

# NORTH CAROLINA PUBLIC STAFF UTILITIES COMMISSION

September 7, 2017

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

Re:

Docket No. E-2, Sub 1146

Dear Ms. Jarvis:

In connection with the above-captioned docket, I transmit herewith for filing on behalf of the Public Staff the following:

- 1. Testimony of Darlene P. Peedin, Manager, Electric Section, Accounting Division; and
- 2. Testimony of Dustin R. Metz, Electric Engineer, Electric Division.

By copy of this letter, I am forwarding a copy of the above to all parties of record.

Sincerely yours,

Electronically submitted /s/ Robert S. Gillam Staff Attorney bob.gillam@psncuc.nc.gov

### RSG/blm

#### Attachments

c: Parties of Record

Executive Director (919) 733-2435

Communications (919) 733-2810 Economic Research (919) 733-2902

Legal (919) 733-6110 Transportation (919) 733-7766

Accounting (919) 733-4279

Consumer Services (919) 733-9277 Electric (919) 733-4326 Natural Gas (919) 733-2267

Water (919) 733-5610

## BEFORE THE NORTH CAROLINA UTILITIES COMMISSION DOCKET NO. E-2, SUB 1146

# Testimony of Darlene P. Peedin On Behalf of the Public Staff North Carolina Utilities Commission

### September 7, 2017

1	Q.	PLEASE STATE YOUR NAME AND ADDRESS FOR THE
2		RECORD.
3	A.	My name is Darlene P. Peedin. My business address is 430 North
4		Salisbury Street, Raleigh, North Carolina.
5		
6	Q.	WOULD YOU BRIEFLY DISCUSS YOUR EDUCATION AND
7		EXPERIENCE?
8	A.	Yes. My education and experience are summarized in Appendix A to
9		my testimony.
10		
11	Q.	WHAT ARE YOUR DUTIES?
12	A.	I am responsible for the performance and supervision of the following
13		activities: (1) the examination and analysis of testimony, exhibits,
14		books and records, and other data presented by utilities and other
15		parties under the jurisdiction of the Commission or involved in
16		Commission proceedings; and (2) the preparation and presentation

to the Commission of testimony, exhibits, and other documents in those proceedings.

### 4 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to present the results of the Public Staff's investigation of the Experience Modification Factor (EMF) riders proposed by Duke Energy Progress, LLC (DEP or the Company) in this proceeding. The EMF riders are utilized to "true-up," by customer class, the recovery of fuel and fuel-related costs incurred during the test year. DEP's test year in this fuel proceeding is the twelve months ended March 31, 2017.

A.

## Q. PLEASE EXPLAIN THE FUEL EMF RIDER BEING PROPOSED BY DEP IN THIS PROCEEDING.

In its application filed on June 21, 2017, DEP stated that it experienced a net underrecovery in the amount of \$33,397,742 for its combined customer classes. DEP proposed to defer collection of \$42,483,532 of underrecovered amounts in the test period, in this case, for the residential, small general service, large general service, and lighting classes until its 2018 annual fuel proceeding. The EMF over/(under) collection of fuel for each of the North Carolina retail customer classes initially proposed was as follows:

1	Residential	(\$21,667,250)		
2	Small General Service	(\$1,070,097)		
3	Medium General Service	\$9,085,789		
4	Large General Service	(\$17,931,000)		
5	Lighting	(\$1,815,185)		
6				
7	As a result of DEP's proposed defe	rral of the underrecovery of fuel		
8	costs until its 2018 annual fuel proce	costs until its 2018 annual fuel proceeding, the EMF increment rider		

The test year fuel and fuel-related costs for the medium general service class were overrecovered by an amount of \$9,085,789, per the initial application. The Company proposed to return the overcollection of fuel (plus interest in the amount of \$1,514,298) for this class during the rate period (December 2017 – November 2018). The proposed EMF rider for the medium general service class was based on DEP's calculated and reported North Carolina retail fuel and fuel-related cost overrecovery of \$9,085,789 for the twelve months ended March 31, 2017. The initially proposed rider was calculated by dividing the fuel and fuel-related cost overrecovery by DEP's normalized test year North Carolina retail sales of 11,162,395 megawatt-hours (MWh) for the medium general service class. The

proposed would be zero for each of the residential, small general

service, large general service, and lighting classes set forth above.

proposed interest of \$1,514,298 for the medium general service class was divided by the same level of MWh sales. This resulted in an initially proposed EMF decrement in the amount of (0.081) cents per kilowatt hour (kWh) and an EMF interest decrement in the amount of (0.014) cents per kWh, both excluding the regulatory fee.

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## Q. PLEASE DESCRIBE THE PUBLIC STAFF'S INVESTIGATION OF THE FUEL EMF INCREMENT AND DECREMENT RIDERS.

