BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-7, SUB 1230

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| In the Matter of: Application of Duke Energy Carolinas, LLC For Approval of Demand-Side Management and Energy Efficiency Cost Recovery Rider Pursuant to G.S. 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 Rule R1-25 of the North Carolina Utilities Commission, the North Carolina Justice Center ("Justice Center"), North Carolina Housing Coalition ("Housing Coalition"), and the Southern Alliance for Clean Energy ("SACE") (collectively, "Efficiency Advocates"), respectfully file this post-hearing brief on Duke Energy Carolinas, LLC's ("DEC" or "the Company") application for approval of its annual demand-side management ("DSM") and energy efficiency ("EE") cost recovery and incentive rider for 2021 ("Rider 12").

## I. Introduction

The Justice Center, Housing Coalition, and SACE support DEC's application and applaud the savings achieved by the Company's portfolio of programs. The Efficiency Advocates remain committed to strengthening the Company'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 EE/DSM rider dockets are primarily focused on cost-recovery for the Company, 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 transition to a clean energy future.

On May 22, 2020, Efficiency Advocates filed the testimony of Forest Bradley-Wright, Energy Efficiency Director for SACE, who covered five topics: DEC's 2019 efficiency portfolio performance, its 2021 forecast showing declining savings, efficiency for low-income customers, the ways that the COVID-19 pandemic is accelerating the need for energy efficiency and creating challenges for program delivery, and progress at the Collaborative. Mr. Bradley-Wright also addressed the interplay between savings from the Company's DSM/EE programs and other public policy. This post-hearing brief reiterates his recommendations and conclusions.

## II. Duke Energy Carolina's Performance in Delivering Energy-Efficiency Savings to its Customers

### A. DEC Just Missed its Target of One-Percent of Savings of Prior-Year Sales but Continues to Offer a Cost-Effective Portfolio of Programs

The Efficiency Advocates commend DEC for having exceeded its projected savings for 2019 and coming close to the agreed upon annual-energy savings target of one-percent of prior-year retail sales.[1] Tr. p. 355. The Company's 2019 savings were 123% of its forecast while only costing a fraction more than projected. Tr. p. 63. Efficiency Advocates are particularly impressed with the success of the Income-Qualified

[1] The Merger Settlement with SACE, South Carolina Coastal Conservation League, and Environmental Defense Fund calls for annual energy savings of 1% of prior-year retail sales beginning in 2015 and cumulative savings of at least 7% over the period from 2014 through 2018. The Merger Settlement was approved by the Public Service Commission of South Carolina ("PSCSC") in Docket No. 2011-158-E. The 1% savings target has also been memorialized in the mechanism governing North Carolina programs, which provides an opportunity for the Company to earn a bonus incentive for achieving savings of 1% or more of prior year retail sales. *Order Approving DSM/EE Programs and Stipulation of Settlement*, Docket No. E-7, Sub 1032 (Oct. 29, 2013).

Energy Efficiency and Weatherization Assistance program, one of the top three residential programs from the perspective of percentage increase in savings. Tr. pp. 64 & 356.

The Company's DSM/EE programs continue to provide strong value for its customers. In 2019, DEC's portfolio had a Utility Cost Test result of 2.91 and a Total Resource Cost test result of 2.69. Tr. p. 356 (citing Ex. FBW-4). DEC reported a decline from 2018 in the net present value of total avoided costs in 2019, due to the combination of lower kilowatt hour savings and lower avoided cost rates, but the value of savings for DEC's customers remained impressive at $437.7 million. *Id.*

**B. DEC's Energy-Savings Projections**

Despite achieving 0.98% of annual savings in 2019, DEC is again forecasting a significant decline in savings for 2021. The Company projects a 10% reduction from the 794.9 gigawatt hours ("GWh") achieved in 2019 and savings that are 16% lower than the recent high of 854 GWh achieved in 2017. Tr. p. 361.

As noted above, DEC significantly exceeded its energy-savings projections, surpassing its forecast for 2019 by 8%. Tr. p. 356. Historically, DEC has underestimated savings in its forecast by a substantial degree. The Company bucked that trend last year when 2018 savings closely tracked the prior year's forecast.[2] It remains to be seen whether the projected reduction in savings for 2021 is a return to the previous tendency of underestimating future performance or a sign that work is urgently needed to grow efficiency savings in the coming years. *Id.*

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[2] Post-hearing Brief of North Carolina Justice Center and Southern Alliance for Clean Energy, Docket No. E-7, Sub 1192 p. 3 (Sept. 9, 2019).

