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VIA ELECTRONIC FILING

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

**RE: Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's
Progress and Informational Report on the Infrastructure Investment
and Jobs Act
Docket No. M-100, Sub 164**

Dear Ms. Dunston:

Enclosed for filing with the North Carolina Utilities Commission ("Commission") on behalf of Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP" and, together with DEC, "Duke Energy" or the "Companies") is the Companies' Progress and Informational Report on the Infrastructure Investment and Jobs Act, which is being filed in compliance with the Commission's November 10, 2022 *Order Directing North Carolina Public Utilities to Take Reasonable and Prudent Action to Obtain Federal Funding and to File Reports* ("IIJA Reporting Order").

Background

On February 1, 2022, the Commission issued its *Order Allowing Comments Regarding Federal Funding for Utility Service in North Carolina* in this docket ("IIJA Comments Order") in which it concluded that it is in the public interest for public utilities in this State to fully and carefully consider taking advantage of federal grants and loans potentially available under the Infrastructure Investment and Jobs Act ("IIJA" or the "Act") and provided parties an opportunity to file comments identifying (a) specific federal programs available to North Carolina public utilities under the Act; (b) reasonable actions to take to access the funds; (c) entities with whom North Carolina public utilities should coordinate; (d) processes contemplated or established by other state agencies; and (e) appropriate actions for the Commission to consider taking to facilitate receipt and deployment of available funds. In their Initial and Reply Comments, the Companies responded to each of these items and committed to keep the Commission apprised of the Companies' efforts to identify and pursue potential IIJA funding opportunities.

The Companies have followed through on this commitment by submitting to the Commission various informational reports on Duke Energy's engagement with federal agencies that will administer federal funding and have attached copies of certain of their formal submissions to these agencies. The Companies have also met with the Public Staff on multiple occasions to describe Duke Energy's approach to identifying funding opportunities under the Act and to provide updates on the status of specific programs. The Companies provided a timeline of these submissions to the Commission and meetings with the Public Staff in the Companies' first Informational Report in compliance with the IJA Reporting Order, which the Companies filed on May 10, 2023. In addition, on November 3, 2023, the Companies hosted an informational meeting with the Public Staff to provide the Public Staff with an update on the Companies continued pursuit of federal funding opportunities.

Duke Energy also provided information to the Commission on the IJA through testimony submitted in the DEC multi-year rate plan ("MYRP") in Docket No. E-7, Sub 1276. In that docket, DEC submitted the rebuttal testimony of Ms. Cynthia Klein describing the Companies' rigorous and nuanced process for identifying funding opportunities under the Act and explaining that, due to the highly competitive nature of the IJA application process, there is significant uncertainty around the receipt of IJA grants. On September 1, 2023, Ms. Klein appeared at the expert witness hearing in the MYRP and responded to questions from the Commission on the timing for awards under the IJA and the eligibility of certain proposed MYRP projects for potential IJA funding.

Ordering Paragraph 2 of the Commission's IJA Reporting Order requires the Companies to file "as often as reasonable and appropriate . . . but at any rate no less than every six months beginning from the date of this order:" progress and informational reports regarding the following items:

- a. Any additional programs under the IJA of which the Commission and parties should be aware
- b. Any State IJA Procedures not previously reported
- c. Developments in IJA funding opportunities and procedures for obtaining funding
- d. Efforts by the reporting party to obtain funding under the IJA, including existing federal programs that received additional funding under the IJA, such reports to quantify the net benefits provided or expected to be provided to customers
- e. Any specific actions the Commission might take in the public interest to increase the opportunity for North Carolina utility customers to receive benefits under the IJA

As noted, Duke Energy submitted its initial report in compliance with the IJA Reporting Order on May 10, 2023. Duke Energy hereby submits the below report as an update to its May 10 report and in compliance with the Commission's directives.

