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May 20, 2019

*Via Electronic Filing and
Federal Express*

Ms. Martha Lynn Jarvis
Chief Clerk
North Carolina Utilities Commission
430 North Salisbury Street
Dobbs Building
Raleigh, NC 27603-5918

RE: 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.G.S. §62-133.9 and Commission Rule
R8-69; *Docket No. E-7, Sub 1192*

Dear Ms. Jarvis:

Enclosed for filing in the referenced docket is the Testimony of Forest Bradley-Wright on behalf of the North Carolina Justice Center and Southern Alliance for Clean Energy. Pursuant to Commission Rule R1-28(e), we are also submitting fifteen (15) paper copies of the testimony and accompanying exhibits via Federal Express, for delivery on May 21, 2019.

By copy of this letter, I am serving all parties of record on the service list. Please let me know if you have any questions about this filing.

Sincerely,

s/ Mindy D. Campbell
Administrative Legal Assistant

MDC
Enclosures
Cc: All parties of record

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-7, SUB 1192

In the Matter of:)
)
Application of Duke Energy Carolinas,) **TESTIMONY OF FOREST**
LLC, for Approval of Demand-Side) **BRADLEY-WRIGHT ON BEHALF**
Management and Energy Efficiency Cost) **OF THE NORTH CAROLINA**
Recovery Rider Pursuant to N.C.G.S. §62-) **JUSTICE CENTER AND**
133.9 and Commission Rule R8-69) **SOUTHERN ALLIANCE FOR**
) **CLEAN ENERGY**
)
_____)

EXHIBITS

- FBW-1 Forest Bradley-Wright Resume
- FBW-2 Direct Testimony of Chris Neme on behalf of NC Justice Center, Southern Alliance for Clean Energy, and Natural Resources Defense Council in N.C.U.C. Docket E-7, Sub 1164 (May 22, 2018)
- FWB-3 PowerPoint from DEC Collaborative
- FBW-4 DEC Community Outreach Programs Chart
- FWB-5 Arkansas Public Service Commission Standardized Annual Reporting Workbook

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1 **I. Introduction and Qualifications**

2 **Q: PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.**

3 A: My name is Forest Bradley-Wright. I am the Energy Efficiency Director for
4 Southern Alliance for Clean Energy (“SACE”), and my business address is 3804
5 Middlebrook Pike, Knoxville, Tennessee.

6 **Q: ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

7 A: I am testifying on behalf of SACE and the North Carolina Justice Center (“NC
8 Justice Center”).

9 **Q: PLEASE SUMMARIZE YOUR QUALIFICATIONS AND WORK
10 EXPERIENCE.**

11 A: I graduated from Tulane University in 2001 and in 2013 received my Master of
12 Arts degree from Tulane in Latin America Studies with an emphasis on
13 international development, sustainability, and natural resource planning.
14 My work experience in the energy sector began in 2001 at Shell International
15 Exploration and Production Co., where I served as Sustainable Development
16 Team Facilitator.

17 From 2005 to 2018, I worked for the Alliance for Affordable Energy. As
18 the Senior Policy Director, I represented the organization through formal
19 intervenor filings and before regulators at both the Louisiana Public Service
20 Commission and the New Orleans City Council on issues such as integrated
21 resource planning, energy-efficiency rulemaking and program design, rate cases,
22 utility acquisition, power plant certifications, net metering, and utility scale
23 renewables. As a consultant, I also prepared and filed intervenor comments on

1 renewable energy dockets before the Mississippi and Alabama Public Service
2 Commissions.

3 Since 2018, I have been the Energy Efficiency Director for SACE. In this
4 role, I am responsible for leading dialogue with utilities and regulatory officials
5 on issues related to energy efficiency in resource planning, program design,
6 budgets, and cost recovery. This takes the form of formal testimony, comments,
7 presentations, and/or informal meetings in the states of Georgia, Florida, North
8 Carolina, South Carolina, Mississippi and in jurisdictions under the Tennessee
9 Valley Authority. A copy of my resume is included as Exhibit FBW-1.

10 **Q: HAVE YOU BEEN AN EXPERT WITNESS ON ENERGY-EFFICIENCY**
11 **MATTERS BEFORE OTHER REGULATORY COMMISSIONS?**

12 A: Yes, I have filed expert witness testimony in Georgia related to Georgia Power
13 Company's 2019 Demand Side Management application. This is my first time
14 submitting testimony to the North Carolina Utilities Commission
15 ("Commission").

