

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-2, SUB 1174

In the Matter of:) **POST-HEARING BRIEF OF NORTH**
Application of Duke Energy Progress,) **CAROLINA JUSTICE CENTER,**
LLC For Approval of Demand-Side) **NORTH CAROLINA HOUSING**
Management and Energy Efficiency) **COALITION, SOUTHERN ALLIANCE**
Cost Recovery Rider Pursuant to G.S.) **FOR CLEAN ENERGY, AND**
62-133.9 and Commission Rule R8-69) **NATURAL RESOURCES DEFENSE**
) **COUNCIL**

Pursuant to Rule R1-25 of the North Carolina Utilities Commission, the North Carolina Justice Center, North Carolina Housing Coalition, the Southern Alliance for Clean Energy, and the Natural Resources Defense Council (collectively, “NC Justice Center et al.”), respectfully file this post-hearing brief on Duke Energy Progress, LLC’s (“DEP” or “the Company”) application for approval of its annual demand-side management (“DSM”) and energy efficiency (“EE”) cost recovery and incentive rider for 2019.

I. Introduction

Overall, NC Justice Center et al. support DEP’s application and value the savings achieved by the Company’s portfolio of programs. The Company continues to offer a wide array of programs and, in certain areas, provide state-of-the-art program design features. But DEP has failed to reach the agreed-to savings-target of 1% of prior year retail sales and is not projected to do so again next year. By missing this target, DEP has missed an opportunity to rely on efficiency and demand side management programs that have been shown to be the lowest-cost resource. As a result, customers will end up paying more for their electric service than is reasonably necessary.

The NC Justice Center et al continue to have concerns with the Company's: (1) over reliance on short-lived measures, particularly its residential behavioral program, My Home Energy Report; (2) inadequate promotion of longer-lived measures and comprehensive treatment of buildings; (3) insufficient planning to offset a significant loss of lighting savings once the 2020 federal EISA efficiency standards go into effect; (4) failure to account for all benefits achieved as a result of its programs when making its cost-effectiveness calculations; and (5) need to reach more lower-income communities and deliver programs that reach rental units. The NC Justice Center et al. filed the testimony of Chris Neme, Principal of the Energy Futures Group, who put forward a number of recommendations for overall improvements to DEP's programs and changes to more accurately calculate savings from the Company's major residential behavioral and lighting programs.¹ The Commission should order the Company to take up these issues in the Collaborative over the course of the next year. In order for the Collaborative to make progress on these substantive issues, NC Justice Center et al. ask that the Commission adopt the recommendations put forward by Mr. Neme to make the Collaborative function more effectively, including the use of an outside facilitator.

In addition, NC Justice Center et al. agree with the Company's plan to continue offering the Residential Energy \$aver program, even though DEP is still working on making the program cost effective. NC Justice Center et al. also agree with DEP's calculation of avoided capacity costs for purposes of establishing the Portfolio Performance Incentive and calculating cost-effectiveness. As it did in the recent Duke

¹ Without objection, Mr. Neme was excused from attending the hearing in person, and his testimony and exhibits were entered into the record as though given orally from the stand at the hearing. Tr. pp. 109-110.

Energy Carolinas DSM/EE docket², we ask the Commission to reject the Public Staff's request to assign zero capacity value to DEP's DSM/EE programs in 2019. Assigning a zero-capacity value to DEP's suite of cost-effective DSM/EE programs that carry on from year to year would discourage the Company from making investments that save ratepayers money in part because of the avoided need for the utility to build new capacity.

II. Duke Energy Progress Failed to Achieve Its Target of One-Percent of Savings of Prior-Year Sales

While NC Justice Center et al. commend DEP for the performance of its DSM and EE programs and for maintaining a highly cost-effective portfolio that benefits all of its customers, the Company has not yet achieved its agreed-to savings target. DEP delivered its highest DSM/EE portfolio savings to date in 2017, saving 416.25 gigawatt-hours (GWh).³ This level of savings corresponds to 0.9% of prior-year sales,⁴ shy of the one percent annual energy savings target to which the Company agreed in a settlement in the then-proposed merger of Duke Energy and Progress Energy ("Merger Settlement").⁵ Tr. p. 119. Though short of the one percent of prior-year retail sales target, the 2017 savings surpassed DEP's projections of 400.2 GWh of total system savings for 2017.⁶

² Order Approving DSM/EE Rider, N.C.U.C. Docket No. E-7, Sub 1164 (Sept. 11, 2018).