The Public Staff's investigation included procedures intended to evaluate whether the Company properly determined its per books fuel and fuel-related costs and revenues during the test period. These procedures included a review of the Company's filing, prior Commission orders, the Monthly Fuel Reports filed by the Company with the Commission, and other Company data provided to the Public Staff. Additionally, they included review of certain specific types of expenditures impacting the Company's test year fuel and fuel-related costs, including nuclear fuel disposal costs and payments to nonutility generators, as well as reviews of source documentation of fuel and fuel-related costs for certain selected Company generation resources. Performing the Public Staff's investigation required the review of numerous responses to written and verbal data requests, as well as a site visit to the Company's offices and several telephone conferences with Company representatives.

1	Q.	PLEASE	DESCRIBE	THE	COMPANY'S	SUPPLEMENTAL

### 2 TESTIMONY AND REVISED EXHIBITS.

On September 6, 2017, DEP filed the Supplemental Testimony and Revised Exhibits of Kendra A. Ward. The purpose of DEP's supplemental testimony is to revise the prospective fuel costs to incorporate the impacts of House Bill 589 (HB 589); to incorporate an adjustment proposed by the Public Staff related to replacement power costs at the Robinson Nuclear Plant; and to clarify the Company's request to defer collection of underrecovered amounts for the residential, small general service, large general service, and lighting classes.

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### Q. WHAT PROPOSALS DID COMPANY WITNESS WARD MAKE IN

### HER SUPPLEMENTAL TESTIMONY?

In her Supplemental Testimony and Revised Exhibits, DEP witness Ward recommended that the initially proposed deferral of \$42,483,532 of test-period underrecoveries for the residential, small general service, large general service, and lighting classes be reduced. The reduction would reflect an adjustment originally proposed by the South Carolina Office of Regulatory Staff (ORS) in a 2017 fuel cost review proceeding.

### Q. PLEASE EXPLAIN THIS ADJUSTMENT.

ORS proposed the adjustment to remove the South Carolina share of certain replacement costs incurred by the Company during an August 2016 outage at the Robinson Nuclear Plant. DEP stipulated to the adjustment in South Carolina. The North Carolina share of the disallowed replacement power costs is \$876,686, and the Company has agreed to this adjustment as a result of discussions with the Public Staff. Of the total \$876,686 adjustment, \$257,907 is allocable to the medium general service class and will be added to the overrecovery to be refunded to this class. The remaining \$618,779 will be offset against the underrecovery that must be collected from the other four customer classes. The Public Staff agrees with this allocation of the disallowed amount.

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# Q. WHAT IS YOUR RECOMMENDATION AS TO THE OVERRECOVERY FROM THE MEDIUM GENERAL SERVICE CLASS?

The amount of the overrecovery, after taking into account the medium general service class's \$257,907 share of the Robinson adjustment, is \$9,343,696. This overcollection, plus interest in the amount of \$1,557,282, will be returned by the Company to the medium general service class during the rate period (December 2017 – November 2018) in this case. The revised EMF rider for the

medium general service class was calculated by dividing the fuel and
fuel-related cost overrecovery by DEP's normalized test year North
Carolina retail sales of 11,162,395 MWh for this class. The interest
of \$1,557,282 was divided by the same level of MWh sales. This will
result in an EMF decrement in the amount of (0.084) cents per kWh
and an EMF interest decrement in the amount of (0.014) cents per
kWh, both excluding the regulatory fee.

## Q. ARE YOU PROPOSING ANY ADJUSTMENTS TO DEP'S TEST-YEAR KWH SALES?

A. No. I am not proposing any change to the normalized North Carolina retail sales as proposed by DEP of 15,786,375 MWh for the residential class; 1,896,757 MWh for the small general service class, 11,162,395 MWh for the medium general service class, 8,347,370 MWh for the large general service class, and 377,137 MWh for the lighting class, as set forth in DEP's testimony.

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## 18 Q. WHAT ARE THE UNDERRECOVERY AMOUNTS YOU ARE 19 PROPOSING FOR THE FIVE CUSTOMER CLASSES?