16 **II. Testimony Overview**

17 **Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

18 A: The purpose of my testimony is to provide a high-level review of the
19 performance of DEC's DSM/EE portfolio and to comment on ongoing work with
20 the Duke Collaborative. I will discuss the following topics:

- 21 • DEC's performance in delivering energy-efficiency savings to its
22 customers over the past year
23 • The Company's energy-savings projections

- 1 • Activity at the Duke Collaborative and its role in supporting
2 continued success of DEC DSM/EE efforts
- 3 • Recommendations concerning Commission oversight and the
4 benefits of adopting a standardized annual reporting template

5 **Q: PLEASE SUMMARIZE YOUR OVERALL IMPRESSION OF DEC'S**
6 **DSM/EE PERFORMANCE.**

7 A: DEC continues to be a regional leader for energy efficiency in the Southeast,
8 while delivering significant energy and cost savings to its customers. For the
9 second consecutive year, DEC has surpassed the one-percent annual savings
10 target agreed to in a settlement with SACE and other parties in the Duke-Progress
11 merger. DEC remains the only utility to have achieved this level of savings in
12 the Southeast. DEC continues to prioritize refinement of its portfolio of
13 programs to achieve increased participation and maintain cost effectiveness.

14 But there remains room for improvement. DEC continues to rely too
15 heavily on short-term, behavioral programs, particularly My Home Energy
16 Report, which accounted for 57% of all energy savings achieved from residential
17 energy-efficiency programs in 2018 (a modest decline from 63% in 2017).

18 Additionally, SACE and NC Justice Center continue to stress the
19 importance of providing energy and bill savings for DEC's low-income
20 customers. More efforts should be targeted at these customers, who have the
21 highest energy burdens (the highest percentage of income spent on residential
22 energy bills), and consequently, the most need for cost-saving energy-efficiency

1 programs. SACE and NC Justice Center appreciate the increased strides made
2 over the last year and continued engagement on this question at the Collaborative.

3 **III. DEC's Energy Savings Achievements and Projections**

4 **Q: DID DEC MEET THE ENERGY SAVINGS TARGETS ESTABLISHED**
5 **DURING THE DUKE ENERGY AND PROGRESS MERGER?**

6 A: DEC again met the one-percent annual savings target, but appears to have fallen
7 short of reaching the seven-percent cumulative target by 2018 that the Company
8 committed to in settlement during the Progress Merger (“Merger Settlement”).¹
9 In 2018, DEC delivered 811 gigawatt-hours (“GWh”) of efficiency savings at the
10 meter, equal to 1.05% of the previous year’s retail sales.² This reflects a 7.8%
11 decline in incremental savings from the previous year, for which DEC reported
12 annual savings of 1.11% of the previous year’s retail sales.³ Nevertheless, DEC
13 should be commended for having again having met and exceeded the one-percent
14 annual savings target. This performance is even more remarkable against the
15 backdrop of a disappointing further decline in commercial and industrial
16 customers contributing to the DSM/EE rider.

17 By contrast, it does not appear that DEC met its seven-percent cumulative
18 savings target from 2014 to 2018. Despite achieving one-percent annual savings
19 in 2017 and 2018, the Company came up short in 2014, 2015, and 2016, thereby

¹ 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.

² Identify calculation methodology and provide citation.

³ DEC reports energy savings as “Net at Plant” or at the generator level.

1 undermining overall cumulative savings, which were 4.58%.⁴ In light of this, and
2 the persistent need for more savings from efficiency programs in DEC's service
3 territory, establishment of new goals for the coming years is warranted. We
4 believe that the Commission's request for comment in Dockets E-2, Sub 931 and
5 E-7, Sub 1032 is the correct place for discussion of new targets. Going forward,
6 we also believe it would also be appropriate for the Company to report on annual
7 and cumulative savings achievements as a leading component of its filing, rather
8 than requiring intervenor data requests or independent calculations.