³ DEP reported 416.25 GWh of annual savings at the generator in 2017 (Evans Ex. 1). That is a value for savings across both its North Carolina and South Carolina service territories. Adjusting for an average line loss rate of 5.1% (DEP response to SACE data request 1-9) produces 396.1 GWh savings at customers' meters. Applying the North Carolina retail sales allocation factor of 85.51%, this comes out to North Carolina savings of 338.7 GWh at the customers' meters (in other words, accounting for line loss).

⁴ Total DEP retail sales in both North Carolina and South Carolina were 43,868 GWh in 2016 [U.S. Energy Information Administration Form 861 Data, Table 10 (https://www.eia.gov/electricity/sales_revenue_price/index.php)].

⁵ The Merger Settlement with SACE, South Carolina Coastal Conservation League, and Environmental Defense Fund calls for annual energy savings of at least 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.

⁶ NCUC Docket No. E-2, Sub 1108, DEP Application for DSM/EE Rider, Evans updated Ex. 1, p. 9.

DEP's application reveals that this trend of falling short of this one-percent savings target will continue. DEP's forecast of the amount of new annual savings its programs will produce in 2019 are equal to about 0.84% of total forecast sales, and 1.21% of sales to non-opt-out customers. Tr. p. 153.

On the other hand, there are admirable elements to DEP's portfolio. First, the Company's program portfolio is very cost-effective, producing \$2.63 in supply-cost savings for every dollar DEP has spent. Tr. p. 151. In the three years from 2015 to 2017, DEP's efficiency programs have saved enough energy at the time of system peak to eliminate the need for the equivalent of about two and a half natural gas "peaker" power plants. *Id.* Third, the portfolio includes a wide range of efficiency measures and programs. Fourth, there are some national state-of-the-art program design features, particularly the Company's recent launch of a midstream channel for promoting non-residential HVAC, lighting, food service, and IT measures. Tr. p. 152.

NC Justice Center et al. support the energy savings and system-cost reductions that have been achieved by the Company's programs. But more savings that would benefit all customers are achievable. Tr. p. 155. NC Justice Center et al. requests that DEP commit itself to acquiring *all* cost-effective EE and DSM program offerings, with a renewed emphasis on longer-lasting measures and measures that reach low-income customers, as set forth below.

III. A Technical Reference Manual Would Streamline the Evaluation of DEC's DSM/EE Portfolio

NC Justice Center et al. ask that the Commission order the development of a Technical Reference Manual ("TRM"). A TRM documents all current assumptions regarding efficiency-measure energy savings, peak-demand savings, savings life, and

incremental costs. Tr. pp. 124-25. The absence of such a single reference document makes it more difficult to review the reasonableness of DEC's savings and net benefits claims. *Id.*

As pointed out by Mr. Neme, the vast majority of states – especially those with fairly robust efficiency-program offerings – have TRMs. *Id.* North Carolina should follow suit. This kind of manual would provide transparency regarding the basis for all utility-savings estimates, as well as other key inputs to cost-effectiveness calculations. This would make it easier for all parties to identify quickly when key assumptions may be outdated, including assumptions, such as savings life and incremental cost, which are often not addressed by impact evaluations. *Id.* Such assumptions are important inputs to cost-effectiveness calculations and shareholder-incentive calculations. DEP witness Robert Evans did not object to the Collaborative establishing a working group that could be tasked with developing a TRM. Tr. p. 86.