May 2023 – November 2023 IIJA Report

I. Additional programs under the IIJA of which the Commission and parties should be aware

At this time, there are no additional programs under the IIJA of which Duke Energy believes the Commission and parties should be aware. As the Companies described in their May 10 Report, Duke Energy has taken significant steps to determine which funding opportunities it should pursue under the Act. To do this, the Companies developed a prioritization framework which allowed them to rank IIJA programs and identify which were most likely to align with Duke Energy's business focus and be executable while providing the greatest benefits to customers. Through this ongoing and in-depth review of the IIJA and active engagement with agencies and stakeholders, the Companies have established a process for targeting the opportunities that will have a meaningful impact to the Companies and their customers.

II. State IIJA Procedures not previously reported

At this time, the Companies are not aware of any state IIJA procedures that have not been previously reported to the Commission. Certain state agencies have established procedures for the pursuit and award of IIJA funding; however, the Companies have not identified any available state agency administered IIJA funding opportunities for which Duke Energy is currently eligible. The Companies expect that they may be eligible for certain state formula funds in the future and are awaiting further guidance on the application process for those funds.

III. Developments in IIJA funding opportunities and procedures for obtaining funding

In their May 10 Report, the Companies described the procedure for obtaining IIJA funding from the DOE and have explained in various proceedings the highly competitive nature of the IIJA application process. In summary, that process consists of filing of a Letter of Intent or a Concept Paper prior to filing a full application. The DOE will respond to a Concept Paper with feedback "Encouraging" or "Discouraging" an applicant from submitting a full application for funding, and an applicant will decide whether to submit a full application. In general, the DOE does not respond to Letters of Intent.

In the DEC MYRP proceeding, witness Klein explained that if an applicant submits a successful application for IIJA funds, the presumptive awardee will receive an invitation to negotiate the terms and conditions of a potential award, which could take three to six months, depending on the complexity of the grant. Importantly, an invitation to negotiate does not guarantee that an applicant will receive an award. As discussed in Section IV below, the DOE has begun to announce awards for certain of its IIJA programs, including the Grid Resilience and Innovation Partnerships ("GRIP") Program.

IV. Efforts by the reporting party to obtain funding under the IIJA, including existing federal programs that received additional funding under the IIJA, such reports to quantify the net benefits provided or expected to be provided to customers

In their May 10 Report, the Companies listed the applications for IIJA funding they had submitted to the DOE. Since then, DOE has announced awards for several IIJA programs. Accordingly, Duke Energy has provided an update on its submitted applications below. The Companies will continue to monitor award announcements and updates to the programs to determine whether additional tranches of funds may be available in future years.

A. Applications for GRIP Topic Area 1 (Grid Resilience Utility and Industry Grants) and Topic Area 2 (Smart Grid)

The Companies submitted individual IIJA applications to the DOE on behalf of DEC and DEP for GRIP Topic Area 1 (Grid Resilience) and an application at the Duke Energy enterprise level for Topic Area 2 (Smart Grid). Unfortunately, the DOE did not select the Companies to negotiate for awards for either Topic Area. As noted, DOE's GRIP Program is highly competitive and therefore receipt of IIJA funds under this program is not guaranteed. As a result, the Companies did not reflect the impact of any potential IIJA awards on project costs in each of DEC's and DEP's respective MYRP proceedings.

The number of GRIP awards announced by the DOE, compared to the number of applicants for each Topic Area, highlights the highly competitive nature of the programs. For Topic Area 1, 289 entities submitted Concept Papers, and DOE encouraged 144 of those entities to apply, including DEC and DEP. Of the total number of applications submitted for Topic Area 1, DOE announced just 16 awards this cycle. These awards favored co-ops and work pertaining to wildfire mitigation or prevention as well as climate adaptation. The DOE also chose several projects aimed at investing in circuit improvements and microgrids for disadvantaged communities. The DOE did not announce any awards for Topic Area 1 for projects located in North Carolina and awarded one project in South Carolina for an application submitted by Tri-County Co-op.