My recommended revised underrecovery amounts (as also set forth in witness Ward's Revised Exhibits) to be deferred for recovery until DEP's 2018 fuel recovery proceeding, for each North Carolina retail

1		customer class, are as follows (excluding the North Carolina
2		regulatory fee):
3		Residential (\$21,282,684)
4		Small General Service (\$1,023,834)
5		Medium General Service \$0
6		Large General Service (\$17,750,323)
7		Lighting (\$1,807,912)
8		I have provided these amounts to Public Staff witness Dustin R. Metz
9		for incorporation into his recommended final fuel factor.
10		
11	Q.	WHAT IS YOUR POSITION ON THE COMPANY'S REQUEST TO
12		DEFER COLLECTION OF THE UNDERRECOVERED AMOUNTS
13		(FOR THE FOUR CLASSES WITH AN UNDERRECOVERY) UNTIL
14		THE NEXT FUEL PROCEEDING?
15	A.	In her Supplemental Testimony, Ms. Ward sets forth the following
16		statement of the Company with regard to the underrecovery from
17		these customer classes:
18 19 20 21 22 23 24 25 26 27 28 29		The Company will not request any interest, for any time period, associated with its proposed delay in recovering this amount. The Company intends to delay recovery of this amount for one year by requesting recovery of the \$41.9 million [net of the Robinson Nuclear adjustment set forth above] in its 2018 fuel proceeding. In its 2018 fuel proceeding, DEP will follow it normal practices to compute the EMF component of its fuel rates to address any over or under collection of the fuel and fuel-related costs for the test period of the 2018 case. The deferred amount of the \$41.9 million, broken down by customer class, will be added into the

1		proposed 2018 EMF amounts for each customer class
2		and billed in the rate period of December 2018-
3		November 2019. DEP will also follow its normal
4		practices to propose the appropriate fuel and fuel-
5		related costs for the rate period of its 2018 fuel case,
6		which will be unaffected by the deferred recovery of the
7		\$41.9 million.
8		
9		Since the Company has agreed not to collect interest on the deferred
10		amounts, and not to extend the deferral past one year, I do not take
11		issue with the Company's request.
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12		
13	0	DOES THIS CONCLUDE YOUR TESTIMONY?
13	Q.	DOES THIS CONCLUDE TOOK TESTIMONT!

A.

Yes, it does.

### Darlene P. Peedin

I am a 1989 graduate of Campbell University with a Bachelor of Business Administration degree in Accounting. I am a Certified Public Accountant and a member of the North Carolina Association of Certified Public Accountants.

Since joining the Public Staff in September 1990, I have filed testimony or affidavits in several general and fuel clause rate cases of utilities currently organized as Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Virginia Electric and Power Company (Dominion Energy North Carolina), Nantahala Power & Light Company, Western Carolina University, and Shipyard Power and Light Company, as well as in several water and sewer general rate cases. I have also filed testimony or affidavits in other proceedings, including applications for certificates of public convenience and necessity for the construction of generating facilities and applications for the approval of cost recovery for Renewable Energy and Energy Efficiency Portfolio Standard (REPS) cases.

I was promoted to Accounting Manager with responsibility for electric matters in January 2017. I have had supervisory responsibility over the Electric Section of the Accounting Division since 2009.

Prior to joining the Public Staff, I was employed by the North Carolina Office of the State Auditor. My duties included the performance of financial, compliance, and operational audits of state agencies, community colleges, and Clerks of Court.

## DUKE ENERGY PROGRESS, LLC DOCKET NO. E-2, SUB 1146

## TESTIMONY OF DUSTIN R. METZ ON BEHALF OF THE PUBLIC STAFF NORTH CAROLINA UTILITIES COMMISSION

### September 7, 2017

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1	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND
2		PRESENT POSITION.
3	A.	My name is Dustin R. Metz. My business address is 430 North
4		Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am a
5		Utilities Engineer with the Electric Division of the Public Staff of the
6		North Carolina Utilities Commission.
7		
8	Q.	BRIEFLY STATE YOUR QUALIFICATIONS AND DUTIES.
9	A.	My qualifications and duties are included in Appendix A.
10		
11	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
12	A.	The purpose of my testimony is to present the Public Staff's
13		recommendations regarding the proposed fuel and fuel-related cost
14		factors for the residential, small general service, medium general
15		service, large general service, and lighting customers of Duke
16		Energy Progress, LLC (DEP or the Company), as set forth in the
17		Company's June 21, 2017 application and revised in the

supplemental testimony of DEP witness Ward field on September 6,
2017. I have reviewed DEP's application, its prefiled and
supplemental testimony and exhibits, its coal contracts, its fuel-
related costs, its test period baseload power plant performance
reports, and the current coal, natural gas, nuclear fuel, and reagents
markets, as well as various documents related to test year power
plant outages. I have also reviewed the testimony of Public Staff
witness Darlene P. Peedin.
For this proceeding, the test period is April 1, 2016 through March
31, 2017, and the billing period is December 1, 2017 through
November 30, 2018.
WHAT DID YOUR REVIEW OF THE PERFORMANCE OF DEP'S
NUCLEAR FLEET REVEAL?
The Company's actual system nuclear capacity factor for the test
year in this case was 93.65%. In comparison, the most recent North
American Electric Reliability Corporation (NERC) five-year average
weighted capacity factor for the size and type of reactors in DEP's
nuclear fleet was 88.94% during the test period.