IV. Programmatic Recommendations that Need Further Development in the Collaborative

A. Overreliance on residential behavioral programs

NC Justice et al. remain concerned about DEP's overreliance on a single residential behavioral program, My Home Energy Report ("MyHER"), to achieve a large portion of its overall savings. Tr. pp. 156-59. Behavioral programs provide few long-term or deep savings. Mr. Neme's comparison to other investor owned utilities revealed that DEP's reliance on residential behavior programs to generate savings is unusual. DEP projects that 55% of its total residential savings in 2019 will come from MyHER alone (31% of its *total* forecast savings in 2019). Tr. p. 156. Only one of the utilities in the comparison group comes close to achieving such a large portion of total savings from

their residential behavior programs as does DEP.⁷ The average non-DEP utility is getting only 9% of total portfolio electric savings from its residential behavior programs; the average of the other southern utilities surveyed is even less. Tr. p. 157.

Mr. Neme explained that such programs often have a low retention life and can struggle to keep pace with market changes. Overreliance on such programs could result in a decrease in future portfolio performance. While NC Justice Center et al. appreciate the reported cost-savings from the MyHER program, DEP should do more to increase the percentage of its program offerings that offer deeper, longer-lasting savings.

B. Need to update savings assumptions to account for persistence of savings

In addition to over relying on the MyHER program, the Company is not properly accounting for the persistence of savings that likely continue for a time following program participation. Tr. pp. 126-30. DEP assumes that MyHER savings last only as long as a residential customer is receiving the reports. Tr. p. 126. As a result, DEP assumes that those savings have to be reacquired by re-running the program each year for the same participants. There is evidence that a significant portion of the savings produced from any set of customers participating in year one would continue to persist in subsequent years after program delivery ends. One study demonstrated that, on average, savings achieved during a program year decline by about 20 percent each year following program termination.⁸ Tr. pp. 127-28.

⁷ The 28% of total savings listed in the table for BG&E includes only efficiency programs aimed at customers. BG&E also gets significant savings from conservation voltage regulation, which was not included in the total savings used to calculate the percentage of savings from residential-behavior programs. If CVR savings were included, the BG&E average would drop to 21%. Tr. p. 158, N 52.

⁸ Tr. p. 102 (citing Khawaja, Sami and James Stewart, *Long-Run Savings and Cost-Effectiveness of Home Energy Report Programs*, Cadmus Group, Inc. (Winter 2014/2015) (http://www.cadmusgroup.com/wp-content/uploads/2014/11/Cadmus_Home_Energy_Reports_Winter2014.pdf)).

As a result, DEP may be significantly over-estimating the *new* savings this program produces each year. Taking into account the persistence of savings significantly reduces the amount of new annual savings a utility can appropriately count from repeat participants. Tr. p. 129. Because the cost per participant does not change, accounting for those persistent savings could render the program not cost-effective if delivered to repeat participants. *Id.* It may make sense to adjust program design and delivery strategy to account for this persistence of savings. One option is to rotate delivery of residential behavior programs to different sets of customers each year, and not return to a group of customers until at least three or four years have passed since they last received MyHER. *Id.*

NC Justice Center et al. request that the Commission refer the issue of whether DEP should change its assumptions regarding the annual savings from MyHER to the Collaborative. More analysis should be done, considering the applicability of the results of other studies' estimates of savings persistence to DEP's program before making any specific changes. Tr. p. 130.

C. Need to update projected savings estimates from lightbulb programs given new federal lighting standards

DEP is assuming that the annual savings produced by a residential LED light bulb installed as a result of its efficiency programs will be realized every year—at the same level experienced in the first year—for each of the next 12 years. Tr. pp. 130-31. These projections do not take into account new federal efficiency standards imposed by the Energy Independence and Security Act (EISA) for most residential light bulbs. Those standards will essentially mean that roughly 80 percent of the savings realized from most LED light bulbs will not be attributable to utility programs after 2020. Tr. pp. 31-32.

NC Justice Center et al. concur with the concerns raised by Public Staff witness Williamson regarding the need for DEP to address the changing baseline for lightbulb efficiency as soon as possible and consider the extent to which market transformation has already occurred. Tr. pp. 234-37.