9 **Q: DID DEC MEET ITS OWN ENERGY SAVINGS PROJECTIONS**
10 **IN 2018?**

11 A: Almost. After years of substantially exceeding its projections for savings, DEC
12 came up just short of its forecast for 2018 in last year's Application. However,
13 DEC had historically underestimated savings in its forecasts by a substantial
14 degree - typically in the range of about 40%— a trend the NC Justice Center and
15 SACE have identified in previous DEC DSM/EE Recovery Rider filings. For
16 2018, the Company broke with this trend and provided a forecast that was much
17 closer to actual achieved savings. As a matter of practice, we support the closer
18 correlation between projections and actuals, if the focus on achieving high levels
19 of savings is sustained.

20 **Q: DOES DEC PROJECT THAT IT WILL SUSTAIN THESE SAVINGS**
21 **LEVELS IN THE FUTURE?**

⁴ DEC response to SACE 2-2(b) in South Carolina Public Service Commission Docket No. 2019-89-E. Note that Counsel for DEC indicated that it did not object as a general matter to reliance on system-wide information provided by counsel for DEC in response to data requests from SACE *et al.* in the companion DEC rider application docket before the Public Service Commission, reserving the right to object in any particular instance. Also, DEC calculated that had achieved the seven-percent savings target when accounting for opt outs.

1 A: No. DEC projects a decline in efficiency saving of more than 150 GWh in 2020,
2 with a corresponding drop in the percent of annual sales down to 0.84%.⁵ If
3 these projections were to be realized, the corresponding 19.3% drop in GWh
4 savings would be highly concerning. However, it is unclear whether the
5 reduction in savings for 2020 is a return to the previous tendency of understating
6 future performance, or an indication that significant corrective action is needed—
7 for example, in response to changing federal lighting standards—in order to
8 maintain or grow efficiency savings going forward.

9 **Q: WAS THE COMPANY'S EE PORTFOLIO COST-EFFECTIVE IN 2018?**

10 A: Yes. DEC's DSM/EE portfolio continues to be cost-effective with benefits of the
11 programs significantly exceeding costs, thereby demonstrating that DEC's
12 customers are realizing real value from the Company's programs. As indicated by
13 the Utility Cost Test ("UCT") score, the net benefits ratio grew considerably in
14 2018, going to 3.98 from 3.45 in the previous year. The total net present value
15 ("NPV") of avoided cost in 2018 was \$633,175,954. The increased UCT ratio
16 partially overcame the reduction in total kWh saved from 2017 noted above,
17 though the NPV benefit still declined by 4.5%.

18 **Q: HOW DID RESIDENTIAL AND NON-RESIDENTIAL SAVINGS**
19 **RELATE TO TOTAL SAVINGS IN 2018?**

20 A: Total savings declined by a relatively modest degree overall from 2017 to 2018,
21 but this masks much larger changes seen between residential and non-residential
22 programs. The decline in non-residential savings was dramatic, and clearly

⁵ DEC response to SACE DR 2-1) in South Carolina Public Service Commission Docket No. 2019-89-E.

1 represents a drag on DEC's overall efficiency-savings performance. In 2017,
2 DEC reported non-residential programs generated 440 GWh of system energy
3 reduction, but that figure fell to 300 GWh in 2018, a more than 30% drop.
4 Declines in non-residential savings, largely as a result of non-residential opt outs,
5 have been a consistent issue raised by SACE and the NC Justice Center in
6 previous filings. A single year drop of this magnitude is quite alarming.

7 By contrast, residential program savings grew by 13.8%, from 494 GWh in
8 2017 to 562 GWh in 2018. Most of this growth was from the Energy Efficient
9 Appliances and Devices program, which grew over 57 GWh, a 42% increase.
10 While higher total savings is good news overall, it appears likely that much of
11 these saving came from lighting measures, which along with My Home Energy
12 Reports, have historically dominated DEC's residential portfolio. Last year, Mr.
13 Chris Neme of the Energy Futures Group provided testimony on behalf of the NC
14 Justice Center, SACE, and the Natural Resources Defense Council in DEC's
15 2018 Application for its DSM/EE Rider (N.C.U.C. Docket E-7, Sub 1164).⁶
16 witness Neme testified that overreliance on these types of measures was cause for
17 concern, especially in light of changing federal lighting standards. He
18 recommended a focus on deeper and longer lived measures to maintain a more
19 balanced and robust program going forward, a view that I share.⁷

20 **Q: WHAT EFFECT DO COMMERCIAL AND INDUSTRIAL OPT OUTS**
21 **HAVE ON PERCENT OF ENERGY SAVINGS?**

⁶ Exhibit FBW-2, Direct Testimony of Chris Neme on behalf of NC Justice Center, Southern Alliance for Clean Energy, and Natural Resources Defense Council in N.C.U.C. Docket E-7, Sub 1164, pp. 27-36 (May 22, 2018).