Q.

A.

In the 2016 DEP Fuel and Fuel-Related Charge Adjustment for Electric Utilities case, Docket No. E-2, Sub 1107, the Public Staff

reserved the right to continue its review and make a recommendation on the following nuclear forced outage events in future proceedings: (1) the Brunswick Nuclear Plant Unit 1 manual reactor shutdown (SCRAM) for component failure that occurred а February 7, 2016 and lasted through February 14, 2016; and (2) the Robinson Nuclear Plant Unit 2 low pressure turbine blade repair outage that occurred on November 17, 2015 and lasted through November 28, 2015.1 The Public Staff has since completed its review and does not recommend any adjustment related to the above listed outages in this case.

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## Q. WHAT DID YOUR REVIEW OF DEP'S PROJECTED FUEL AND FUEL-RELATED COSTS REVEAL?

The cost of natural gas is expected to increase from the test period to the billing period, as evidenced by Henry Hub observed forward prices; likewise, the cost of nuclear fuel is expected to increase. The cost of coal is expected to decrease. DEP's proposed fuel and fuel-related costs are based on a 92.6% system nuclear capacity factor, which is what the Company anticipates for the billing period.

<sup>&</sup>lt;sup>1</sup> The Company had yet to complete its review and analysis of these outages prior to the close of the 2016 hearing.

In addition, I have reviewed the supplemental testimony and exhibits
of DEP witness Kendra A. Ward filed on September 6, 2017. I agree
with the mathematical accuracy of the calculations, particularly as
they pertain to the estimated purchase power costs for qualifying
facilities resulting from the passage of House Bill 589, and have
incorporated these costs in Table 1 below. To the extent that the
Public Staff finds it necessary to comment on the reasonableness
and prudency of these costs, we will do so in DEP's 2018 Fuel and
Fuel-Related Charge Adjustment for Electric Utilities case.

Public Staff witness Darlene Peedin describes the Public Staff's review of the test period EMF in her testimony, and I have incorporated her recommendations in Table 1 below.

Based on my investigation, the projected fuel and fuel-related costs (including reagents) set forth in DEP's application and testimony, in combination with the testimony of Public Staff witness Peedin, are reasonable and are in accordance with the requirements of N.C.G.S. 62-133.2.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE
 APPROPRIATE FUEL COMPONENTS AND TOTAL FUEL

### 1 FACTORS (EXCUDLING REGULATORY FEE) FOR USE IN THE

### **BILLING PERIOD?**

A. I recommend approval of the fuel components and total fuel factors (excluding the regulatory fee) shown in Table 1, effective for the twelve months billing period beginning December 1, 2017:

TABLE 1 - Total Proposed Fuel and Fuel-Related Cost Factors (¢ per kWh)

Rate Class	Base & Prospective	EMF and EMF Interest	Total Fuel Factor
Residential	2.179	0	2.179
Small General Service	2.121	0	2.121
Medium General Service	2.356	(0.098)	2.258
Large General Service	2.417	0	2.417
Lighting	1.657	0	1.657

For comparison purposes, Table 2 below provides the existing fuel and fuel-related cost factors (excluding the regulatory fee) approved in Docket No. E-2, Sub 1107.

TABLE 2 - Total Existing Fuel and Fuel-Related Cost Factors (¢ per kWh)

Rate Class	Base & Prospective	EMF	Total Fuel Factor
Residential	1.993	(0.160)	1.833
Small General Service	2.088	(0.359)	1.729
Medium General Service	2.431	(0.447)	1.984
Large General Service	2.253	(0.016)	2.237
Lighting	0.596	0.280	0.876

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- Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 3 A. Yes.

### Dustin R. Metz

Through the Commonwealth of Virginia Board of Contractors, I hold a current Tradesman License certification of Journeyman and Master within the electrical trade, 2008 and 2009 respectively. I graduated from Central Virginia Community College with Associates of Applied Science degrees in Electronics & Electrical Technology (Magma Cum Laude), 2011 and 2012 respectively, and an Associates of Arts in Science in General Studies (Cum Laude) in 2013. I graduated from Old Dominion University in 2014, earning a Bachelor of Science degree in Engineering Technology with a major in Electrical Engineering and a minor in Engineering Management.

I have 12 plus years of combined experience in engineering, electromechanical system design, troubleshooting, repair, installation, commissioning of electrical & electronic control systems in industrial and commercial nuclear facilities, project planning & management, and general construction experience.

I joined the Public Staff in the fall of 2015. Since that time, I have worked on general rate cases, fuel cases, applications for certificates of public convenience and necessity, customer complaints, nuclear decommissioning, power plant performance, and other aspects of utility regulation.