Mr. Neme identified several issues that would need to be addressed before making adjustments to DEP's economic net-benefit calculations. Tr. p. 136. But given how significant lighting savings are in DEP's overall portfolio, the Commission should order that this issue be taken up by the Collaborative for discussion, analysis, and recommendations on how to proceed before next year's DSM/EE rider application is filed.

D. Need to Adjust Cost-Effectiveness Calculations

DEP is not accounting for all of the benefits that should be included under two key cost-effectiveness tests, the Utility Cost Test ("UCT") and the Total Resource Cost test ("TRC"). Tr. p. 117. DEP's exclusion of those benefits is inconsistent with national best practices, as outlined in the *National Standard Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources*⁹ ("NSPM"). Tr. p. 138.

As explained in the NSPM and Mr. Neme's testimony, the UCT examines cost-effectiveness from the perspective of the utility system. It answers the question of whether utility system costs will be reduced through utility investment in efficiency resources. When analyzing cost effectiveness of an electric utility's efficiency program, that means the cost is the program budget, and the benefit is the net present value (NPV) of the sum of all electric system benefits. Tr pp. 138-39.

⁹ Woolf, Tim et al., *National Standard Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources*, Edition 1, Spring 2017 (<https://nationalefficiencyscreening.org/national-standard-practice-manual/>).

The TRC, on the other hand, examines cost-effectiveness from the combined perspective of the utility system and efficiency program participants. In other words, it includes benefits to the participants in addition to the utility system benefits that are accounted for in the UCT. On the cost side, this requires adding any contributions program participants make to the cost of efficiency measures.¹⁰ On the benefit side, it requires adding any non-electric benefits that those participants receive. That can be the value of gas savings (from measures like attic insulation in homes that have central air conditioning and gas heating), water savings (from measures like low flow showerheads that save electricity by reducing hot water consumption), and other non-energy benefits such as improved comfort, improved health and safety, and improved business productivity. Tr. p. 139.

Though DEP includes all of the costs associated with its programs when making its UCT calculations, it leaves out several categories of benefits, such as avoided ancillary service costs, avoided credit and collection costs, and the value of risk-mitigating benefits of efficiency. If DEP accounted for these benefits and adjusted its estimated savings to account for marginal line-loss rates (which are much higher than average line-loss rates) rather than average line-loss rates, DEP's UCT estimates of benefits would likely increase substantially. Tr. pp. 139-45. The combined, compound effect of addressing these issues would likely increase the UCT estimates of benefits by about 20%. But the increase would be bigger for some programs than others. Tr. p. 145.

With regard to the TRC, DEP does not follow the NSP Manual and take into consideration avoided gas costs for measures that save electricity and gas, avoided water

¹⁰ For example, if a utility efficiency program offers a \$200 rebate for an efficient central air conditioner that has an incremental cost of \$500, then the additional \$300 paid by the customer is a TRC cost.

consumption for electric efficiency measures that save electricity and water, and other non-energy participant benefits like improved business productivity, building durability, health, and safety. Tr. pp. 145-50. If it did so, DEP's TRC estimates of benefits would likely increase by over 50%. Tr. p. 149.

Ensuring that these cost-effectiveness tests more fully capture all relevant benefits and costs will result in a more informed assessment of DEP's DSM/EE portfolio. As with Mr. Neme's other programmatic recommendations, the DEP-DEC Collaborative should analyze how to include these missing benefits under the UCT and the TRC test.

E. More Emphasis on Measures that Deliver Longer-Lived Savings

With respect to the residential sector, Mr. Neme provided a number of recommendations designed to boost DEP's energy savings by expanding and enhancing existing programs, developing new programs, and targeting customer segments that remain relatively untapped. Tr. pp. 159-70. Specifically, he recommended improvements to the Residential Smart \$aver program, comprehensive home energy retrofit programs, an enhanced multifamily retrofit program, and new programs focused on manufactured housing and low-income households.