⁷ *Id.*

1 A: In 2018, 56% of the non-residential load opted out of DEC's energy-efficiency
2 rider. The percentage of non-residential opt-out is considerably higher in South
3 Carolina (70%) than it is in North Carolina (51%). But both reflect large
4 amounts of lost opportunity for additional potential energy savings with utility
5 efficiency programs.⁸

6 Because commercial and industrial efficiency savings can be among the
7 most economic, greater savings among these customers would likely translate
8 into even higher utility-system cost reductions. While we recognize that
9 commercial and industrial customers who opt out also certify that they have
10 implemented their own energy-efficiency or demand-side management measures,
11 there is no requirement to report any resulting savings to the Company or the
12 Commission, which inhibits DEC's ability to plan.

13 Adjusted to exclude non-residential opt-outs, DEC's savings as a
14 percentage of sales in 2018 was 1.67%, compared to 1.05% overall, suggesting
15 that were it not for the large number of opt-outs Duke could be on the path to
16 national leadership in efficiency.⁹ Removing opt-out customers from the
17 calculation, DEC reports cumulative savings from 2014 through 2018 of 7.11%.

18 This indicates that if all non-residential customers had been part of the efficiency

⁸ While we encourage DEC to continue doing everything possible to retain non-residential customers, we recognize that both the statute and the Commission's interpretation of the statute make it difficult for Duke to achieve full potential with non-residential efficiency programs. Historically, the opt-out was meant as a tool for companies that are pursuing their own energy-efficiency measures, not as a back-door method to fully eliminate the program for an entire class of customers. At some point, the Commission may want to revisit its policy, and also communicate to the legislature that this is a problem that needs to be addressed.

⁹ Again, it is notable that DEC has the highest savings as a percentage of sales in the Southeast, but the region as a whole lags far behind the national average and most other regions.

1 programs, and saved at comparable levels to those who were, DEC would have
2 met their Merger Settlement cumulative savings targets.

3 **Q: HOW DID DEC'S LOW-INCOME EFFICIENCY IMPACTS COMPARE**
4 **TO PREVIOUS YEARS?**

5 A: The DEC Income Qualified Energy Efficiency and Weatherization Assistance
6 program and Neighborhood Energy Saver program¹⁰ dipped somewhat in 2018
7 from the previous year.

8 We believe DEC has made increasing savings for low-income customers a
9 priority and strongly encourage them to continue pursuing this objective. We are
10 currently supporting this effort alongside a robust group of interested advocates
11 through our work at the Collaborative, and offer a variety of suggestions below.
12 We look forward to continuing this work together and feel important progress has
13 already been made over the past several months.

14 **Q: WHAT ARE SOME OF THE ISSUES ASSOCIATED WITH**
15 **DELIVERING EFFICIENCY PROGRAMS TO LOW-INCOME**
16 **CUSTOMERS?**

17 A: In last year's proceeding, witness Neme provided testimony that identified
18 several important issues related to serving low-income customers, including
19 equity concerns and the need for program designs that match their particular
20 financial and housing circumstances (for example, programs for renters,
21 multifamily and manufactured homes). His testimony for the DEP DSM/EE
22 Recovery Rider went a step further in noting that Company investment in low-
23 income programs as a percentage of total efficiency budgets lagged behind peer

¹⁰ Exhibit FWB-3, PowerPoint presentation from January 31, 2019 Collaborative meeting.

1 utilities and was insufficient to meet the needs of low-income customers, who
2 also contribute to the DSM/EE Rider. witness Neme also noted that improving
3 low-income customers' ability to pay provides utility system benefits to all
4 customers. His recommendation was for Duke to engage the Collaborative in
5 working to expand and enhance the deployment of low-income efficiency
6 programs. While such discussion has begun in earnest at the Collaborative, the
7 issues identified in witness Neme's testimony persist and there is considerable
8 work ahead if better results are to be achieved.

