{(c) = (c) / (d)}	Allocated Annual General Incremental Costs
5	Residential		63.4%			44.1%	\$ 8,464,673
6	General		35.5%			52.1%	\$ 9,992,573
7	Industrial		1.1%			3.8%	\$ 726,274
8	Totals		100.0%			100.0%	\$ 19,183,520

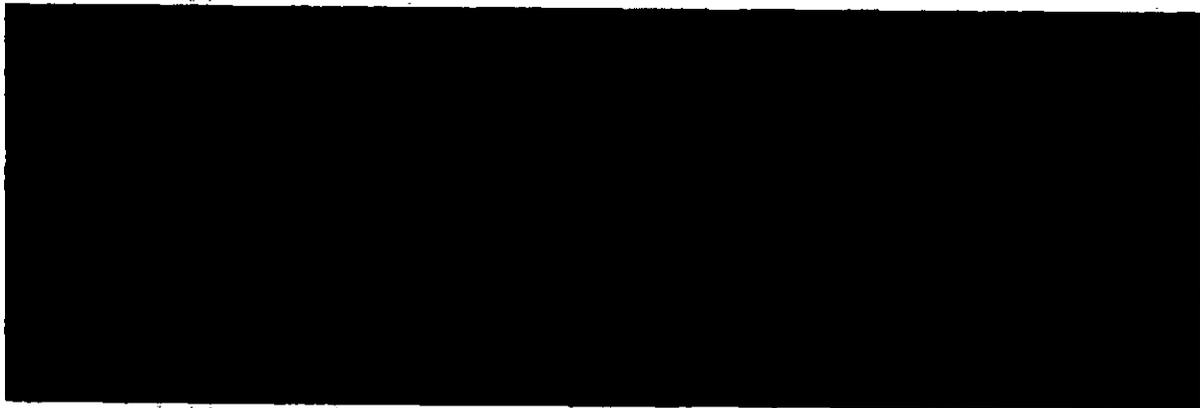
Total cost allocation by customer class - EMF Period:

Line No.	Customer Class	Total Incremental REPS cost by class	% Incremental REPS cost by class
9	Residential	\$ 17,689,807	47.55%
10	General	\$ 18,280,780	49.14%
11	Industrial	\$ 1,230,774	3.31%
12	Total	\$ 37,201,361	100.00%

Revised Williams Ex. No. 1 Pg 1 Line No. 14

Notes:

- (1) Average monthly number of REPS accounts for the EMF Period.
- (2) EE allocated to account type according to actual relative contribution of EE RECs by customer class
- (3) Limited to 25% of total RECs



DUKE ENERGY PROGRESS, LLC
Docket No. E-2, Sub 1205
Compliance Costs for the EMF Period April 1, 2018 to March 31, 2019

Revised Williams Exhibit No. 2
Page 2 of 2
July 16, 2019

Calculate incremental cost under/(over) collection per customer class - EMF Period:

Line No.	Account Type	Allocated Annual Set-aside and Other Incremental costs	Allocated Annual General Incremental Costs	Total Incremental Costs	Actual NC Retail REPS Revenues Realized - EMF Period	Annual REPS EMF - Under/(Over)-Collection, before Interest	Interest on Over-collection ⁽¹⁾	Annual REPS EMF - Under/(Over)-Collection
1	Residential	\$ 9,225,134	\$ 8,464,673	\$ 17,689,807	\$ 16,401,778	\$ 1,288,029	\$ -	\$ 1,288,029
2	General	\$ 8,288,207	\$ 9,992,573	\$ 18,280,780	\$ 19,213,014	\$ (932,234)	\$ (155,372)	\$ (1,087,606)
3	Industrial	\$ 504,500	\$ 726,274	\$ 1,230,774	\$ 1,278,418	\$ (47,644)	\$ (7,941)	\$ (55,585)
4	Total	\$ 18,017,841	\$ 19,183,520	\$ 37,201,361	\$ 36,893,210	\$ 308,151	\$ (163,313)	\$ 144,838

<<< Revised Williams Exhibit No. 2 page 1 >>>

Notes:

⁽¹⁾ Interest calculated at annual rate of 10% for number months from mid-point of EMF period to mid-point of prospective rider billing period.

I/A

DUKE ENERGY PROGRESS, LLC
 Docket No. E-2, Sub 1205
 DEP REPS Billing Components proposed to be effective December 1, 2019 - November 30, 2020

Revised Williams Exhibit No. 4
 Page 1 of 1
 July 16, 2019

Calculate DEP NC Retail monthly REPS rider components:

Line No.	Customer Class	Total Projected Number of Accounts - DEP NC Retail ⁽¹⁾	Annual REPS EMF Under/(Over)-Collection	Contract Amendments, Penalties, Change-of-control, Etc. ⁽²⁾	Total EMF costs/(credits)	Monthly EMF Rider	Projected Total Billing Period Incremental Costs	Monthly REPS Rider
1	Residential	1,234,405	\$ 1,288,029	\$ (388,096)	\$ 899,933	\$ 0.06	\$ 20,578,687	\$ 1.39
2	General	200,915	\$ (1,087,606)	\$ (348,680)	\$ (1,436,286)	\$ (0.60)	\$ 21,309,868	\$ 8.84
3	Industrial	1,794	\$ (55,585)	\$ (21,224)	\$ (76,809)	\$ (3.57)	\$ 1,357,665	\$ 63.07
4			\$ 144,838	\$ (758,000)	\$ (613,162)		\$ 43,246,220	
			Revised Williams Ex. No. 2, Pg 2				Williams Ex. No. 3, Pg 2	

Compare total annual REPS charges per account to per-account cost caps:

Customer Class	Monthly EMF Rider	Monthly REPS Rider - 12 months	Combined Monthly Rider - 12 months	Regulatory Fee Multiplier	Monthly EMF Rider including Regulatory Fee	Monthly REPS Rider including Regulatory Fee	Combined Monthly Rider including Regulatory Fee	Combined Annual Rider including Regulatory Fee	Annual Per-Account Cost Cap
5 Residential	\$ 0.06	\$ 1.39	\$ 1.45	1.001402	\$ 0.06	\$ 1.39	\$ 1.45	\$ 17.40	\$ 27.00
6 General	\$ (0.60)	\$ 8.84	\$ 8.24	1.001402	\$ (0.60)	\$ 8.85	\$ 8.25	\$ 99.00	\$ 150.00
7 Industrial	\$ (3.57)	\$ 63.07	\$ 59.50	1.001402	\$ (3.58)	\$ 63.16	\$ 59.58	\$ 714.96	\$ 1,000.00

Notes:

- (1) Projected average monthly number of REPS accounts for the Billing Period.
- (2) Forward EMF Period receipts for contract amendments, penalties, change-of-control, etc

Customer Class	Contract receipts credited by customer class - Revised Payne Exhibit No. 2	NC retail portion of EMF Period costs - Revised Williams Exhibit No. 1, Pg 1	Allocation to customer class - Revised Williams Exhibit No. 2, Pg 1	Receipts for contract amendments, penalties, change-of-control, etc.
Residential			51.20%	\$ (388,096)
General			46.00%	\$ (348,680)
Industrial			2.80%	\$ (21,224)
Total contract payments received - EMF Period	\$ (758,000)	\$ (758,000)	100.00%	\$ (758,000)
	Revised Payne Exhibit No. 2		100.00%	

