

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-2, SUB 1289

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of Duke Energy Progress, LLC, for a Certificate of Environmental Compatibility and Public Convenience and Necessity to Construct Approximately 2.1 Miles of New 230 kV Transmission Line in Wake County, North Carolina	) ) ) ) ) ) )	ORDER GRANTING CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC CONVENIENCE AND NECESSITY
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BY THE COMMISSION: On April 14, 2022, Duke Energy Progress, LLC (DEP or Applicant) filed an application pursuant to N.C. Gen. Stat. § 62-100 et seq. and Commission Rules R1-5 and R8-62 for a certificate of environmental compatibility and public convenience and necessity (CEPCN) to construct approximately 2.1 miles of new 230 kV transmission line in Wake County, North Carolina. The application was filed with exhibits and the direct testimony of Bill Quaintance, Micah E. Retzlaff, and Joshua Bledsoe. The new transmission line will run southeast and east from the Harris Plant–Wake 230 kV Transmission Line across DEP-owned property then continuing east crossing the north side of a private property before connecting into the southwestern side of the proposed Holly Spring Utley Creek Substation. The proposed project will serve the Fujifilm Diosynth Biotechnologies proposed biopharmaceutical manufacturing facility (Fujifilm Facility) within the town of Holly Springs, North Carolina by connecting the substation to the FujiFilm Facility’s delivery point.

On April 22, 2022, the Commission issued an Order Scheduling Hearings and Requiring Public Notice (Scheduling Order), setting forth the dates for a public witness hearing and an evidentiary hearing to be held in Raleigh, North Carolina, and dates for the filing of testimony.

DEP’s application was properly served on the parties designated by N.C.G.S. § 62-102.

On June 7, 2022, DEP filed Affidavits of Publication confirming that the Public Notice had been published for four successive weeks in Wake County beginning on May 5, 2022.

On June 14, 2022, the North Carolina Department of Administration filed comments made in review of the environmental impact information received by the State Clearinghouse regarding the proposed transmission line and a letter stating that it has

determined that no further review action is needed for compliance with the North Carolina Environmental Policy Act.

On July 13, 2022, DEP filed a Motion to Proceed with Initial Clearing, Excavation, and Construction to permit it to begin initial construction activities of the line at its own risk to allow the timely development of the project.

On July 28, 2022, the Commission issued an Order Granting Motion to Proceed with Initial Clearing, Excavation, and Construction.

On August 2, 2022, the Public Staff filed a letter in lieu of testimony in this proceeding stating that, based on its investigation of the application, exhibits, and other matters of record, the Public Staff believes that DEP has complied with the requirements of N.C.G.S. § 62-102 and has demonstrated as required by N.C.G.S. § 62-105 that: (1) the proposed transmission line is necessary; (2) when compared with reasonable alternative courses of action, construction of the line in the proposed location is reasonable; (3) the estimated costs associated with the line are reasonable; (4) the impact of the line on the environment is justified considering the state of available technology; and (5) the environmental compatibility, public convenience, and necessity require the transmission line. The Public Staff recommends that the Commission issue the requested CEPCN. No other comments have been filed in this docket and no other party has intervened.

On August 11, 2022, DEP filed a Motion to Cancel Hearings, requesting that the Commission cancel both the public witness hearing and the expert witness hearing and accept into evidence DEP's application, testimony, and exhibits.

On August 15, 2022, the Commission issued an Order Canceling Public Witness Hearing and Expert Witness Hearing wherein it also required the filing of a proposed order.

Based upon DEP's verified application, the testimony and exhibits received into evidence, and the entire record in this proceeding, the Commission makes the following:

### **FINDINGS OF FACT**

1. DEP is a public utility providing electric service to customers in its service area in North Carolina and is subject to the jurisdiction of the Commission.
2. The Commission has jurisdiction over DEP's application. Pursuant to N.C.G.S. § 62-100 et. seq. and Commission Rule R8-62, a public utility must receive a CEPCN before constructing a transmission line of 161 kV or above in North Carolina.
3. The proposed transmission line would run southeast and east from the Harris Plant–Wake 230 kV Transmission Line across DEP-owned property then continuing east crossing the north side of a private property, which will be owned by DEP,

before connecting into the southwestern side of the proposed Holly Spring Utleigh Creek Substation. The approximate total length of the proposed transmission line is 2.1 miles.

4. The Commission did not receive any written complaints or other consumer statements of position regarding the proposed transmission line.