9 **Q: WHAT IS THE RELATIONSHIP BETWEEN THE DEC DSM/EE**
10 **RECOVERY RIDER PROCEEDING AND THE COLLABORATIVE**
11 **WORKING GROUP?**

12 **A.** Stakeholder engagement with Duke on energy efficiency-related matters in North
13 Carolina dates back more than a decade. A settlement agreement concluding the
14 2009 proceeding for Duke Energy Carolinas' Save-a-Watt Approach established
15 a regional stakeholder advisory group that has since been formalized as the
16 Collaborative. Key components of the role that the Commission-approved
17 settlement envisions for the Collaborative include:

- 18 • Collaborating on new program ideas, reviewing modifications to
19 existing programs, ensuring an accurate public understanding of the
20 programs and funding;
- 21 • Reviewing the EM&V process, giving periodic status reports on
22 program progress, helping to set EM&V priorities;
- 23 • Providing recommendations for the submission of applications to revise
24 or extend programs and rate structures; and

- 1 • Guiding efforts to expand cost-effective programs for low-income
2 customers.¹¹

3 The Commission called for regular meetings involving a broad spectrum of
4 regional stakeholders representing balanced interests, as well as national energy-
5 efficiency advocates and experts. The Commission stated:

6 *“The advisory group will determine its own rules of*
7 *operation, including the process for setting the agendas*
8 *and activities of the group, consistent with these terms.*
9 *Members agree to participate in the advisory group in*
10 *good faith consistent with mutually-agreed upon rules of*
11 *participation.”¹²*

12 Over the years, the Commission has routinely referred work to the group on a
13 range of matters arising in recovery rider dockets, and required Duke to report
14 back to the Commission on progress made on these issues.

16 **Q. WHAT ARE SOME OF THE HISTORIC STRENGTHS OF THE**
17 **COLLABARATIVE?**

18 A: EM&V and program progress reporting have been strengths of the Collaborative
19 experience in recent years, with Duke providing substantial documentation and
20 involving a wide range of relevant efficiency program staff in the Collaborative
21 meetings.

22 **Q. PLEASE IDENTIFY SOME OF THE HISTORIC CHALLENGES OR**
23 **DEFICIENCIES OF THE COLLABORATIVE PRIOR TO SEPTEMBER**
24 **2018?**

11 *Application of Duke Energy Carolinas, LLC For Approval of Save-a-Watt Approach, Energy Efficiency Rider and Portfolio of Energy Efficiency Programs, Agreement and Joint Stipulation of Settlement*, N.C.U.C. Docket No. E-7, Sub 831, at p. 26 (June 12, 2009).

¹² *Id.*

1 A: In the past, the Collaborative's efforts to develop new program ideas, modify
2 existing programs, or otherwise impact the overall efficiency savings of Duke's
3 efficiency program portfolio for customers in general, or for low-income
4 customers in particular, were not as strong as it could be. However, as I set forth
5 below, there are some encouraging signs that this may improve.

6 Specifically, in recent years, the Collaborative has worked on developing:

- 7 • On-Bill Financing
- 8 • Combined Heat and Power
- 9 • Development of a Technical Resource Manual
- 10 • Strategies for addressing Commercial and Industrial Opt outs¹³
- 11 • Multi-family efficiency programs
- 12 • Maximization of cross-program marketing
- 13 • Non-energy benefits
- 14 • Manufactured housing
- 15 • Residential new construction

16 Despite the dedication of extensive time, energy, and resources by Duke
17 and participating stakeholders, these efforts have produced little to no tangible
18 results, having neither been implemented by Duke directly nor resulted in further
19 specific action by the Commission. While no single factor likely explains this
20 failure to achieve more substantive accomplishments, it is important to consider
21 the various factors that could lead to greater success in the future, which are
22 discussed in further detail below.

¹³ Including through strategic energy management.

1 Fortunately, over the past several months, DEC and Collaborative
2 stakeholders have given renewed attention to fulfilling the original guidance from
3 the Commission-approved settlement. There are encouraging signs since
4 September 2018 with regard to this original guidance from ten years ago in terms
5 of how meetings are run, relationships between participants are being built, and
6 the “good faith” responsibility to engage in the process is being embraced.

