STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-2, SUB 1173

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application of Duke Energy Progress, LLC,)	AFFIDAVIT
Pursuant to G.S. 62-133.2 and NCUC Rule)	OF
R8-55 Relating to Fuel and Fuel-Related)	DUSTIN R. METZ
Charge Adjustments for Electric Utilities	í	

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, Dustin R. Metz, first being duly sworn, do depose and say:

I am an engineer with the Electric Division of the Public Staff – North Carolina Utilities Commission. A summary of my education and experience is attached to this affidavit as Appendix A.

The purpose of this affidavit is to present the Public Staff's recommendations regarding the proposed fuel and fuel-related cost factors for the residential, small general service, medium general service, large general service, and lighting customers of Duke Energy Progress, LLC (DEP or the Company), as set forth in the Company's June 20, 2018, application. I have reviewed DEP's application, its prefiled testimony and exhibits, its fuel-related costs, its test period baseload power plant performance reports, and the current coal, natural gas, nuclear fuel, and reagents markets, various documents related to test year power plant outages, and the costs authorized to be recovered by

Session Law 2017-192 (HB 589). I have also reviewed the testimony of Public Staff witness Jenny Li.

For this proceeding, the test period is April 1, 2017 through March 31, 2018, and the billing period is December 1, 2018 through November 30, 2019.

Of particular concern to the Public Staff in its investigation of the test year fuel costs was the significant under recovery that took place due to the Company's greater than expected fuel costs in January 2018. After reviewing discovery and discussing the issue with DEP, the Public Staff is satisfied that the January 2018 fuel costs were reasonable and prudently incurred.

Based upon my investigation, I have determined that the projected fuel and reagent prices set forth in the testimony of DEP witnesses Ward, Grant, and Church, were calculated appropriately for this proceeding.

The cost of natural gas and nuclear fuel is expected to decrease from the test period to the billing period while the cost of coal is expected to increase. DEP's proposed fuel and fuel-related costs are based on a 94.1% system nuclear capacity factor, which is what the Company anticipates for the billing period.¹

Based on my investigation, I have determined that the projected fuel and reagent costs set forth in DEP's testimony, and the prospective components of

¹ The Company's actual system nuclear capacity factor for the test year was ~ 95%. In comparison, the most recent North American Electric Reliability Council (NERC) five-year average weighted for the size and type of reactors in DEP's nuclear fleet was ~90% during the test period.

the total fuel factor, have been calculated in accordance with the requirements of N.C. Gen. Stat. § 62-133.2.

The Public Staff investigated DEP's fuel costs authorized to be recovered in the fuel adjustment proceeding by HB 589 by reviewing spreadsheets provided by the Company detailing QF costs for the test year. Based upon this investigation, I have determined that the costs authorized by HB 589 that DEP seeks to recover for the test year are reasonable.

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

The Public Staff recommends approval of the fuel components and total fuel factors (excluding the regulatory fee) shown in Table 1, effective for the twelve months beginning December 1, 2018:

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

Rate Class	Base & Prospective	EMF and EMF Interest	Total Fuel Factor
Residential	2.311	0.575	2.886
Small General Service	2.556	0.363	2.919
Medium General Service	2.477	0.343	2.820
Large General Service	1.757	1.038	2.795
Lighting	2.251	0.885	3.136

For comparison, Table 2 below provides the existing fuel and fuel-related cost factors (excluding the regulatory fee) approved in Docket No. E-2, Sub 1146:

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

Rate Class	Base & Prospective	EMF	Total Fuel Factor
Residential	2.179	0.0	2.179
Small General Service	2.121	0.0	2.121
Medium General Service	2.356	(0.098)	2.258
Large General Service	2.417	0.0	2.417
Lighting	1.657	0.0	1.657

This completes my affidavit.

Sworn to and subscribed before me,

this the 29th day of August, 2018.

My Commission Expires: 12/17/2022

Joanne M. Berube **NOTARY PUBLIC** WAKE COUNTY, N.C. My Commission Expires 12-17-2022.

Appendix A

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 and Electrical Technology (Magna 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 over 12 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 and management, and general construction experience, including 6 years with AREVA NP, where I provided onsite technical support and participated in root cause analysis teams at commercial nuclear power plants, including those owned by both Duke and Dominion.

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, participated in multiple technical working groups, and other aspects of utility regulation.