In its application and supporting testimony, DEC does not directly note that its projected decline in future savings will dip below the one-percent savings target. Tr. p. 361. Generally, too little attention is given to explaining the reasons for the expected decline in savings or addressing the steps that DEC is taking to reverse that trend. Tr. p. 362. The Commission specifically drew attention to this matter in its 2019 Order, stating that: “In particular, the Commission notes the forecasted decline in DEC's DSM/EE savings in 2020 and concludes that it would be helpful to have the Collaborative examine the reasons for the forecasted decline, and explore options for preventing or correcting a decline in future DSM/EE savings.”[3] Going forward, Efficiency Advocates recommend the following concrete steps to better explain the specific causes of forecasted declines and identify potential ways to address those declines:

- The Commission direct DEC to explain forecast declines and show what steps are being taken to prevent them, providing a clear explanation for the reductions (indicating specific factors driving those forecast declines) in its annual rider docket filing. When forecasted savings levels are lower than those reported in recent years, DEC will provide a clear explanation for the reductions – indicating specific factors driving the declines, identifying which programs are impacted by those factors, and how much.
- DEC provide details to the Collaborative from the five-year program planning projections the Company is using as inputs for its DSM/EE modeling in the 2020 IRP.

[3] *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice*, Docket No. E-7, Sub 1192 p. 35 (Oct. 18, 2019).

- The Commission request a report from the Collaborative by January 31, 2021 that would examine the reasons for forecasted declines and explore options for preventing or correcting a decline in future DSM/EE savings, as requested by the Commission in its 2019 DEC DSM/EE Rider Order. Putting a date on this request and showing that the Commission would welcome such a report will provide additional focus and momentum for such efforts at the Collaborative and provide valuable information to help DEC sustain levels of energy savings as least as high as it has achieved in recent years.
- The Commission direct DEC to provide a detailed plan for achieving or exceeding the one-percent savings target in its next annual DSM/EE Rider filing.

Tr. pp. 363-64.

These recommendations are consistent with the continued interest by a broad group of clean energy and public interest advocates in maintaining or enhancing the 1% savings target agreed to by the Company as part of a settlement during the Duke-Progress merger. Tr. p. 364. Energy efficiency savings tend to be higher in states with savings targets and this agreed to target remains relevant in the Carolinas. *Id.* In addition to not losing sight of the 1% savings target, Efficiency Advocates continue to promote the establishment of new energy savings targets.[4] SACE was among the parties calling for a new savings target in the rider mechanism Dockets, numbers E-2, Sub 931 and E-7, Sub 1032, which remain pending before the Commission.[5] Tr. p. 388. As set forth in the rider

[4] *See* Tr. p. 102, Docket No. E-7, Sub 1192 (June 28, 2019).

[5] Joint Initial Comments of Natural Resources Defense Council, Southern Alliance for Clean Energy, Sierra Club, South Carolina Coastal Conservation League and North Carolina Sustainable Energy Association, NCUC Docket Nos. E-2, Sub 931 and E-7, Sub 1032 (July 10,

mechanism comments, an energy efficiency resource standard is the single most effective policy to promote energy-efficiency savings, particularly when paired with a portfolio performance incentive.[6] *Id.*

### C. Declines in Non-Residential Savings Continue, Largely as a result of Non-Residential Opt Outs

The Company's non-residential programs achieved significantly less savings than projected. Tr. p. 357. Nationally, commercial and industrial customers often represent the most cost-effective energy savings opportunities and can significantly reduce the overall cost of a utility's energy-efficiency portfolio. But in 2019, 60% of the non-residential load opted out of DEC's energy-efficiency rider, reflecting large amounts of lost opportunity for additional potential energy savings with utility efficiency programs. Tr. p. 358. Non-residential opt-outs represent a drag on DEC's overall performance and have been a consistent concern for several years. Tr. p. 358.