For Topic Area 2, 326 entities submitted Concept Papers, and the DOE encouraged 157 of those entities to apply, including DEC and DEP. Of the total number of applications submitted for Topic Area 2, the DOE announced 34 awards this cycle. The awards focus on grid-edge technologies, rural modernization, and the enablement of microgrids. The DOE announced two awards for Topic Area 2 for projects located in North Carolina: one to Dominion Energy Virginia for a proposed critical grid management project¹ and one to Surry-Yadkin Electric Membership Corporation for a project to support a series of smart grid infrastructure upgrades.²

¹ <https://www.energy.gov/sites/default/files/2023-10/DOE-GRIP-Virginia-Electric-and-Power-Co.pdf>

² <https://www.energy.gov/sites/default/files/2023-10/DOE-GRIP-Surry-Yadkin-Electric-Membership-Corporation.pdf>

On November 10, 2023, the Companies received feedback from the DOE on the Companies' GRIP Program applications. While the DOE found that the Companies' applications reflected strong technical feasibility and program management, the applications would have benefited from a more specific focus on community benefits. In particular, the DOE noted that the applications did not include community benefits or labor agreements, and therefore, it was not clear to what extent the projects would benefit certain disadvantaged communities. Duke Energy will review the DOE's comments and incorporate them, as applicable, into future applications.

B. Update on GRIP Topic Area 3 (Grid Innovation)

As Duke Energy explained in its November 4, 2022 Informational Update to the Commission, the Companies are not directly eligible to apply for GRIP Topic Area 3 (Grid Innovation), as the program is intended to provide financial assistance to a state, a combination of two or more states, an Indian tribe, a unit of local governments, and public utility commissions to collaborate with electric sector owners and operators. As previously reported, the Companies did partner with the State Energy Office, North Carolina Department of Environmental Quality on an application to fund onshore transmission to support offshore wind and other renewables integration in DEP's service territory. Unfortunately, the DOE did not select the State Energy Office's application for an award.

On November 10, 2023, the State Energy Office received feedback from the DOE on the Grid Innovation application. While the application supported the desired objectives through addressing diversified resources and interconnection challenges for renewables, DOE found challenges in the application's aggressive timelines and lack of union labor.

There were no awards issued for Topic Area 3 for projects located in North Carolina. Of the total 135 Concept Papers submitted for Topic Area 3, DOE issued eight awards. Two of the awards will be funding projects in Hawaii to help rebuild the grid after the recent catastrophic wildfires. The remaining awards were issued to certain Pacific Northwest Tribes, a project located in rural Georgia, and a joint interconnection queue transmission study in Minnesota.

C. Application for Long Duration Energy Storage for Everyone, Everywhere Initiative

On September 22, 2023, the DOE announced awards for its Long Duration Energy Storage Demonstrations, an IIJA program for which DEP had applied. The DOE awarded grants to only nine proposals, and unfortunately, did not select DEP for an award. Although the DOE did not select the Companies' application, one of the winning projects utilizes the same Energy Dome storage technology as proposed in DEP's application – a closed-loop, CO2 energy storage system. Duke Energy will continue to monitor the development and potential applications of this technology.

D. Application for Hydroelectric Production Incentives

The Companies submitted applications for funding under the DOE's Hydroelectric Production Incentives Program in 2023. As of the date of this report, the DOE has not provided feedback to Companies on applications for that program. As noted, the Companies will continue to monitor the status of all programs for which Duke Energy is eligible and will provide an update on funding opportunities in their next semi-annual report.

E. Application for Regional Clean Hydrogen Hubs Program

On October 12, 2023, DOE notified the Companies that DOE did not select the Southeast Hydrogen Hub Coalition for Phase 1 funding (detailed planning). The program was highly competitive, and the DOE selected just seven of the 33 coalitions it had encouraged to submit full applications. Successful applicants received grants for more in-depth feasibility studies. Once those are complete, an engineering and cost study will be completed. Once firm cost estimates are in hand, the federal government and private sector would work on a funding solution for the projects. The Companies expect the studying and planning phases to take many years with an eye on going operational in the early 2030s.

