Jason A. Higginbotham
Associate General Counsel

4720 Piedmont Row Drive/PNG 04C
Charlotte, NC 28210

o: 704.731.4015

Jason.Higginbotham@duke-energy.com



March 24, 2023

**VIA ELECTRONIC FILING**

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

**RE: Duke Energy Progress, LLC Western Carolinas Modernization Project**
**Annual Report on Community Engagement**
**Docket No. E-2, Sub 1089**

Dear Ms. Dunston:

In compliance with ordering paragraph No. 6 of the North Carolina Utilities Commission's ("Commission") March 28, 2016 *Order Granting Application in Part, with Conditions, and Denying Application in Part*, I enclose for filing the Annual Community Engagement Report of Duke Energy Progress, LLC ("DEP" or the "Company"), which provides the Company's accomplishments to date on efforts to work with customers in the Western Region to reduce peak load through demand-side management, energy efficiency and other measures and on DEP's efforts to site solar and storage capacity in the Western Region.

DEP's application for a certificate of public convenience and necessity ("CPCN") to construct a 9.5 MW solar photovoltaic facility at the Asheville Plant is pending in Docket No. E-2, Sub 1311. If the Commission approves DEP's CPCN application, then the Company will have met its commitment to build at least 15 MW of solar generation and 5 MW of storage capacity in the Asheville region, given the other projects DEP has successfully completed as part of the Western Carolinas Modernization Project, and the Company will consider the enclosed report its final required update to the Commission.

If you have any questions, please let me know.

Sincerely,

Jason Higginbotham

Jason A. Higginbotham

Enclosure
cc: Parties of Record

Duke Energy Progress, LLC
Western Carolinas Modernization Project
Annual Report on Community Engagement for Demand-Side Management,
Energy Efficiency and Technology
Docket No. E-2, Sub 1089
March 24, 2023

## I. Community Engagement for Demand-Side Management and Energy Efficiency

As highlighted in Duke Energy Progress' ("DEP" or the "Company") 2018, 2019, 2020, and 2021 Integrated Resource Plans as well as DEP's Annual Report on Community Engagement and Demand-Side Management, filed in this docket on March 28, 2022, the Company has successfully pushed the contingent combustion turbine ("CT") out beyond the mid-2030s in part through its community collaboration in Buncombe County. Given the Company's initial projections about growth in the DEP-Western Region, DEP considers its ability to delay construction of the contingent CT compliance with the Commission's directive to work with customers in the DEP-Western Region to reduce peak load through demand-side management, energy efficiency or other measures.

## II. Technology: Solar, Storage, Microgrid Development

Below is a discussion of the projects that are being developed pursuant to DEP's commitments to invest in clean energy resources in Western North Carolina including through building solar and storage resources in the DEP-Western Region.

Project Update:

1. Mt. Sterling Microgrid (Docket No. E-2, Sub 1127) - COMPLETE
    - Haywood County
    - Approximate Capacity – 10 kW Solar PV and 95 kWh Battery Storage Facility
    - NCUC Order Granting certificate of public convenience and necessity ("CPCN") – April 2017
    - Completion Date – May 2017

2. Asheville Rock Hill Battery - COMPLETE
    - Buncombe County
    - Sited at utility-owned substation
    - Approximate Capacity – 9 MW Battery Storage Facility
    - In-Service Date – August 2020

3. Hot Springs Microgrid (Docket No. E-2, Sub 1185) - COMPLETE
    - Madison County
    - Approximate Capacity – 2 MW Solar PV and 4 MW Battery Storage Facility
    - NCUC Order Granting CPCN – May 2019
    - In-Service Date – December 2021

4. Woodfin Solar (Docket No. E-2, Sub 1257)
    - Buncombe County
    - Approximate Capacity – 5 MW Solar PV
    - CPCN received May 2021
    - Anticipated In-Service Date – Q3 2023

5. Riverside Battery
    - Buncombe County
    - Sited at utility-owned substation
    - Approximate Capacity – 5 MW Battery Storage Facility
    - Anticipated In-Service Date – August 2024

6. Asheville Plant Solar Facility (CPCN Docket No. E-2, Sub 1311) and Battery (identified in DEP's MYRP filing – Docket No. E-2, Sub 1300)
    - Buncombe County
    - Sited at utility-owned CC plant
    - Approximate Capacity – 9.5MW Solar PV and 17 to 18 MW Battery Storage Facility
    - CPCN application for Solar PV filed on January 23, 2023 (pending review by the NCUC)
    - Anticipated In-Service Date – September 2025

7. Craggy Battery
    - Buncombe County
    - Sited at utility-owned substation
    - Approximate Capacity – 31 MW Battery Storage Facility
    - Anticipated In-Service Date – March 2026

The current pipeline of solar and storage projects in the western region shown above will allow DEP to meet the Commission's order to deploy at least 15 MW of new solar generation and 5 MW of utility-scale storage in the Asheville region.

Located at one of the highest peaks in the Great Smoky Mountains National Park, the Mt. Sterling Microgrid continues to power communication equipment for rangers in remote

areas of the park. In the City of Asheville, the approximately 9 MW Asheville Rock Hill Battery is operating next to a DEP substation. The Hot Springs Microgrid (approximately 2 MW solar and 4 MW storage) was placed in-service in December 2021. During its planned islanding test in December 2022, the microgrid successfully picked up the town's entire load from a black start using only the solar and battery storage to restore power, a first for the company. Critical learnings continue to be uncovered that will pave the way for future microgrids. The Woodfin Solar facility (approximately 5 MW) received a CPCN on May 20, 2021 and will be placed in service this year. The Asheville Plant Solar Facility (approximately 9.5 MW) is projected to begin construction late 2024 or early 2025 if the Commission grants DEP's application for a CPCN, which is currently pending in Docket No. E-2, Sub 1311. Benefits of the Asheville Plant Solar Facility include being located on a brownfield development site, having sufficient acreage and being primarily clear of trees and debris, having a point of interconnection onsite, not being adjacent to residential customers, and being Company-owned. The Asheville Plant Solar Facility will be the final solar project to achieve the solar installation requirements established by the Commission's Order in this docket. An approximately 17 MW battery, co-located with the Asheville Plant Solar Facility, was included in the DEP Multi-Year Rate Plan ("MYRP") filing and is planned to be in-service in March 2025. This project is referred to in the MYRP as the "Lake Julian" battery.

As summarized above, the Company continues to develop multiple solar and storage facilities planned on Company-owned land in Buncombe County. These projects are in various stages of the generator interconnection process. The Company is also considering a full range of options, including non-wires alternatives such as solar and storage, when grid needs are identified through the integrated systems and operations planning framework, further demonstrating the benefits of distributed energy technologies in DEP's western region.

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Progress, LLC's Annual Report on Community Engagement, in Docket No. E-2, Sub 1089, has been served by electronic mail, hand delivery, or by depositing a copy in the United States Mail, 1st Class Postage Prepaid, properly addressed to parties of record.

This the 24th day of March, 2023.

Jason A. Higginbotham
Associate General Counsel
Duke Energy Corporation
4720 Piedmont Row Drive/PNG 04C
Charlotte, NC 28210
Tel 704.731.4015
Jason.Higginbotham@duke-energy.com