5. DEP's application meets the requirements of N.C.G.S. § 62-102.

6. DEP has carried its burden of proof under N.C.G.S. § 62-105(a) through substantial, competent evidence showing that:

- (a) the proposed transmission line is necessary to satisfy the reasonable needs of the public for an adequate and reliable supply of electricity;
- (b) when compared with reasonable alternative courses of action, construction of the transmission line in the proposed location is reasonable, preferred, and in the public interest;
- (c) the costs associated with the proposed transmission line are reasonable;
- (d) the impact that the proposed transmission line will have on the environment is justified considering the state of available technology, the nature and economics of the alternatives, and other material consideration; and
- (e) the environmental compatibility, public convenience, and necessity require the construction of the transmission line.

7. It is in the public interest, reasonable, and appropriate to grant the requested certificate.

#### **EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-2**

These findings of fact are essentially informational, jurisdictional, and procedural in nature and uncontroverted.

#### **EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 3-7**

The evidence supporting these findings of fact appear in DEP's application; the direct testimony of DEP witnesses Quaintance, Bledsoe, and Retzlaff; the studies and exhibits filed by DEP; and the recommendation of the Public Staff.

The parties' respective burdens of proof in this proceeding are governed by statute, N.C.G.S. § 62-105(a). The Commission has in the past interpreted the burden of proof requirement set forth in N.C.G.S. § 62-105(a) as follows:

In interpreting this statute, the Commission concludes that the electric utility applying for approval to site a transmission line has the initial burden of proof, including that it examined “reasonable alternative courses of action” and that “construction of the transmission line in the proposed location is reasonable, preferred, and in the public interest.” A landowner or other intervenor who believes that an alternative route studied by the utility is preferable to that proposed or that the utility did not consider or appropriately weigh relevant factors in reaching its decision may introduce evidence and otherwise argue that the utility has not met its burden of proof. Once the utility has sustained its burden of proof, a landowner or other intervenor proposing an alternative not originally examined by the utility has the burden under the statute of proving that its alternative should have been studied and is preferable to the proposed route.

Final Order Overruling Exceptions and Affirming Recommended Order, *Application of Carolina Power and Light Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity to Construct Approximately 19.6 Miles of 230 kV Transmission Line in Wayne, Duplin, and Sampson Counties, North Carolina*, No. E-2, Sub 796, at 2 (N.C.U.C. Aug. 29, 2002).

In considering other “relevant and material” factors pursuant to N.C.G.S. § 62-105(a), the Commission notes that “[i]t is hereby declared to be the policy of North Carolina:...(5) To encourage and promote harmony between public utilities, their users and the environment.” N.C.G.S. § 62-2. In addition, the Commission considers the following declaration of State environmental policy:

The General Assembly of North Carolina, recognizing the profound influence of man’s activity on the natural environment, and desiring, in its role as trustee for future generations, to assure that an environment of high quality will be maintained for the health and well-being of all, declares that it shall be the continuing policy of the State of North Carolina to conserve and protect its natural resources and to create and maintain conditions under which man and nature can exist in productive harmony. Further, it shall be the policy of the State to seek, for all of its citizens, safe, healthful, productive and aesthetically pleasing surroundings; to attain the widest range of beneficial uses of the environment without degradation, risk to health or safety; and to preserve the important historic cultural elements of our common inheritance.

N.C. Gen. Stat. § 113A-3.

### **Showing of need**

DEP witness Bill Quaintance testified regarding the need for proposed transmission line. A summary of witness Quaintance’s testimony follows.

DEP’s assessment of electric energy requirements for the Fujifilm Facility identified the need to build a new 230 kV substation and a new 230 kV transmission line to provide

power to the substation in the area on the west side of the town of Holly Springs in Wake County, North Carolina. Currently, two general distribution circuits routed near the Fujifilm Facility site serve the area. One feeder serves residential load in the community and surrounding developments. Approximately 3 MVA of available capacity exists in each circuit, and this capacity is expected to be needed to address continued growth in Holly Springs and the surrounding area. Fujifilm Diosynth is requesting up to 28 MVA, which would require a minimum of three dedicated distribution feeders. There are no existing empty feeder break positions in the area infrastructure. Typically, single customer loads of at least 8 MW are served from transmission lines to address both loading and power quality concerns. Thus, construction of a new transmission substation is required to satisfy this load addition.

### **The routing study and selection process**

DEP witness Micah Retzlaff testified regarding the routing study and selection process. A summary of witness Retzlaff's testimony follows.

