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April 26, 2023

**VIA ELECTRONIC FILING**

Ms. A. Shonta Dunston, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

**RE: Duke Energy Progress, LLC's Supplemental Information Regarding  
its Application for Certificate of Public Convenience and Necessity  
Docket No. E-2, Sub 1311**

Dear Ms. Dunston:

Enclosed for filing with the North Carolina Utilities Commission ("Commission") is Duke Energy Progress, LLC's ("DEP" or the "Company") Supplemental Information Regarding its Application for a Certificate of Public Convenience and Necessity authorizing the construction and completion of the Asheville Plant Solar Generating Facility in Buncombe County, North Carolina ("CPCN Application").

On January 23, 2023, DEP submitted the CPCN Application, which consisted of the Application, pre-filed written direct testimony of DEP witness Justin LaRoche, and Exhibits 1-4, as required by Commission Rule R8-61(b). On March 21, 2023, the Public Staff propounded its Data Request No. 2 ("PSDR No. 2") to DEP, which included requests that DEP submit certain supplemental information related to the CPCN Application. Further to the commitments made in its responses to PSDR No. 2, DEP hereby encloses the following supplemental information and requests that it be incorporated with and considered part of the Company's CPCN Application:

- Exhibit 3 SUPPLEMENTAL. The supplemental Exhibit 3 removes redactions to capital cost information that were included in the public version of the CPCN Application because those cost estimates were filed as public information in Docket No. E-2, Sub 1300. DEP submits that such information is properly considered confidential but for its inadvertent disclosure in another proceeding and does not waive its right to designate related cost information as confidential in this proceeding or similar or related cost information as confidential in future proceedings.

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- Exhibit 4 SUPPLEMENTAL. The supplemental Exhibit 4 contains additional information in response to the requirement by Commission Rule R8-61(b)(4)(iv) that a public utility provide a description of “[r]isk factors related to the construction and operation of the generating facility, including a verified statement as to whether the facility will be capable of operating during the lowest temperature that has been recorded in the area using information from the National Weather Service Automated Surface Observing System (ASOS) First Order Station in Asheville, Charlotte, Greensboro, Hatteras, Raleigh or Wilmington, depending upon the station that is located closest to where the plant will be located.”

The supplemental information is provided in redline and clean formats for ease of reference. The remaining portions of the CPCN Application are unchanged.

If you have any questions regarding any of the above information, please let me know.

Sincerely,



Jason A. Higginbotham

Enclosure

cc: Parties of Record

**Exhibit 3 SUPPLEMENTAL  
EQUIPMENT AND COST INFORMATION**

**3.1 Estimated Construction Costs**

The estimated cost of the Asheville Solar Facility is approximately \$24.3MM

**3.2 Estimated Construction Costs Expressed as \$/MW**

Approximately [BEGIN CONFIDENTIAL] [REDACTED]  
[REDACTED] [END CONFIDENTIAL].

**3.3 Estimated Annual Operating Expenses by Category**

Average annual operating expense is [BEGIN CONFIDENTIAL] [REDACTED]  
[END CONFIDENTIAL].

**3.4 Estimated Annual Operating Expenses Expressed as \$/MWH**

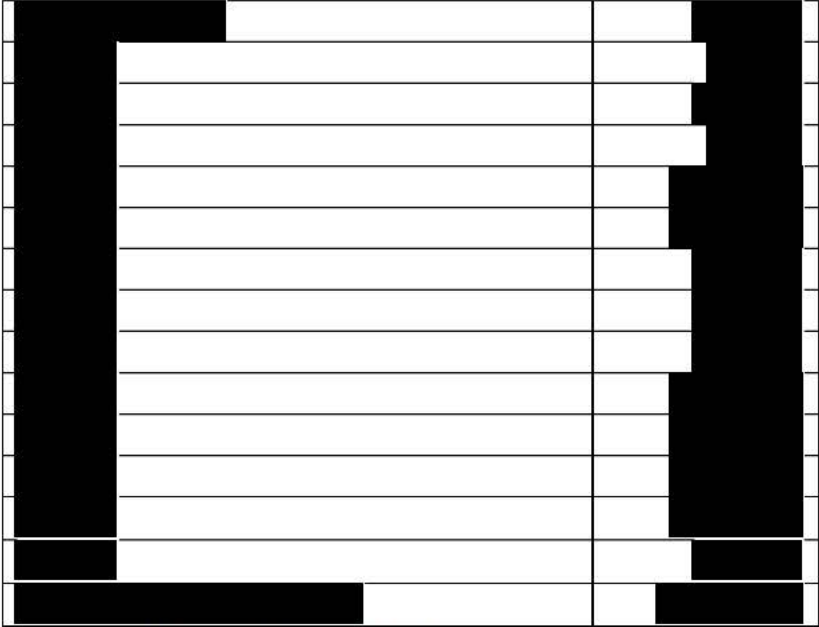
Approximately [BEGIN CONFIDENTIAL] [REDACTED] [END  
CONFIDENTIAL] averaged over 35 years.

