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October 25, 2017

VIA ELECTRONIC FILING

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

RE: Duke Energy Progress, LLC's Rebuttal Testimony Docket No. E-2, Sub 1150

Dear Ms. Jarvis:

To the extent that the Commission treats the October 23, 2017 Petition to Intervene of Mr. Oliver Canaday as prefiled testimony and it is admitted into the record, pursuant to the Commission's July 18, 2017 Order Scheduling Hearings, Requiring Filing of Testimony, Establishing Discovery Guidelines and Requiring Public Notice, I enclose Duke Energy Progress, LLC's Rebuttal Testimony of Timothy J. Same and James Umbdenstock for filing in connection with the referenced matter.

Thank you for your attention to this matter. If you have any questions, please let me know.

Lawrence B. Somers

Enclosures

cc: Parties of Record

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1150

In the Matter of)	
In the Matter of Application of Duke Energy Progress, LLC For A Certificate of Environmental Compatibility and Public Convenience and Necessity Pursuant to N.C. Gen. Stat. § 62- 100 et seq. to Construct Approximately 11.5 Miles of New 230kV Transmission Line in)))))))	REBUTTAL TESTIMONY OF TIMOTHY J. SAME FOR DUKE ENERGY PROGRESS, LLC
Cleveland area of Johnston County, North)	
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Caronna)	

- 1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A. My name is Timothy J. Same, and my business address is 410 S. Wilmington
- 3 Street, Raleigh, North Carolina 27601.
- 4 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
- 5 A. I became the Manager of Site Design and Permitting in Substation
- 6 Engineering in May 2017. I previously held the position of Lead Transmission
- 7 Siting Specialist, Transmission Siting, Permitting, and Engagement within
- 8 Duke Energy Progress, LLC ("DEP").
- 9 Q. DID YOU PREVIOUSLY SUBMIT DIRECT TESTIMONY IN THIS
- 10 **MATTER?**
- 11 A. Yes, I did.
- 12 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?
- 13 A. The purpose of my testimony is to respond to portions of the allegations
- contained in the Petition to Intervene filed by Mr. Oliver L. Canaday on
- October 23, 2017 regarding his alleged lack of notice of the public workshops
- held by DEP for the Cleveland-Matthews 230kV Transmission Line, electric
- and magnetic fields ("EMF") in the siting process, and the way that farmland
- and forests were considered by DEP in the siting process.
- 19 Q. IN HIS PETITION TO INTERVENE, MR. CANADAY ALLEGES
- 20 THAT HE DID NOT RECEIVE NOTICE OF DEP'S PUBLIC
- 21 WORKSHOPS FOR THE CLEVELAND-MATTHEWS LINE IN
- 22 NOVEMBER 2016. HOW DO YOU RESPOND?

On November 4, 2016, DEP mailed a letter via U.S. Postal Service ("USPS")
priority mail to Mr. Canaday at 713 S. Camellia Avenue, Panama City, FL
32404-6939, inviting him to one or both of the open house events on
November 16, 2016 and November 17, 2016. DEP's letter to Mr. Canaday
was not returned as undeliverable. On April 20, 2017, DEP mailed another
letter providing notice of survey activities via USPS certified mail to Mr.
Canaday to the same mailing address, and DEP received documented
confirmation of delivery of the certified letter to Mr. Canaday. On May 19,
2017, Transmission Public Engagement Specialist Drew Gilmore spoke to Mr.
Canaday by phone for more than 40 minutes. During that conversation, Mr.
Canaday indicated he did not receive the first letter announcing the project
and inviting him to the workshops; however, he acknowledged receipt of the
certified letter. Mr. Gilmore checked the mailing address of each letter and
confirmed they matched. Mr. Canaday also confirmed the mailing address
was correct and had not changed during the time period between both
mailings. If Mr. Canaday did not receive notice of the public workshops, we
regret any inconvenience.

Letters were sent to 1,036 owners of 1,313 parcels. In addition, announcement letters were sent to both Johnston and Wake County administrators and each municipal government within the study area. Two newspaper advertisements also ran in the News & Observer in the weeks prior to the events.

A.