1. Strengthen the Residential Smart \$aver EE Program

DEP should endeavor to improve participation in its Residential Smart \$aver EE program (formerly known as the Home Energy Improvement Program) significantly through establishment of a midstream channel for promoting some of the measures through equipment distributors, increasing incentives, enhancing marketing, and other means to reach more customers. Tr. pp. 160-61. For example, a Connecticut utility saw more than a six-fold increase in participation in its heat-pump water heater rebates when

it moved rebates upstream to distributors.¹¹ Changes in rebate levels, marketing strategies, paperwork requirements, options for financing investments (for example, through on-bill financing), or other program elements may also enable increases in participation. *Id.*

NC Justice Center et al. do not agree with the Public Staff's recommendation to terminate or suspend the Residential Smart Saver program, given its potential to achieve deep and long-lasting savings and given the Company's over reliance on behavioral programs. Tr. p. 241-42. Though the program has not yet achieved positive cost-effectiveness scores, as noted above, DEP is not currently accounting for all system or participant benefits in its calculation of TRC and UCT scores. If it had done so, there is a real possibility that the Residential Smart Saver program would be cost-effective. In addition to the need for a more balanced portfolio that includes longer-lasting savings, disrupting the program would disrupt relationships with contractors. As DEP witness Robert Evans explained, suspending the program would disrupt the Trade Ally Network and make it difficult and more costly to restart at a later date when circumstances change or program delivery improves to bring the program up to cost-effectiveness standards. Tr. p. 54. It is important to preserve and improve, rather than discard, DEP's only residential program that addresses HVAC systems, the largest single energy-user in the home. Tr. pp. 54, 240.

¹¹ Tr. p. 118 (citing Jennifer Parsons, *Energize Connecticut Upstream Residential HVAC Program*, presented at the 2015 ACEEE National Conference on Energy Efficiency as a Resource in Little Rock, Arkansas (Sept. 2015) (http://aceee.org/sites/default/files/pdf/conferences/eer/2015/Jennifer_Parsons_Session4A_EER15_9.22.15.pdf)).

2. *Imperative to reach more low-income customers and renters*

As Mr. Neme testified, low-income customers are less likely to participate in EE programs because they usually offer rebates to defray, but not eliminate, the incremental cost of more efficient appliances. Tr. p. 164. Low-income customers can rarely afford to make any contribution to efficiency-measure costs. They are also more likely to be renters, who face greater barriers to efficiency program participation than home owners. In rental properties, including multi-family buildings, there is often a split-incentive problem. Tr. pp. 164-65. Namely, the party who pays for making major investments in the building envelope, HVAC, and appliance-efficiency measures – the landlord – is different than the party who reaps the resulting savings on their energy bills – the tenant. *Id.*

Second, low-income customers need the bill savings that result from energy-efficiency improvements more than other customers. Low-income households face higher energy burdens and energy bills can force trade-offs with other essential expenses. Tr. p. 165. Finally, because of their financial constraints, low-income households are generally more likely to have problems paying their bills. Tr. p. 165. DEP incurs costs managing relationships with customers who are behind on paying their bills. To the extent that low-income efficiency programs can lower such bill-collection costs for the utility, there are added utility-system benefits from low-income programs that do not accrue to other programs. *Id.* As Mr. Neme noted in his testimony, DEP is not currently accounting for this system benefit in its cost-effectiveness calculations. Tr. p. 144.

DEP invests much less in its low-income programs than its peers. Tr. p. 168. The Company ranks near the bottom in terms of its investments in low-income energy

efficiency in a national ranking of the nation's 51 largest electric utilities prepared by the American Council for an Energy Efficient Economy ("ACEEE").¹² *Id.* DEP spent only 2.06% of its total efficiency program budget on low-income programs. One third of the other utilities ranked by ACEEE spent more than 10% of their efficiency program funds, or at least five times as much as DEP, on low-income programs. The median percentage of spending on low-income programs was 6.23%, or about three times the DEP level. The critical needs faced by low-income customers are further exacerbated by the increasing rates that all customers need to pay. Following DEP's most recent rate case, the Company has announced a 6.4% increase in electric rates for residential customers over the next four years, increasing to 7.3% thereafter.¹³

The Collaborative should consider the design of a new residential, whole-building retrofit program targeted to electrically-heated low-income households, possibly with a tiered-incentive structure. Tr. p. 169. This kind of tiered-incentive could allow income-eligible customers to receive the retrofit services for free. Such a program could be delivered on DEC's behalf by community action agencies that already perform low-income home retrofits using federal and/or state dollars. *Id.* DEP has experience with this kind of partnership following its investment in the Helping Home Fund.¹⁴ The Collaborative should analyze the Helping Home Fund to determine whether any aspects of the program could serve as a model for an additional cost-effective EE program offering, taking into consideration the ability of such a program to leverage federal weatherization dollars or other resources.