After having established the need for the transmission of power to the new substation, DEP retained Jacobs Engineering Group (Jacobs), an international technical professional services firm with utility and infrastructure siting experience, to assist DEP with the line routing and obtaining public input for the project. Jacobs conducted a comprehensive routing study and prepared a Routing Study and Environmental Report, which is attached as Exhibit A to DEP's application. DEP and Jacobs established the study area, which was designed to provide a set of reasonable and geographically distinct route alternatives. Data was then collected from publicly available sources to identify sensitivities to the presence of a transmission line. This allowed DEP to consider alternatives for the preferred route for the transmission line. The data were used to create a raster-based suitability surface within a GIS framework, the purpose of which was to aid in the identification of areas more suitable for the placement of a transmission line route. DEP sought public input to solicit study area data and determine community values relative to the project and receive input from stakeholders and public officials, including communications with Federal, State, and local agencies. All the possible transmission line segments were located predominantly on DEP-owned property, so DEP communicated directly with owners of nearby properties about the project.

Jacobs grouped the collected data into three categories: Technical, Ecological, and Land Use/Cultural and further divided those categories into individual criteria and assigned them a weight from 1 to 10 according to each criterion's potential sensitivity to a transmission line, as determined by members of DEP's project team and feedback from public comments. With this data, Jacobs developed alternative routes and ultimately selected one as the preferred route for the transmission line. The objective of the routing analysis was to identify economically feasible routes that connected the proposed Holly Springs Utleigh Creek Substation to the Harris Plant–Wake 230 kV transmission line while avoiding or minimizing impacts to both community and natural resources. DEP contacted local, state, and federal government agencies to obtain information on resources of particular concern that were relevant to the routing process. Different potential routing

alternatives were shared with the public and with local officials to obtain input for evaluation. The study team quantified engineering, land use, social, and environmental resources that each feasible route would impact. The quantitative data and public input were used to evaluate the alternatives and select a preferred route.

Because of the Covid-19 pandemic and because only one private property owner would be directly impacted by any of the alternative route segments, DEP determined that the best tool for communicating information about the project was a project website that allowed visitors to review a map of the project area, alternative segment locations, and the status of the project. Also, DEP mailed notifications to property owners directly impacted or within 500 feet of any study segment informing each of the project, providing project-related information and inviting them to meet with DEP representatives to ask questions about the project, provide feedback and data about properties in the study area, and learn about updates. DEP also contacted the following state and federal agencies for information on threatened or endangered species, wetlands, wildlife resources, stream sensitivity, hydric soils, and other potential permitting issues. Those agencies included the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, N.C. Wildlife Resources Commission, N.C. Natural Heritage Program, and N.C. Department of Environmental Quality, including the N.C. Division of Water Resources and the N.C. Division of Land Quality.

Jacobs identified five distinct routes using a combination of seven line segments. After analyzing route alternatives based on technical, social, land use, and ecological factors, DEP's siting team determined that Alternative D was the preferred route for several reasons: (1) it maximizes distance to existing and planned residential developments; (2) it has the least amount of right-of-way acreage below the 265 foot elevation, which minimized the need for structure replacements if Harris lake levels increase due to additional reactors; (3) it minimizes impact to identified ecological sensitivities in the area including wetlands and waterbodies; (4) it is limited to property currently owned by Duke Energy, except for a small section on a single, privately-owned property; and (5) it is the least overall impacting route in the numerical evaluation performed for the project. By using standard construction procedures and mitigation techniques when coordinating the project with State and Federal agencies, the construction, operation, and maintenance of the proposed project will have limited effects on the natural and social resources in the area. The total estimated cost for the project is \$6,530,000.

The chosen route, Alternative D, which DEP describes in its application, originates at a tap location adjacent to Structure 22 on the Harris Plant–Wake 230 kV transmission line and is approximately 2.8 miles. From the tap location, the route travels southeasterly paralleling the stream towards the southeast for approximately 0.40 miles, runs east for approximately 0.58 miles, and then crosses the north side of White Oak Creek before angling south for approximately 0.20 miles, crossing Utley Creek and extending one mile to the proposed substation location.

DEP's line engineering team made minor adjustments to the selected path after the line selection process, but before DEP filed its application, to meet the in-service date of August 2023.<sup>1</sup> Those adjustments are explained in the direct testimony of DEP witness Joshua Bledsoe. A summary of witness Bledsoe's testimony follows.