**3.5 Projected Cost of Major Components and Schedule for Incurring Costs**

[BEGIN CONFIDENTIAL]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
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[END CONFIDENTIAL]

**3.6 Utility Revenue Requirement During Construction**

The Construction Work in Progress for this project will not be included in rate base, but instead will accrue AFUDC of \$854,000. Therefore, there should be no impact on revenue requirements during the construction period.

**3.7 Anticipated In-Service Expenses During the First Year**

[BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL].

**3.8 Anticipated Impact on Customers Rates. Estimated Construction Costs**

The annual North Carolina retail revenue requirement for Year 1 of operation is estimated to be approximately [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] which would result in an approximate average retail rate increase of [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL].

**Exhibit 3 SUPPLEMENTAL**  
**EQUIPMENT AND COST INFORMATION**

**3.1 Estimated Construction Costs**

The estimated cost of the Asheville Solar Facility is approximately ~~[BEGIN CONFIDENTIAL]~~ \$24.3MM ~~[END CONFIDENTIAL]~~.

**3.2 Estimated Construction Costs Expressed as \$/MW**

Approximately [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL].

**3.3 Estimated Annual Operating Expenses by Category**

Average annual operating expense is [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL].

**3.4 Estimated Annual Operating Expenses Expressed as \$/MWH**

Approximately [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] averaged over 35 years.

**3.5 Projected Cost of Major Components and Schedule for Incurring Costs**

[BEGIN CONFIDENTIAL]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

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[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[END CONFIDENTIAL]

**3.6 Utility Revenue Requirement During Construction**

The Construction Work in Progress for this project will not be included in rate base, but instead will accrue AFUDC of \$854,000. Therefore, there should be no impact on revenue requirements during the construction period.

**3.7 Anticipated In-Service Expenses During the First Year**

[BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL].

**3.8 Anticipated Impact on Customers Rates. Estimated Construction Costs**

The annual North Carolina retail revenue requirement for Year 1 of operation is estimated to be approximately [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] which would result in an approximate average retail rate increase of [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL].

**Exhibit 4 SUPPLEMENTAL****CONSTRUCTION SCHEDULE AND OTHER FACILITY INFORMATION****4.1. Anticipated Construction Schedule**

Should the Commission approve the CPCN request, the Asheville Plant Solar Facility, construction would be targeted to allow for commission of the project by September of 2025, assuming timely authorization to procure major equipment and obtain necessary permits and approvals. A more detailed preliminary schedule can be seen below.

<b>Activity Name</b>	<b>Milestone Date</b>
Notice to Proceed	Q4 2024
Engineering/Procure Equipment	Q3 2023 – Q4 2024
Site Mobilization	Q4 2024 / Q1 2025
Placed in Service	September 2025
Final Commission	Q1 2026

**4.2. Additional Generating Facility Information**

The specific equipment suppliers have not been selected at this time for every component. However, the following is a preliminary description of the major components of the Asheville Plant Solar Facility.

**Solar Array**

The solar array is expected to consist of 1,106 strings of 430W modules for a total capacity of 12.8 MWdc.

**Racking System**

A fixed tilt racking system will be used to mount the modules. The racking will be set at a fixed tilt of 20°.

**Solar Power Conversion Devices**

Duke Energy plans to use a total of 13 TMEIC PVU-L0840GR inverters. Each string inverter has a capacity of 840 kW to meet the net export capacity of 9.5 MW.

**4.3. Qualifications and Selection Process for Principal Contractors**

The Company plans to issue a competitive request for proposals (“RFP”) to competitively source the EPC and major equipment to execute the project as cost-effectively as possible for customers. These activities are planned for the second half of 2023.