Even though non-residential opt-out customers certify that they have implemented independent efficiency or DSM measures, there is no requirement that they report any resulting savings. Absent a requirement that non-residential customers demonstrate independently implemented efficiency savings, the opt-out mechanism is on the way to becoming a backdoor method to essentially eliminate the Company's efficiency programs for an entire class of customers. This is a persistent and worsening issue that should not be ignored and may warrant the Commission review its current policies on non-residential opt outs, which, at a minimum, should require some reporting of the savings achieved by customers that opt out of the DSM/EE rider. Capturing energy savings

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2019); Attorney General's Office Initial Comments on the Duke Energy Progress and Duke Energy Carolinas Demand-side Management and Energy Efficiency Mechanisms, NCUC Docket Nos. E-2, Sub 931 and E-7, Sub 1032 (July 10, 2019).

[6] *Id.* at p. 5.

through commercial and industrial programs is one of the best ways to keep energy prices low for all customers. Tr. p. 358.

### D. Overreliance on short-lived Measures in Residential Behavioral Programs

Residential program savings accounted for 68% of total savings in 2019. Tr. p. 356. Within these residential programs, the largest savings came from My Home Energy Reports ("MyHER") behavioral program and lighting measures in the Energy Efficient Appliances and Devices program. *Id.* We have consistently expressed concern about the Company's overreliance on these lighting and behavioral measures. *Id*. Behavioral programs like MyHER provide no significant long-term or deep savings. And changing federal lighting standards will make it increasingly difficult for the Company to continue to rely on lighting measures to achieve cost-effective savings. Tr. p. 357.

Our concerns are magnified by the preliminary findings of the Company's Market Potential Study, which contemplated that the overwhelming majority of achievable efficiency potential would come from behavioral programs such as MyHER. *Id.* Likewise, the Company has identified that the change in federal lighting standards is a large factor in the projected decline in efficiency savings in the coming years. Tr. pp. 181-82. But this is not a new development, as is reflected in the testimony proffered by SACE, the Justice Center, and related efficiency and equity advocates over the years.[7] Tr. p. 188.

[7] *See, e.g. Direct Testimony of Jennifer Weiss on Behalf of the North Carolina Justice Center and Southern Alliance for Clean Energy*, Docket No. E-7, Sub 1130 pp. 10-11 (May 23, 2017); *Direct Testimony of Christopher Neme on Behalf of the North Carolina Justice Center, Natural Resources Defense Council, and Southern Alliance for Clean Energy*, Docket No. E-7, Sub 1164 pp. 6-10, 35-36 (May 22, 2018).

The Efficiency Advocates recommend that DEC continue to work with the Collaborative to develop and expand programs that provide deeper and longer lived measures—particularly those that target residential heating/cooling and water heating—to maintain a more balanced and robust program going forward. Tr. p. 357. Among the myriad benefits of capturing deeper savings is the potential to make up savings declines from lighting as federal standards go into effect.

## III. The Importance of Providing Energy Bill Savings for DEC's low-income Customers, Particularly in Light of the COVID-19 Pandemic

North Carolinians continue to experience high levels of poverty and correspondingly high customer energy burdens.[8] DEC has made real strides in reaching a larger number of low-income households with deeper energy savings. But room for improvement remains.

### A. DEC Has Made Improvements in Reaching Low-Income Customers

We commend DEC for achieving increased savings for low-income customers. In 2019, total savings from the Company's Income-Qualified Energy-Efficiency and Weatherization Assistance and Neighborhood Energy Saver programs rose 30% from 2018. Tr. p. 359. These programs combined to reach nearly 11,000 households. Importantly, savings per unit increased from 488 kWh in 2018 to 835 kWh in 2019. *Id.* Some of the improved results from the Income-Qualified Energy-Efficiency and Weatherization Assistance program were the result of a successful pilot that targeted a

[8] Before the COVID-19 pandemic, 14% of North Carolinians experience poverty, which means $25,100 per year or less for a family of four. US Census Bureau, American Community Survey, 2018 estimates; *see also* South East Energy Efficiency Alliance and the North Carolina Justice Center, "The Power of Energy Efficiency: Expanding Access to Energy Efficiency Improvements for Low and Moderate Income North Carolina Households," http://www.ncjustice.org/sites/default/files/ENERGY%20EFFICIENCY%20report-REVISED-web.pdf.

dense area containing a significant number of low-income households and energy-intense households. We look forward learning more details about this promising pilot initiative at the Collaborative and to assisting the Company with expanding its reach if feasible.