¹² Relf, Grace et al., *2017 Utility Energy Efficiency Scorecard*, ACEEE Report U1707 (June 2017), <https://aceee.org/research-report/u1707>

¹³ *Duke Energy Progress files new rates for North Carolina customers* (March 2018), <https://news.duke-energy.com/releases/duke-energy-progress-files-new-rates-for-north-carolina-customers>

¹⁴ CN Ex. 2, Helping Home Fund Report.

The Collaborative should review other options as well. Mr. Neme provided the examples of Commonwealth Edison pilot program to promote heat-pump retrofits in electric-resistance-heated, low-income, multi-family buildings in the Chicago area.¹⁵ Similarly, Entergy Arkansas is running a program that weatherizes manufactured homes, 37 percent of which were occupied by low-income households and another 29 percent either “likely” to be or “potentially” low-income.¹⁶ Mr. Neme reported impressive cost-effectiveness scores for this program: 8.56-to-1 TRC benefit-to-cost ratio in 2017. Tr. pp. 169-70. These programs could be models for similar future DEP initiatives and should be reviewed by the Collaborative.

3. *Improvements to non-residential programs*

DEP should build on recent success and progress in promoting efficiency measures for business customers through the midstream channel of its non-residential Smart \$aver rebate program. Tr. pp. 161-63. The Company’s forecasts show that 2019 lighting savings will be reduced to about half of what they were in 2016.¹⁷ DEP should work to increase savings from its successful programs for non-residential customers.

V. Approve DEP’s Portfolio Performance Incentive and Avoided Capacity Cost Calculations

Public Staff witnesses Hinton and Maness testified that DEP should assign a zero-dollar value to avoided capacity benefits for purposes of calculating the Company’s Portfolio Performance Incentive for its DSM/EE programs in 2019 (and for the following four years). Tr. pp. 192-94; 213-22. Likewise, Public Staff witness Williamson

¹⁵ Tr. p. 124 (citing Illinois Commerce Commission, Order, Docket No. 17-0312 (Sept. 11, 2017) (<https://www.icc.illinois.gov/docket/files.aspx?no=17-0312&docId=256554>)).

¹⁶ Tr. p. 124 (citing Energy Arkansas, Arkansas Energy Efficiency Program Portfolio Annual Report, Docket No. 07-085-TF, 2017 Program Year (May 1, 2018) (<http://www.apscservices.info/EEInfo/EEReports/Entergy%202017.pdf>)).

¹⁷ Evans Ex. 1.

recommends assigning a zero avoided-capacity value for purposes of calculating cost-effectiveness in 2019 and beyond. Tr. pp. 246-51. The Public Staff's proposed change to the cost-effectiveness test results in rendering the Residential New Construction, EE for Business, and the EnergyWise for Business programs non-cost-effective when they otherwise are deemed cost-effective under DEP's approach. Tr. p. 251.

The Public Staff's recommendations stem from their interpretation of updates to paragraph 70A of the Revised Mechanism that were adopted in Docket No. E-2, Sub 1145. Tr. p. 213. According to the revised language, the capacity benefits from Duke's new DSM/EE programs should receive the same treatment that was approved by the Commission for new qualifying facilities in the most recent avoided cost docket, No. E-100, Sub 148. If the Public Staff's interpretation is adopted by the Commission, DEP would lose about \$1.5 million in Portfolio Performance Incentive in 2019. Tr. pp. 194-95.