- Q. MR. CANADAY ASSERTS THAT DEP'S CPCN APPLICATION

 CONSTITUTES "FRAUD" BECAUSE IT SHOULD HAVE GIVEN A

 DIFFERENT WEIGHT TO FARMLAND OR FORESTED LAND

 SOLD FOR TIMBER IN ITS SITING PROCESS. HOW DO YOU

 RESPOND?
 - DEP appropriately considered land use in the siting study to select the overall best route with the least impact for the Cleveland-Matthews Transmission Line. In the siting study, a weighting of 2 was used for "cropland crossed" and a weighting of 3 for "upland forest crossed." Inherently, each routing factor is considered to have some level of impact as a result of routing a transmission line through the given area. The intent of the weighting is to differentiate between the levels of impact of the underlying land uses and to help determine areas of higher constraint versus lower constraint when routing the line. DEP and Burns & McDonnell used prior siting experience and direct feedback from the public during the comment period to help determine the weights used. "Cropland crossed" was given a relatively lower weight primarily because continued farming activity is allowed under Duke Energy Progress transmission lines. The only exceptions to this would be the areas immediately adjacent to the structures and guy wires and crops taller than 12 feet high at maturity. Only four routing factors were given a higher weight than "upland forest crossed." These factors are "residential proximity score" (5), "open space/green areas" (5), "wetland crossing score" (4), and "stream sensitivity score" (4). Each of these four highest weighted factors

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appropriately reflect the value of and risk of these land uses that could impact and ultimately prevent DEP from siting and eventually constructing the proposed line, and, again, reflect input from past transmission line siting processes and feedback from the public. Finally, if trees are removed from property as part of the construction of a DEP transmission line, DEP compensates property owners for the value of such timber. DEP relied upon its comprehensive siting process and appropriately considered land use in selecting the preferred route for the Cleveland-Matthews Transmission Line.

9 Q. MR. CANADAY ALLEGES "FRAUD" IN THE CPCN APPLICATION

BECAUSE THE SITING STUDY DOES NOT CONSIDER "EMF

POLLUTION" AS AN ENVIRONMENTAL IMPACT. HOW DO YOU

RESPOND?

Α.

Duke Energy's in-house EMF expert, Kim L. Craven, Principal Engineer, attended the public workshops and provided information regarding EMF. In DEP's Verified Responses to Commission Order Requiring Duke Energy Progress, LLC, To Provide Additional Information filed October 9, 2017 in this docket, the Company provided additional technical information and handouts regarding EMF and typical readings at 230kV transmission lines. As to Mr. Canaday's allegation that the EMF was not included as an environmental impact in the siting study, the expected EMF readings would essentially be the same along any alternative route for the Cleveland-Matthews Transmission Line and, therefore, it would have no impact on the relative rankings of the alternative routes had it been considered as an

- environmental impact in the study. DEP does not believe that EMF is
- 2 "pollution" or that the proposed Cleveland-Matthews Transmission Line poses
- any inappropriate EMF risk.
- 4 Q. IN CONCLUSION, DO YOU BELIEVE DUKE ENERGY PROGRESS
- 5 APPROPRIATELY EVALUATED ALTERNATIVE ROUTES TO
- 6 SELECT THE PREFERRED ROUTE FOR THE CLEVELAND-
- 7 MATTHEWS LINE?
 - A. Yes. Although DEP understands Mr. Canaday's desire to not have a
- 9 transmission line cross his property, Duke Energy Progress' comprehensive
- transmission line siting process identified Route 31 (Segments 30, 33, 36, 37)
- and 39) for the Cleveland-Matthews Line as the best and least impactful route
- to serve the transmission needs in this portion of Johnston County. I believe
- that DEP's application provides the necessary information to prove that it is in
- the public convenience and necessity, and I ask that the Commission approve
- 15 it.

- 16 Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL
- 17 **TESTIMONY?**
- 18 A. Yes.