We strongly encourage the Company to build on its recent success and ask that the Commission continue to place a high priority on increasing low-income customer savings opportunities. In particular, we ask that the Commission:

- Express support for DEC to pursue higher savings for low-income customers, with correspondingly higher budgets for those programs designed to reach those customers; and
- Direct DEC to provide a plan in its next DSM/EE Recovery Rider filing showing how it plans to ramp up low-income efficiency savings over the next three to five years. Such a plan should include strategies for addressing energy burdens with deep efficiency savings as well as neighborhood style approaches that reach large numbers of customers.

### B. The COVID-19 Pandemic is Increasing Need for More Low-Income Efficiency

Preexisting economic inequalities have been dramatically worsened as a consequence of the COVID-19 pandemic, heightening the urgency of deploying efficiency measures that can provide some measure of bill relief for those high energy-burdened customers. Tr. pp. 369-70. Despite the short-term challenges caused by the pandemic for program delivery, there should be a significant expansion of energy efficiency programs aimed at assisting vulnerable and financially struggling families who are being harmed by recent and ongoing economic turmoil. T pp. 367-68. Given that the Commission-ordered halt to non-pay disconnections for Duke Energy customers is coming to an end, it will be increasingly important to focus energy efficiency efforts on those households who will be struggling to keep up with current bills while paying arrearages that have accumulated during the moratorium.[9] T p. 369. One way to achieve that goal would be for DEC to expand its Income-Qualified Weatherization Pilot to better reach those low-income customers with high energy intensity and with past-due bills. T pp. 369-70. We ask the Commission to direct DEC to present a plan by a date certain to increase efficiency assistance to customers suffering from the current economic downturn and address program delivery challenges brought on by the pandemic. Tr. pp. 370-71.

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

Mr. Bradley-Wright's testimony covered a number of key policy and regulatory matters relating to the Company's energy savings achievements and efforts to cut carbon emissions in North Carolina. Specifically, he addressed integrated resource planning, program applications, performance incentive mechanism review, rate cases, and the Duke Energy Progress DSM/EE Rider. Tr. pp. 382-91. It is important to recognize that the Company's efficiency and DSM 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 decisions.

As one concrete recommendation, Efficiency Advocates ask that DEC provide carbon emissions reduction figures associated with achieved savings (annual and cumulative over time) in its future annual rider filings and correlate them to Clean Energy

[9] *Order Lifting Disconnection Moratorium and Allowing Collection of Arrearages Pursuant to Special Repayment Plans*, Docket No. M-100, Sub 158 (Jul. 29, 2020).

Plan emissions reduction targets as well as the Company's own corporate carbon reduction goals. Tr. p. 391.

## V. The Collaborative

The Efficiency Advocates are encouraged by progress made within the Energy Efficiency Collaborative over the past year. The Company has worked with stakeholders to shape priorities for the year as well as agendas for individual Collaborative meetings. Tr. pp. 371-78. However, we continue to believe that Commission engagement and enhanced accountability will be important to improve upon progress to date in the coming years.

The Collaborative has been focused on identifying ways to increase savings opportunities for low-income customers and on examining portfolio level opportunities and challenges to develop recommendations for increased savings opportunities. Tr. pp. 372-74. Progress is steady on both fronts. As noted above, several stakeholders within the Collaborative have supported maintaining or exceeding the 1% savings target and members have helped to identify new program ideas for the Company to consider. Tr. pp. 375-76.

In recent years, Efficiency Advocates have also asked DEC to improve its public reporting to better show top-level data on portfolio- and program-level trends.[10] Following that request, the Commission last year ordered the Company to include in its future DSM/EE filings a table that shows DSM/EE costs and savings for the most recent

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[10] See, e.g., *Direct Testimony of Forest Bradley-Wright on Behalf of the North Carolina Justice Center and Southern Alliance for Clean Energy*, Docket No. E-7, Sub 1192 pp. 27-28 (May 20, 2019).

five years.[11] Tr. p. 56. While this additional information, included as Evans Exhibit 13, provides a useful additional snapshot of trends in program spending and savings, we continue to believe additional reporting would be beneficial to the Commission and interested stakeholders. Mr. Bradley-Wright provided an example of this dashboard reporting (from DEC's Multifamily Program) provided to the Collaborative in his testimony. Tr. pp. 379-80. This reporting format compares projections to reported values for expenditures, savings, and participation by program (as well as at the portfolio level).