7 **Q. WOULD ADDRESSING THESE ISSUES ENHANCE THE VALUE OF**
8 **THE COLLABORATIVE AND THE OVERALL SUCCESS OF DEC**
9 **EFFICIENCY EFFORTS?**

10 A: We continue to believe that the Collaborative is useful because detailed
11 efficiency program implementation issues are best addressed through joint
12 problem solving and collaboration. Moreover, many efficiency issues do not fit
13 effectively into formal docketed proceedings. My recommendation to continue
14 using the Collaborative for these types of issues is consistent with, and I endorse,
15 witness Neme’s testimony on the subject from last year.¹⁴

16 Therefore, despite disappointment with the low level of impact resulting
17 from the Collaborative’s work in recent years, we remain committed to its
18 original purpose and strive to understand and overcome past limitations. As
19 noted below, we see encouraging signs that Duke also recognizes the importance
20 of these issues and is willing to try new approaches going forward.

21 My recommendation, therefore, is to continue using the Collaborative for
22 these types of issues but to monitor whether the effort proves more effective this
23 year than in the past. At the end of the year, it would be appropriate to evaluate

¹⁴ Exhibit FBW-2, Direct Testimony of Chris Neme, pp. 39-45.

1 whether better results have been achieved, or whether additional operational
2 changes or Commission direction is warranted.

3 **Q. WHAT STEPS HAVE BEEN TAKEN TOWARD COLLABORATIVE**
4 **IMPROVEMENT IN THE PAST YEAR?**

5 A: Beginning in September 2018, we have worked closely with Duke to implement a
6 number of positive changes that improve the likelihood of current and future
7 work at the Collaborative showing concrete results than in the past.

8 These include:

- 9 • More frequent in-person meetings to achieve greater momentum on
10 Collaborative priorities;
- 11 • Shared agenda setting to identify pertinent topics, achieve greater
12 stakeholder buy-in, and increase discussion among participants
- 13 • Higher levels of stakeholder involvement;
- 14 • A shift in focus away from formulaic reporting by the Company towards
15 a greater emphasis on problem-solving opportunities and the
16 development of program enhancement recommendations;
- 17 • Group decision-making on setting the Collaborative's annual work
18 priorities;
- 19 • More communication and project work occurring between regular
20 Collaborative meetings; and
- 21 • New expectations around tangible project deliverables.

22 It is encouraging that even with more frequently scheduled meetings, Stakeholder
23 participation in the Collaborative has been robust, and Duke Energy has provided

1 significant investment by enlisting participation by a large number of their
2 program management staff. In addition to SACE and NC Justice Center, active
3 participants in the Collaborative currently include:

- 4 • North Carolina Public Staff
- 5 • South Carolina Office of Regulatory Staff
- 6 • North Carolina Sustainable Energy Association
- 7 • South Carolina Coastal Conservation League
- 8 • Duke University Nicholas Institute
- 9 • Environmental Defense Fund
- 10 • National Housing Trust
- 11 • North Carolina Building Performance Association
- 12 • Green Built Alliance
- 13 • Natural Resource Defense Fund
- 14 • Carolina Utility Customers Association
- 15 • NC DENR, Weatherization Office
- 16 • Advanced Energy

17 To expand our own capacity, SACE has also enlisted the support of Jim
18 Grevatt of the Energy Futures Group to aid the work of stakeholders at the
19 Collaborative. He brings valuable additional technical expertise, and personal
20 perspective from efficiency working groups in other jurisdictions.

21 Duke's willingness to accommodate the changes above, and stakeholders'
22 commitment of greater time and resources to the Collaborative, are encouraging.

1 Without this, there would be little reason to anticipate better outcomes with the
2 way the Collaborative is currently constituted.

3 **Q. ARE THERE STILL CHALLENGES TO ACHIEVING HIGHER LEVELS**
4 **OF EFFECTIVENESS AT THE COLLABORATIVE?**

5 A: Yes. While numerous process steps have already been taken to improve the
6 Collaborative, there are still challenges that warrant attention.

7 As noted in the 2009 settlement agreement, making recommendations on
8 potential modifications to existing programs and making suggestions concerning
9 the addition of new programs are among the main purposes of the Collaborative.
10 In order to do so, timely provision of pertinent information is essential, as is
11 having sufficient time and space for group discussion to work through issues and
12 develop practical recommendations.