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1150

In the Matter of)	
)	
Application of Duke Energy Progress, LLC)	
For A Certificate of Environmental)	REBUTTAL TESTIMONY OF
Compatibility and Public Convenience and)	JAMES UMBDENSTOCK FOR
Necessity Pursuant to N.C. Gen. Stat. § 62-) I	DUKE ENERGY PROGRESS, LLC
100 et seq. to Construct Approximately 11.5)	
Miles of New 230kV Transmission Line in)	
Cleveland area of Johnston County, North)	
Carolina)	

- 1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A. My name is James Umbdenstock, and my business address is 1020 W.
- 3 Chatham Street, Cary, North Carolina 27511.
- 4 Q. DID YOU PREVIOUSLY SUBMIT DIRECT TESTIMONY IN THIS
- 5 **MATTER?**
- 6 A. Yes, I did.
- 7 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?
- 8 A. The purpose of my testimony is to respond to portions of the allegations
- 9 contained in the Petition to Intervene filed by Mr. Oliver L. Canaday on
- October 23, 2017 regarding the proposed use of the 500kV transmission line
- in the area to serve the new substation, instead of the proposed Cleveland-
- Matthews Transmission Line.
- 13 Q. IN HIS PETITION TO INTERVENE, MR. CANADAY ALLEGES
- 14 "FRAUD" IN DEP'S CPCN APPLICATION BECAUSE YOUR
- DIRECT TESTIMONY STATES THAT "THERE ARE CURRENTLY
- NO TRANSMISSION LINES" IN THE AREA. HOW DO YOU
- 17 **RESPOND?**
- 18 A. I certainly do not believe my testimony was fraudulent. In my direct
- 19 testimony, I stated that, "There are currently no transmission lines or
- 20 substations in this area of Johnston County, which is roughly bounded by
- Interstate 40 on the west, Highway 70 Bypass on the north, Highway 70 on
- 22 the east and Interstate 95 on the south." I used the term "roughly" to describe
- the area, but agree with Mr. Canaday that the DEP Cumberland-Wake 500kV

Transmission Line is located at the far western edge of the study area we
evaluated for the new project. In addition, portions of the Erwin-Selma
230kV Transmission Line, and the Lee Sub-Milburnie 230kV Transmission
Line are also in the study area and feasible routes to connect the new
Matthews Road Substation to these existing 230kV transmission lines were
evaluated in the siting process. All of these existing transmission lines are
depicted in the Routing Study and Environmental Report submitted as Exhibit
A to DEP's CPCN Application, as revised on July 24, 2017.

A.

Q. DO YOU AGREE WITH MR. CANADAY'S ASSERTION THAT DEP SHOULD TAP THE EXISTING 500KV TRANSMISSION LINE INSTEAD OF BUILDING THE PROPOSED 230KV CLEVELAND-MATTHEWS TRANSMISSION LINE?

No I do not. DEP has never allowed a load connection to its 500kV bulk transmission system. DEP's 500kV transmission network is reserved for the bulk transport of large amounts of electricity. DEP's bulk transmission system includes all 500kV lines and stations. These DEP 500kV facilities help form the backbone of the SERC bulk transmission system and provide the primary means of serving large geographical areas. A comprehensive study would be required to consider the connection of any load to the Bulk System, and the expectation is that this would be rare.

Even if it were feasible to serve a 230kV retail transmission-to distribution ("T/D") substation from the 500kV transmission system, it would require approximately 200 contiguous acres for a 500/230kV transmission-to-

1		transmission (T/T) substation in addition to the construction of a 230/24kV
2		T/D substation. Furthermore, two separate 180 foot wide 500kV transmission
3		line right-of-way corridors from the existing Cumberland-Wake 500kV line to
4		the new substation site would also be needed.
5		Based upon my nearly 38 years of engineering experience with Duke
6		Energy Progress, I disagree with Mr. Canaday's assertion that tapping the
7		existing 500kV transmission line would be a feasible alternative to the
8		proposed Cleveland-Matthews 230kV Transmission Line.
9	Q.	DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL
10		TESTIMONY?

Yes, it does.

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Progress, LLC's Rebuttal Testimony, in Docket No. E-2, Sub 1150, has been served by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid to the following parties:

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Oliver Canaday 713 Camellia Avenue Pana City, FL 32404

This the 25th day of October, 2017.

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