BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-7, SUB 1265

In the Matter of: **Application of Duke Energy Carolinas, LLC for Approval of Demand-Side Management and Energy Efficiency Cost Recovery Rider Pursuant to N.C. Gen. Stat. § 62-133.9 and Commission Rule R8-69**	**POST HEARING BRIEF OF NORTH CAROLINA JUSTICE CENTER, NORTH CAROLINA HOUSING COALITION, AND SOUTHERN ALLIANCE FOR CLEAN ENERGY**

PURSUANT to North Carolina Utilities Commission (Commission or NCUC) Rule R1-25 and the Commission's *Notice of Due Date for Proposed Orders and/or Briefs*, issued June 20, 2022, in this docket, North Carolina Justice Center (NC Justice Center), North Carolina Housing Coalition (NC Housing Coalition), and Southern Alliance for Clean Energy (SACE) (collectively, Efficiency Advocates) respectfully submit this post-hearing brief in the above-captioned docket.

I. <u>Introduction</u>

The Efficiency Advocates support Duke Energy Carolina's (DEC or the Company) application and applaud the savings achieved by the Company's portfolio of programs. The Efficiency Advocates remain committed to strengthening DEC's programs, increasing overall savings, and providing additional opportunities for low-income customers to receive expanded energy-efficiency services, including access to comprehensive efficiency retrofits.

Although the DSM/EE rider dockets are primarily focused on cost-recovery for DEC, they also provide the only regular avenue for the Commission to observe trends and set direction for program and policy improvements in the Company's portfolio of programs. The Efficiency Advocates appreciate the opportunity to intervene on behalf of our members and constituents to highlight the importance of reaching low-income customers with bill-saving efficiency programs and the central role of energy efficiency in the clean energy transition. The Company and Efficiency Advocates are in agreement that increasing energy efficiency savings will be an important part of DEC's Carbon Plan compliance path.[1] But disagreements remain about the amount of savings that DEC (and its sister utility, Duke Energy Progress) should attain as part of a least-cost carbon reduction pathway.[2] Regardless of what determination the Commission ultimately makes in the Carbon Plan docket on the appropriate level of efficiency savings that DEC will be required to attain, these annual rider dockets will become even more important opportunities for the Commission to track progress towards attaining that ultimate savings requirement and provide general oversight of the Company's efficiency programs. Efficiency Advocates filed the testimony of Forest Bradley-Wright, SACE Energy Efficiency Director, on May 17, 2022. This post-hearing brief reiterates his recommendations and conclusions, many of which highlight the need

[1] *Verified Petition for Approval of Carbon Plan, App. G, Grid Edge and Customer Programs*, Docket No. E-100, Sub 179, at 5 (May 16, 2022) ("Energy Efficiency is a proven low-cost means to reduce . . . CO_2 emissions and is foundational to any decarbonization strategy"); *Joint Comments of North Carolina Sustainable Energy Association, Southern Alliance for Clean Energy, Sierra Club, and Natural Resources Defense Council*, Docket No. E-100, Sub 179, at 3 (July 15, 2022) (noting the importance of energy efficiency to meeting Duke Energy's short and long-term carbon emission reduction requirements).

[2] *Compare Verified Petition for Approval of Carbon Plan, App. G, Grid Edge and Customer Programs*, Docket No. E-100, Sub 179, at 5 (contending that the assumed annual energy efficiency savings of"1% of eligible load . . . represents a very ambitious target"), *with Joint Comments of North Carolina Sustainable Energy Association, Southern Alliance for Clean Energy, Sierra Club, and Natural Resources Defense Council*, Docket No. E-100, Sub 179, at 24 (highlighting the insufficient level of projected energy efficiency savings in Duke Energy's Carbon Plan filings).

for greater Commission oversight over the Company's progress advancing energy efficiency.

II. The Company's Performance in Delivering Energy-Efficiency Savings to its Customers Declined in 2020

a. DEC Adjusted to Difficult Circumstances but Failed to Meet the Target of One Percent of Savings of Prior-Year Sales

The Efficiency Advocates commend DEC for proactively adjusting its approach to delivering DSM/EE services considering the COVID-19 pandemic. Despite these adjustments, DEC once again fell short of the agreed-upon energy savings target of one percent of prior-year retail sales for the third year in a row, with the Company's efficiency savings amounting to 0.79% of 2021 retail sales.[3] This represents about a 16% decrease from DEC's projected savings for 2021.[4]

b. Non-Residential Opt Outs Have Led to a Significant Decline in Non- Residential Savings

While savings attributed to the Company's non-residential programs increased relative to 2021, primarily due to heightened savings from the Smart Saver Custom, HVAC Products, and Small Business Energy Saver programs, overall non-residential program performance is worse than it was pre-pandemic.[5] DEC's non-residential energy efficiency programs comprised 35% of total energy efficiency savings in 2021.[6] However, given non-residential customers' significant portion of overall consumption and the comparatively minor cost of commercial and industrial energy efficiency, there is good reason to suspect that their share of