Notwithstanding that the DOE did not select the proposed Southeast Hydrogen Hub for IIJA funding, Duke Energy's contributions to the Southeast Hydrogen Hub Coalition strengthened the Companies' partnerships with peer utilities, large customers, and other stakeholders. The Companies plan to maintain a forum for continued engagement and believe the learnings from the project development and application process as well as the partnerships that were established will be valuable as Duke Energy continues to develop and construct hydrogen-capable natural gas turbines.

V. Any specific actions the Commission might take in the public interest to increase the opportunities for North Carolina utility customers to receive benefits under the IIJA

At present, Duke Energy is not aware of any specific actions the Commission should take to increase the opportunity for North Carolina utility customers to receive benefits under the IIJA. The Companies appreciate the Commission's focus on this important effort and will continue to monitor developments in funding opportunities to determine if opportunities for the Commission to act in the public interest to receive IIJA funding emerge.

Update on the Federal Loan Opportunities Under the IRA

Though not required by the Commission's IIJA Reporting Order, the Companies are providing information in this report on the Inflation Reduction Act of 2022 (P.L. 117-169) ("IRA"), as it has created opportunities to leverage federal loan guarantees to support investments the Companies may make in the future. As described more fully below, the IRA has expanded the types of projects that are eligible for financing through the DOE's Loan Programs Office ("LPO") to include projects that focus on clean energy, environmental justice, job creation and domestic manufacturing goals.

The IRA amended Title XVII of the Energy Policy Act of 2005 to create a new Section 1706 titled, “Energy Infrastructure Reinvestment Financing”, which created additional categories of projects that may be eligible for financing through the DOE’s LPO. The DOE is implementing Section 1706 through the Energy Infrastructure Reinvestment (“EIR”) Program, which will provide loan guarantees – not grants – to eligible entities to provide lower cost financing for eligible projects. In May 2023, the DOE issued program guidance as well as an Interim Final Rule amending its regulations to implement the loan guarantee provisions of Section 1706.

The DOE’s program guidance on the EIR Program defines project eligibility as “projects that retool, repower, repurpose, or replace Energy Infrastructure that has ceased operations” or “projects that enable operating Energy Infrastructure to avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases.” The Companies are actively working with the LPO in the pre-application stage of the process to determine which projects may be eligible for the program, develop a programmatic approach to finance a portfolio of projects under a single loan facility, and develop a loan structure to secure the loan guarantee that complies with both the LPO’s requirements for lien position and the utilities’ first mortgage bond indentures. The Companies are also establishing gating criteria to use to screen projects for inclusion in any future applications.

Duke Energy plans to submit a combined Part I application, which establishes eligibility for the program, for DEC and DEP projects as a portfolio. LPO will disburse funds as applicants complete projects or reach project milestones. The LPO is accepting applications now for the Section 1706 program and requires the receipt of conditional commitment by September 2026. Under the program, LPO must disburse funds by September 2031.

Eligible projects will require a Part II application and completion of due diligence to fully evaluate the EIR Program against other available financing alternatives. A key consideration before committing to the loan financing will be evaluating the expected interest rate savings net of additional program costs once final loan terms are known (including program administrative and compliance costs). While there could be customer savings from reduced interest expense for projects financed through a DOE loan guarantee, Duke Energy will not be able to determine if the “all-in” financing costs are attractive until after completion of Parts I and II of the application and the LPO completes its due diligence and offers a loan commitment.

As with its pursuit of federal funds under the IIJA, Duke Energy commits to keep the Commission apprised of its efforts to identify and pursue loan opportunities under the IRA that may be in the public interest.

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

Sincerely,

A handwritten signature in black ink that reads "Jason Higginbotham". The signature is written in a cursive, flowing style.

Jason A. Higginbotham

cc: Parties of Record

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's and Duke Energy Progress, LLC's Informational Report on the Infrastructure Investment and Jobs Act, in Docket No. M-100, Sub 164, 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 13th day of November, 2023.



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