13 Since last September, Duke has proposed modifications to several existing
14 programs and proposed one new program and appears to be genuinely interested
15 in engaging the Collaborative in the process, but this is a work in progress. Over
16 the past few months Duke has presented several program changes for discussion,
17 but rather than engaging stakeholders earlier in the process, this typically occurs
18 after their ideas about how to proceed have been nearly or fully baked. In
19 addition, we have had almost no insight into what they have researched,
20 considered, or ruled out in the process of getting to their final idea.

21 This limits the potential for DEC to receive and incorporate feedback and
22 likely diminishes the value that the Collaborative could otherwise bring to
23 program modification and development. Ultimately, this represents a significant

1 lost opportunity and one of the principal challenges to effectiveness at the
2 Collaborative today.

3 A summary of recent experience with program changes is illustrative:

- 4 • Residential Smart Saver – In response to a Commission directive, DEC
5 submitted a filing to the Commission resolving a cost effectiveness issue. We
6 support DEC’s efforts in this area, and encourage the Company to engage the
7 Collaborative at an early stage for assistance with solving these types of
8 challenges.
- 9 • Pay for Performance¹⁵ – This new program concept was also introduced at the
10 September 2018 Collaborative meeting, but received very little time for
11 discussion. Instead, Duke opted to seek approval from the Commission prior to
12 engaging Collaborative participants in its development. Expanding efficiency
13 program offerings for low-income customers is one of the highest priorities
14 among stakeholders, making this a natural topic for work at the Collaborative.
15 Instead, the only available opportunity for input was via filing a letter with the
16 Commission. SACE joined North Carolina Sustainable Energy Association in
17 doing so, and provided a number of recommendations that we believe could
18 improve the impact and likelihood of success for the program in its pilot phase
19 and beyond. DEC did not accept or incorporate any of the recommendations.
- 20 • Neighborhood Energy Saver - At the November 2018 Collaborative meeting,
21 Duke announced its intention to modify the Neighborhood Energy Saver
22 program and provided background information the following month. When the

¹⁵ While this is a program of Duke Energy Progress, the same staff are represented at the Collaborative and we feel the experience is therefore relevant to interactions with both companies.

1 subject was discussed as an agenda item at the January 2019 Collaborative
2 meeting, DEC indicated that there would be an opportunity for input from
3 interested stakeholders and offered to host a call for more in-depth discussion.
4 During that call Duke described details of its proposed modifications for the
5 first time and, when asked, indicated that the deadline for any feedback was the
6 following day. Unfortunately, this was both impractical from a timing
7 perspective and lacked the kind of structure needed for deliberative review,
8 problem solving, and development of recommendations. In this case, it should
9 be noted that SACE supported the specific changes Duke indicated.

10 Each of these examples is meant to illustrate opportunities for improved
11 process at the Collaborative, and is not intended to contest specific changes made
12 to these programs. However, we believe that improvements in how Duke engages
13 the Collaborative during the development of new programs and modification of
14 existing programs is extremely important for fulfillment of the purpose the
15 Commission directed for stakeholder engagement.

16 Some of the challenges to success are that there currently is no common
17 understanding of protocol and timelines for Collaborative review and
18 development of recommendations for new programs or modifications to existing
19 programs. This uncertainty around specific deliverables, timelines, and pathways
20 for implementation at the collaborative contributes to a lack of clarity on what it
21 will take for the work of the Collaborative to have an effect on Duke decision
22 making.

1 As previously noted, we recognize the Company is making strides to move
2 in the right direction, and appears to genuinely desire substantive contributions
3 from the group. To this end, DEC has been making meaningful attempts to
4 improve the flow of information and refine their methods of engagement as
5 continued dialogue with stakeholders leads to more common understanding.
6 Most recently, the Company signaled a desire to engage discussion on the topic
7 of expanding the midstream channel for delivery of efficiency measures, work
8 that has only just begun.

9 We believe these efforts represent a good direction for the Collaborative
10 and move away from the perception that it is merely a checkbox for compliance
11 and reporting.