[3] Tr. 183:19-20.
[4] Tr. 184:2-3.
[5] Tr. 185: 8-13.
[6] Tr. 185:8-9.

total savings would have been higher but for commercial and industrial opt outs.[7] "In 2021, approximately 61% of DEC's commercial and industrial energy consumption opted out of the utility's energy efficiency offerings (30,083 GWh out of 49,305 GWh of DEC's non-residential retail sales)."[8] While these customers are required to certify "that they have implemented their own energy-efficiency or demand-side management measures, there is no requirement to report any resulting savings to the Company or the Commission."[9]

c. Overreliance on Short-Lived Measures in Residential Behavioral Programs

Residential program savings accounted for 65% of total savings in 2021.[10] Within these residential programs, the largest savings came from My Home Energy Report (MyHER), a behavioral program responsible for 53% of DEC's total savings.[11] We have consistently expressed concern about the Company's overreliance on these behavioral measures. Although its decision is not controlling authority, Efficiency Advocates would note that the South Carolina Public Service Commission (PSC) found that DEC's and Duke Energy Progress' (DEP) (collectively, the Companies) planned overreliance on behavioral programs to achieve future efficiency savings justified requiring modifications to the filed Integrated Resource Plans.[12] The PSC ordered the Companies to "work with members of the Collaborative to ensure that residential saving projections are not

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[7] Tr. 185:16-18; 186:2-3.
[8] Tr. 185:18-20.
[9] Tr. 186:7-9.
[10] Tr. 184:9-10.
[11] Tr. 184:11-12.
[12] *Order Requiring Modifications to Integrated Resource Plans of DEC and DEP*, South Carolina Public Service Commission Docket Nos. 2019-224-E & 225-E, at 15 (June 28, 2021).

overly dependent on behavioral programs with short savings persistence."[13] Behavioral programs like MyHER provide no significant long-term or deep savings. Changing federal lighting standards are making it increasingly difficult for the Company to continue to rely on lighting measures to achieve cost-effective savings.

III. The Energy Efficiency Collaborative

Over the past few years, Energy Efficiency Collaborative (the Collaborative) stakeholders have submitted several DSM/EE program proposals for DEC's consideration.[14] Last year, DEC "regularly included time on the Collaborative meeting agenda for information updates on program recommendations submitted by stakeholders,"[15] a welcome change from years past. However, while DEC's proposals progress rapidly towards formal submission with the Commission, stakeholder recommendations stall by comparison.[16] Indeed, DEC has yet to submit a program proposal developed by Collaborative stakeholders for Commission approval.[17]

In contrast, the progress achieved developing the High Energy Use Low-Income Energy Efficiency Pilot High Energy Use Pilot) and the Tariffed On-Bill Pilot reveals (1) how DEC and stakeholders can cooperatively design effective DSM/EE programming and (2) what improvements would enhance Collaborative program development, implementation, and delivery. Specifically, the experience developing these two pilots demonstrates, among other things: (1) the importance

[13] *Id.* at 34.
[14] *See* Tr. 190:22-24; 191:23-26; 192:1-6.
[15] Tr. 191:17-19.
[16] Tr: 191:20-22.
[17] Tr. 192:12-14.

of achieving consensus around the need to develop practical, cost-effective DSM/EE programming for Commission review and approval; (2) how Duke Energy's New Product Development group's direct involvement contributes to "better shared understanding of program design options, challenges, and opportunities"; (3) fruitful program advancement requires flexibility and critical thinking skills, and is "less effective without ongoing, hands-on engagement between stakeholders and" DEC; and (4) the need for parties to recognize and adhere to program milestones and deadlines.[18]

IV. <u>There Is Further Room to Grow the Company's Low-Income Efficiency Programs</u>

DEC's recent efforts to increase low-income customers' access and participation in income and non-income qualified DSM/EE programming is laudable. DEC's Low-Income Energy Efficiency and Weatherization Assistance programs, which are estimated to reduce DEC system load by 9.1 GWh in 2023, are much more effective now than they were pre-pandemic.[19] Indeed, both programs are projected to amount to approximately 2% of total residential energy savings in 2022.[20] In addition, two recent, separate stipulations in a DEC rate case and DSM/EE proceeding require DEC to develop low-income energy efficiency program pilots and conduct a survey analyzing non-income qualified programming penetration among Duke Energy low-and moderate-income ratepayers respectively.[21]

[18] Tr. 193:8-20; 194:1-2.
[19] Tr. 196:4-5, 7-9.
[20] Tr. 196:6-7.
[21] Tr. 196:13-18; 197:8-12