Efficiency advocates recommend that DEC continue to work with the Collaborative to refine this dashboard data reporting and share associated workpapers, as appropriate, such that Collaborative members can better understand program and portfolio performance and work with the data to identify opportunities and solutions that lead to expanded efficiency savings.

In addition, in order to build on the shared progress achieved in the Collaborative, Efficiency Advocates recommend that DEC work with Collaborative members to establish and utilize project deadlines and create work products for select activities, including those requested above.

## VI. Conclusion and Summary Recommendations

DEC remains a regional leader in the scope and quality of its energy-efficiency programs, thereby delivering significant value to North Carolina ratepayers. The Company's EE and DSM programs will take on even greater significance as North Carolina undertakes the Clean Energy Plan goals under Governor Cooper's Executive Order 80. These annual rider docket proceedings are important not only for setting the

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[11] *Order Approving DSM/EE Rider and Requiring Filing of Customer Notice*, Docket No. E-7, Sub 1192 (Oct. 18, 2019).

rider and allowing the Company's cost recovery, but to provide an opportunity for the Commission to review trends in the Company's portfolio of programs and provide policy guidance to the Company.

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

1) Provide details to the Collaborative from the 5-year program planning projections that the Company is using as inputs for their DSM/EE modeling in the 2020 IRP.
2) Continue to work with the Collaborative to refine its data reporting so that Collaborative members can better understand program and portfolio performance and identify opportunities and solutions that lead to expanded efficiency savings.
3) Work with Collaborative members to establish and utilize project deadlines and create work products for select activities.
4) Provide carbon emissions reduction figures associated with achieved savings (annual and cumulative) in its annual rider filings and correlate those reductions to Clean Energy Plan emissions reduction targets and the Company's own corporate carbon emissions reduction goals

And Request that the Commission order the following:

1) Request a report from the Collaborative by January 31, 2021 that would "examine the reasons for the forecasted declines in 2020, and explore options for preventing or correcting a decline in future DSM/EE savings," as requested by the Commission in its 2019 DEC

DSM/EE Rider Order, with the recommendation that such a report include consideration of projected declines in 2021 as well.

2) Direct DEC to explain future forecast declines, when applicable, and show what steps are being taken to prevent them in future rider filings.

3) Direct Duke to provide a detailed plan to achieve 1% annual savings in its next annual DSM/EE Rider filing, reflecting the Company's best effort to balance cost with strategies to deliver meaningful savings for customers.

4) Express affirmative support for DEC to pursue higher savings for low-income customers, with correspondingly higher budgets for programs directed at low-income households.

5) Direct DEC to provide a plan in its next DSM/EE Recovery Rider filing showing how it plans to ramp up low-income efficiency savings over the next three to five years. Such a plan should include strategies for addressing energy burdens with deep efficiency savings as well as neighborhood style approaches that reach large numbers of customers.

6) State its support for deploying targeted energy efficiency programs to help customers mitigate the impact of COVID-19 and direct DEC to submit a specific plan by a date certain that includes proposed modified program budgets, savings goals, and customer targeting strategies – with a specific emphasis placed on customers who are elderly, disabled, have high energy burdens, and who lost their employment as a result of the pandemic.

Respectfully submitted this the 13th day of August, 2020.

/s/ David L. Neal
N.C. Bar No. 27992
Southern Environmental Law Center
601 West Rosemary Street, Suite 220
Chapel Hill, NC 27516
Telephone: (919) 967-1450
Fax: (919) 929-9421
dneal@selcnc.org

*Attorney for North Carolina Justice Center, North Carolina Housing Coalition, and Southern Alliance for Clean Energy*

CERTIFICATE OF SERVICE

I certify that the persons on the service list have been served with the foregoing Post-Hearing Brief of 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 13th day of August, 2020.

s/ David Neal