DEP disagrees that the agreed-to changes in the Revised Mechanism should result in a zero-dollar value for avoided capacity benefits for its DSM/EE programs, as set forth in rebuttal testimony of Timothy Duff. Tr. pp. 92-108. NC Justice Center et al. also disagree with the Public Staff's position. First, as SACE and other intervenors pointed out in the biennial avoided cost docket, assigning a zero capacity value for qualifying facilities does not accurately reflect their capacity value, regardless of what is in DEP's most-recent integrated resource plan. *Post-Hearing Brief of Southern Alliance for Clean Energy*, Docket No. E-100, Sub 148 (pp. 29-30). By the same token, the real capacity benefits of the Company's DSM/EE investments should be valued for purposes of the PPI and cost-effectiveness evaluations.

DEP's DSM/EE portfolio is part of a long-term, Commission-approved strategy for avoiding otherwise more expensive utility investments to meet the energy and capacity needs of its retail customers. The DSM/EE portfolio is included in the Company's Integrated Resource Plan.¹⁸ Without those program investments, DEP would have additional, more expensive capacity needs than it faces in the coming years. Reducing the Portfolio Performance Incentive and undercutting the cost-effectiveness evaluation would significantly diminish the Company's incentives to grow and expand its DSM/EE programs, ultimately costing DEP's customers more than the disputed amount of the Incentive payment. Such a disincentive runs counter to the State's public policy, which favors least-cost resources, such as EE and DSM, and favors energy conservation and efficiency. *See, e.g.*, N.C. Gen. Stat. §§ 62-2(a)(3a); 62-133.9(b). Moreover, it is not appropriate to make this shift based on a disputed interpretation of a recently revised provision in the Revised Mechanism. Instead, this disputed issue should be taken up during the upcoming review of the Cost Recovery and Incentive Mechanism.

Finally, the Commission rejected the Public Staff's argument on this same issue in DEC's recent DSM/EE cost-recovery proceeding in Docket No. E-7, Sub 1164, and it would be appropriate to rule consistently in this proceeding.¹⁹

VI. Make Improvements to the Collaborative

As noted above, NC Justice Center et al. recommend a more thorough discussion of a number of topics in the DEP-DEC combined Collaborative meetings. Mr. Neme provided concrete recommendations for ways to improve the Collaborative and help it to function more collaboratively. Tr. pp. 170-76. He has found similar collaboratives in

¹⁸ Duke Energy Progress, LLC 2017 Integrated Resource Plan Update and 2017 REPS Compliance Plan, Docket No. E-100, Sub 147 (Sept. 1, 2017).

¹⁹ Order Approving DSM/EE Rider, N.C.U.C. Docket No. E-7, Sub 1164, at pp. 10, 43-44 (Sept. 11, 2018).

other jurisdictions to be a more effective venue for addressing complex issues than regulatory proceedings. Tr. pp. 171-72. In jurisdictions where well-functioning collaborative processes have become institutionalized, regulators often choose to focus their efforts on higher-level policy issues, such as savings targets and budgets, and direct the collaboratives to work out EM&V, program design, and other operational issues. Tr. pp. 172-74. Mr. Neme identified a number of qualities that allow a collaborative to achieve these goals, including:

- **More frequent meetings:** In order to get substantive work done, the collaborative should meet at least 8 to 10 times a year (almost monthly) for larger group discussions, as well as more numerous sub-group working sessions focused on specific topics (for example, examination and analysis of a particular program design or developing a TRM). Tr. p. 175. In rebuttal testimony, DEP witness Evans agreed with Mr. Neme's recommendation that a combined DEC-DEP Collaborative meet more frequently. Tr. pp. 86-87.
- **Shared agenda-setting:** Including parties in establishing priorities for discussion, including specific meeting agendas. Tr. p. 175.
- **Independent facilitation:** An independent facilitator ensures that all voices are heard, including in the setting of agendas for meetings, and enables participants in the Collaborative to focus on the topic at hand rather than the actual running of meetings. An outside facilitator has been hired to manage the collaborative process in Illinois, Arkansas, and Michigan and has helped to make the work more effective. Tr. p. 175. As another example, for a recently hosted stakeholder

meeting on Duke Energy's planned Power/Forward initiative, the Company brought in the Rocky Mountain Institute as an outside facilitator.²⁰

- **Institutionalization of working processes:** This includes establishing a schedule for meetings and what those meetings will cover; distributing agendas; and distributing meeting notes, summaries of agreements/ disagreements, and lists of next steps. All of these steps must be taken with enough advance notice for parties to be able to meaningfully prepare and participate in the meetings. Over time, more formal processes should be developed (e.g., annual processes for reviewing and updating and documenting savings assumptions). Tr. p. 176.