Despite these efforts, more spending and low-income energy efficiency programming is needed given the number of low-income DEC customers, the number of low-income DEC customers receiving assistance, and the limitations in DEC's existing programming. Almost 30% of DEC's 2.2 million residential customers are at or below 200% of the Federal Poverty Level, which is the income eligibility threshold for DEC's income qualified energy efficiency programming.[22] However, only 10,000 DEC customers receive low-income energy efficiency programming services each year.[23]

V. DSM/EE Programs Relevance to Other Commission Dockets and Public Policy

Mr. Bradley-Wright's testimony covered several key policy and regulatory matters relating to the Company's DSM/EE efforts. Specifically, he discussed settlements in the most recent rate case, the Carbon Plan, integrated resource planning, and the Governor's Clean Energy Plan. It is important to recognize that the Company's DSM/EE programs do not exist in isolation. Efficiency Advocates raise these dockets and related policy issues to increase the chances that efficiency goals are supported by and not undermined by rate design, resource planning decisions, or other policy determinations.

Additionally, energy efficiency programs paid for through this Rider (and supported by the Collaborative's work) should intentionally reinforce and help advance efforts in North Carolina to expand use of clean and affordable energy through resource planning, rate design, and other policy decisions. For example,

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[22] Tr. 199:5-7.
[23] Tr. 199:8-9.

DSM/EE is a least cost resource[24] that can help North Carolina cost effectively achieve the carbon reduction targets set forth in House Bill 951. Additionally, given current natural gas price volatility, additional DSM/EE spending and programming could help mitigate DEC ratepayers' exposure to rising and unpredictable fuel costs.[25] Given these headwinds, it is critical that the number, reach, and effectiveness of DSM/EE programs be enhanced.

VI. Conclusion and Summary Recommendations

In conclusion, the Efficiency Advocates recommend that the Company do the following:

1. Quantify and analyze the full lifetime carbon savings associated with DEC's DSM/EE portfolio in future recovery rider proceedings to enable the Commission and other interested parties to track the impact of DSM/EE resources towards achieving carbon reduction goals. Towards that end, DEC should work with the Collaborative to identify and expand the carbon reduction impact of the Company's energy efficiency portfolio.
2. Work with the Collaborative to establish an action plan to reverse savings declines and identify steps that will allow DEC to meet and exceed 1% savings of total retail electric

[24] Tr. 188:6-7.
[25] *See generally Order Establishing Standard Rates and Contract Terms for Qualifying Facilities*, Docket No. E-100, Sub 158, at 61 (April 15, 2020) (noting that renewables can help utilities hedge against fuel price volatility).

sales in each program year.[26] The plan should be periodically updated and presented to the Commission as an appendix to future DEC DSM/EE rider applications. In addition, DEC should work with the Collaborative to increase the average measure life for DEC's EE portfolio through a shift towards measures with deeper and longer-lived savings.

3. Increase the scale and reach of DEC's income qualified low-income efficiency programs, with corresponding new plans for investments that will allow for the achievement of those savings targets. Status and outputs of this work should be reported to the Commission in DEC's next DSM/EE recovery rider filing.
4. Establish a default process and timeline for the development of Collaborative stakeholder program recommendations – from initial proposal submission to filing with the Commission – that indicates key milestones and expected timeframes in between.

[26] It is important to note that Witness Bradley-Wright's recommendation that DEC attain a threshold of 1% savings of total retail sales was made before SACE and its partner groups had reviewed Duke Energy's carbon plan filing and completed their analysis and recommendations for Duke Energy to achieve its carbon reduction goals. After completing that analysis, SACE, along with National Resources Defense Council, Sierra Club, and the North Carolina Sustainable Energy Association, recommended that DEC and DEP ramp up their energy efficiency savings to 1.5% savings of total retail sales as part of a least-cost carbon plan.

And request that the Commission order the following:

1. Direct DEC to continue providing information related to the energy savings and economic impacts of DSM/EE programs that were introduced during and/or are a product of the Collaborative in future DSM/EE recovery riders. In addition, DEC should be required to indicate what program modifications or additions were initiated by participating stakeholders, as well as stakeholder-initiated recommendations upon which the Commission has not acted.
2. Direct Duke to develop applications in accordance with Commission approved energy efficiency-related recommendations derived from the Low-Income Affordability Collaborative.

Respectfully submitted this the 27th day of July, 2022.

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CERTIFICATE OF SERVICE

I certify that the parties of record on the service list have been served with the Post-Hearing Brief by the North Carolina Justice Center, North Carolina Housing Coalition, and Southern Alliance for Clean Energy either by electronic mail or by deposit in the U.S. Mail, postage prepaid.

This the 27th day of July, 2022.

s/ David L. Neal
David L. Neal