#### **4.4. Risk Factors Related to the Construction and Operation of the Generating Facility.**

There would be no additional risk for the construction or operation of this solar facility compared to other facilities owned or operated by Duke Energy. In response to Public Staff’s request that the Company address potential construction risks given that the site is in the mountains; is subject to cold weather, fog and snow, as well as the timing of the projected spend, Duke Energy Progress states:

The Company’s proposed schedule accounts for potential winter weather delays in that the work within Q4 2024 and Q1 2025 is primarily receiving and staging materials and installing racking components. These activities are less likely to be impacted by inclement weather.

In response to Public Staff’s request that the Company provided a verified statement that the facility will be capable of operating at -16 degrees Fahrenheit – the lowest recorded temperature at the site – and the performance of the facility if the calculated wind chill at the site is lower than -16 degrees Fahrenheit, Duke Energy Progress states:

PV modules are rated for extreme temperatures with manufacturer data indicating performance at -40°C (-40°F) without issue. PV modules actually perform better at lower temperatures. Inverters are rated to -25°C (-13°F) for normal operations and may enter a standby mode at temperatures lower than the operational range. Standby temperatures mode is rated to -40°C (-40°F). Equipment is unaffected by wind chill and cannot be colder than the ambient air temperature.



**Exhibit 4 SUPPLEMENTAL**

**CONSTRUCTION SCHEDULE AND OTHER FACILITY INFORMATION**

**4.1. Anticipated Construction Schedule**

Should the Commission approve the CPCN request, the Ashville Plant Solar Facility, construction would be targeted to allow for commission of the project by September of 2025, assuming timely authorization to procure major equipment and obtain necessary permits and approvals. A more detailed preliminary schedule can be seen below.

<b>Activity Name</b>	<b>Milestone Date</b>
Notice to Proceed	Q4 2024
Engineering/Procure Equipment	Q3 2023 – Q4 2024
Site Mobilization	Q4 2024 / Q1 2025
Placed in Service	September 2025
Final Commission	Q1 2026

**4.2. Additional Generating Facility Information**

The specific equipment suppliers have not been selected at this time for every component. However, the following is a preliminary description of the major components of the Asheville Plant Solar Facility.

**Solar Array**

The solar array is expected to consist of 1,106 strings of 430W modules for a total capacity of 12.8 MWdc.

**Racking System**

A fixed tilt racking system will be used to mount the modules. The racking will be set at a fixed tilt of 20°.

**Solar Power Conversion Devices**

Duke Energy plans to use a total of 13 TMEIC PVU-L0840GR inverters. Each sting inverter has a capacity of 840 kW to meet the net export capacity of 9.5 MW.

**4.3. Qualifications and Selection Process for Principal Contractors**

The Company plans to issue a competitive request for proposals (“RFP”) to competitively source the EPC and major equipment to execute the project as cost-effectively as possible for customers. These activities are planned for the second half of 2023.

#### **4.4. Risk Factors Related to the Construction and Operation of the Generating Facility.**

There would be no additional risk for the construction or operation of this solar facility compared to other facilities owned or operated by Duke Energy. In response to Public Staff’s request that the Company address potential construction risks given that the site is in the mountains; is subject to cold weather, fog and snow, as well as the timing of the projected spend, Duke Energy Progress states:

The Company’s proposed schedule accounts for potential winter weather delays in that the work within Q4 2024 and Q1 2025 is primarily receiving and staging materials and installing racking components. These activities are less likely to be impacted by inclement weather.

In response to Public Staff’s request that the Company provided a verified statement that the facility will be capable of operating at -16 degrees Fahrenheit – the lowest recorded temperature at the site – and the performance of the facility if the calculated wind chill at the site is lower than -16 degrees Fahrenheit, Duke Energy Progress states:

PV modules are rated for extreme temperatures with manufacturer data indicating performance at -40°C (-40°F) without issue. PV modules actually perform better at lower temperatures. Inverters are rated to -25°C (-13°F) for normal operations and may enter a standby mode at temperatures lower than the operational range. Standby temperatures mode is rated to -40°C (-40°F). Equipment is unaffected by wind chill and cannot be colder than the ambient air temperature.

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Progress, LLC's Supplemental Information Regarding its Application for Certificate of Public Convenience and Necessity, in Docket No. E-2, Sub 1311, has been served by electronic mail, hand delivery, or by depositing a copy in the United States Mail, 1<sup>st</sup> Class Postage Prepaid, properly addressed to parties of record.

This the 26<sup>th</sup> day of April, 2023.



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