With regard to the use of an outside facilitator and the recommendations to share in agenda setting, NC Justice Center et al. draw the Commission's attention to the stipulation and agreement entered into with DEC, the Public Staff, and a number of intervenors in 2013 in Docket No. E-7, Sub 1032. As part of that stipulation, DEC agreed to a framework for the Collaborative that included the use of a third-party facilitator.²¹ In addition, the agreement called for a process "for setting the agendas and activities of the group" that would be set by the Collaborative, not solely by DEC. *Id.* Given that the Company now employs a joint DEC-DEP Collaborative, this agreement is relevant in this DEP docket. At present, the Company does not make use of a third-party facilitator for the DEC-DEP Collaborative. NC Justice Center et al. requests that the Commission order DEP to abide by the terms of the 2013 agreement and stipulation for

²⁰ Duke Energy Progress, LLC and Duke Energy Carolinas, LLC's Report of NC Power/Forward Technical Workshop N.C.U.C. Docket Nos. E-2, Sub 1142 and E-7, Sub 1146 (Jun. 26, 2018) (noting that the workshop was independently facilitated by the Rocky Mountain Institute).

²¹ Stipulation and Agreement, *DEC's Application for Approval of Cost Recovery Mechanism and Portfolio of DSM and EE Programs*, N.C.U.C. Docket No. E-7, Sub 1032, Exhibit 1: Cost Recovery and Incentive Mechanism for DSM and EE Programs at para. 39 (Aug. 19, 2013).

the collaborative by employing an independent, third-party facilitator and by working collaboratively on agenda setting with the members of the combined DEC-DEP Collaborative.

VII. Conclusion

In conclusion, NC Justice Center et al. recommend the following steps to help the Company to increase its energy savings from DSM/EE programs and to work more effectively with stakeholders through the Collaborative:

- 1) Order DEP and the Collaborative to analyze and recommend changes before next year's DSM/EE rider application on the filing:
 - a. Development and adoption of a Technical Resources Manual;
 - b. Rebalance the EE portfolio to acquire more savings from longer-lasting measures and to rely less on behavioral programs;
 - c. Revise DEP's assumptions regarding the persistence of savings from the MyHER program and adopt revisions to program delivery that are consistent with those new assumptions;
 - d. Analyze and make adjustments to DEP's economic net-benefit calculations for lighting measures from 2020 forward that are subject to new federal efficiency standards pursuant to the Energy Independence and Security Act;
 - e. Bring DEP's application of the TRC and UCT cost-effectiveness tests in line with national standards as set forth in the *National Standard Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources* by accounting for all relevant system and individual benefits;

f. Analyze and make program recommendations for new and improved measures that would provide direct bill-benefits to low-income customers and renters, including consideration of program offerings by Entergy Arkansas and Commonwealth Edison as well as the Helping Home Fund;

2) Accept the avoided capacity value used by DEP for its DSM/EE programs in year 2019 for purposes of the Portfolio Performance Incentive and cost-effectiveness evaluations and reject the Public Staff's recommended avoided capacity value of zero;

3) Order DEP to continue its residential Smart \$aver efficiency program and to work with the Collaborative to consider recommendations provided in the testimony of Chris Neme to improve the cost-effectiveness of the program;

4) Adopt the recommendations for improving the Collaborative set forth by NC Justice Center et al. witness Chris Neme, including the use of more frequent meetings, working groups, an outside facilitator, and shared agenda-setting.

Respectfully submitted this 18th day of October, 2018.

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CERTIFICATE OF SERVICE

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

This the 18 day of October, 2018.

s/ Lauren Fry