The deviated line follows the segments of Alternative Route D, but sharp angles and impacts to wetlands have been minimized, decreasing overall construction costs. These adjustments were made after the line engineering team performed a site visit. The tap location was relocated to an easier to access location to facilitate construction and provide better locations for installation of line switches. The team adjusted the line route to reduce the total number of points of intersection, reducing the cost of materials and installations. The impacts of these line deviations to the surrounding area that was studied in the transmission line siting and public input process will be minimal. The tap line will still be over 3,000 feet from the closest subdivision, and the deviations in the middle of the line route bring the line closer to the center of DEP-owned land, reducing impacts to surrounding areas.

The deviated route is approximately 2.1 miles. Its tap location on the Harris Plant–Wake 230 kV line is approximately 280 feet west of Structure 26. The route travels south-southeast from the tap location approximately 0.44 miles, then turning east-southeast for 0.80 miles and crossing White Oak Creek and its associated floodway to a point approximately 180 feet south of Utley Creek. The route then bears east for approximately 0.86 miles to the proposed substation location.

It is not uncommon for lines to deviate from the initial line siting and public input process as a project progresses.<sup>2</sup> The deviation for this line is insignificant, and the Public Notice approved by this Commission contained a description of the updated route.

The Commission has not received any written complaints or other consumer statements of position regarding the proposed transmission line.

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<sup>1</sup> In its application, DEP listed an in-service date of September 2023. DEP corrected that date in its Motion to Proceed with Initial Clearing, Excavation, and Construction, stating that the committed service date is actually August 1, 2023.

<sup>2</sup> See Re-Filed Deviation of Approved, New 230 kV Transmission, *Application of Duke Energy Progress, LLC, for a Certificate of Environmental Compatibility and Public Convenience and Necessity to Construct Approximately 4.6 Miles of New 230 kV Transmission Line in New Hanover County, North Carolina*, Docket No. E-2, Sub 1215 (filed October 1, 2020), in which DEP filed notice of a proposed deviation of minimal impact for informational purposes, and Order Granting Certificate of Environmental Compatibility and Public Convenience and Necessity, *Application of Duke Energy Progress, LLC, for a Certificate of Environmental Compatibility and Public Convenience and Necessity to Construct Approximately 11.5 Miles of New 230 kV Transmission Line in Johnston County, North Carolina*, Docket No. E-2, Sub 1150 (N.C.U.C. January 12, 2018), where DEP agreed to consider minor adjustments to the proposed route, provided that additional landowners would not be affected by such adjustment.

## Discussion and conclusions

Having carefully reviewed the application and based upon the evidence of record and the recommendation of the Public Staff, the Commission concludes that DEP has carried its burden of proof under N.C.G.S. § 62-105(a) in demonstrating that the proposed transmission line is necessary for an adequate and reliable supply of electric energy to its service area. The Commission further concludes that DEP has demonstrated that Alternative D, including the deviations and adjustments described by DEP witness Bledsoe, is the preferred transmission line route, that the Public Notice provided by DEP was appropriate under the circumstances, that construction of a transmission line along the updated route of Alternative Route D is in the public interest, and that the proposed costs associated therewith are reasonable.

IT IS, THEREFORE, ORDERED as follows:

1. That pursuant to N.C.G.S. § 62-102, a certificate of environmental compatibility and public convenience and necessity to construct approximately 2.1 miles of new 230 kV transmission line in Wake County, North Carolina, as described in DEP's application, is hereby issued to DEP; and
2. The certificate of environmental compatibility and public convenience and necessity is attached hereto as Appendix A.

ISSUED BY ORDER OF THE COMMISSION.

This the 19th day of September, 2022.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "Erica N. Green". The signature is written in a cursive, flowing style.

Erica N. Green, Deputy Clerk



**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-2 Sub 1289

KNOW ALL PERSONS BY THESE PRESENTS THAT

DUKE ENERGY PROGRESS, LLC

410 S. Wilmington St.  
NCRH 20/ P.O. Box 1551  
Raleigh, North Carolina 27602

is hereby issued this

**CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC CONVENIENCE  
AND NECESSITY PURSUANT TO N.C. GEN. STAT. § 62-102**

to construct approximately 2.1 miles of new 230 kV transmission line in Wake County, North Carolina, running from the Harris Plant–Wake 230 kV Transmission Line to connect into the proposed Holly Spring Utley Creek Substation

subject to receipt of all federal and state permits as required by existing and future regulations prior to beginning construction and further subject to all other orders, rules, regulations, and conditions as are now or may hereafter be lawfully made by the North Carolina Utilities Commission.

ISSUED BY ORDER OF THE COMMISSION.

This the 19th day of September, 2022.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "Erica N. Green". The signature is written in a cursive style with a large initial "E".

Erica N. Green, Deputy Clerk