12 **IV. DEC'S Compliance with the Commission's Order in Docket E-7, SUB 1164**

13 **Q. PLEASE DESCRIBE THE COMMISSION'S DIRECTIVE WITH**
14 **REGARD TO SACE'S RECOMMENDATIONS IN DOCKET E-7, SUB**
15 **1164.**

16 A. The Order approving Rider 10 included a directive that DEC address the
17 following issues raised in witness Neme's testimony, then report back to the
18 Commission as part of the Company's 2019 Rider filing:

- 19 • Improving participation in Residential Smart \$aver;
- 20 • Promoting whole house retrofits;
- 21 • Building on recent success of the midstream channel in the non-
22 residential Smart \$aver prescriptive rebate program;
- 23 • Assessing potential to reduce opt-outs;

- 1 • Considering implementation of a Technical Resource Manual;
- 2 • Improving effectiveness of the Collaborative;
- 3 • Addressing Persistence and savings from MyHER;
- 4 • The impact of upcoming changes in lighting standards; and
- 5 • DEC/DEP collaborative combination and more frequent meetings.

6 **Q. WHAT IS THE STATUS OF COLLABORATIVE RELATED ISSUES**
7 **INCLUDED IN THE COMMISSION’S 2018 ORDER IN THIS DOCKET?**

8 A: In general, we agree with DEC’s characterization of discussions at the
9 Collaborative on these topics. However, we feel it important to note that
10 attention and discussion on many of these topics were of a very limited nature.

11 One reason for such limited discussions is that the time between the
12 Commission’s order on September 11, 2018 and DEC’s filing in this proceeding
13 was short, less than six months. Even with more frequent meetings, this was not
14 enough time to take an in-depth look at most of these issues.

15 Another reason why many issues were not addressed at much depth was
16 that the group decided to first dedicate time toward improving the way the
17 Collaborative operates, rather than repeat the experience of past efforts, which
18 yielded little substantive result.

19 Finally, the group decided to focus the majority of its efforts on two
20 overarching priorities for 2019, described further below, rather than attempt to
21 tackle a much longer list of topics that would have exceeded our time or
22 bandwidth.

1 Nevertheless, we would reiterate that many of the issues that were identified
2 in the Commission's Rider 10 Order, even those that did not receive detailed
3 attention, remain topics of interest that will likely warrant work at the
4 Collaborative in the future.

5 One of the important lessons drawn from previous experience with the
6 Collaborative is that some important issues cannot be resolved in one year or less.
7 Therefore, decisions to prioritize certain issues in the short term will result in
8 other issues being deferred until a later date.

9 **Q. WHAT ARE THE 2019 PRIORITIES OF THE COLLABORATIVE?**

10 A: This January, the Collaborative selected two key work priorities for 2019:

- 11 • Evaluation of portfolio level opportunities and challenges; and
12 • Expansion of energy-efficiency impact for low-income customers.

13 Additionally, the Collaborative will continue to participate in reviews of existing
14 program progress and discuss opportunities for program modifications and
15 additions.

16 **Q. WHAT APPROACHES TO EVALUATING THE PORTFOLIO LEVEL
17 OPPORTUNITIES AND CHALLENGES IS THE COLLABORATIVE
18 CONSIDERING?**

19 A. This topic has generated considerable interest among participants and the focus of
20 work is still largely under development. There is, however, a recognition that the
21 topic overlaps with the Commission's request for comment on June 7, 2019
22 regarding the current incentive mechanism, rate impact, and program
23 performance targets, as well as issues related to cost-effectiveness.

1 **Q. WHAT APPROACHES TO EXPANDING LOW-INCOME EFFICIENCY**
2 **IS THE COLLABORATIVE CONSIDERING?**

3 A: North Carolinians experience high levels of poverty and correspondingly high
4 customer energy burdens.¹⁶ Energy-efficiency programs for low-income
5 households are key to addressing this issue. While Duke is to be commended for
6 its low-income energy-efficiency achievements to date, more is needed going
7 forward.

8 The Collaborative has identified low-income energy efficiency as one of its
9 top priorities for 2019. Discussion has centered on increasing total budgets and
10 savings impact for low-income customers and refining approaches for designing
11 and implementing programs to do so.

12 Several broad strategies have been discussed that would increase the impact
13 of efficiency programs for the benefit of low-income customers:

14 **1. Expand budget allocations for programs targeted to low-income**
15 **customers**

16 To be effective, increased spending must be matched with well-designed
17 programs, effective delivery channels, and evaluation approaches that properly
18 inform and support periodic refinements to overcome challenges to serving this
19 segment of customers. Without higher levels of spending, however, there is little
20 hope of achieving substantially more than has been accomplished in the past. This
21 is particularly true following the end of the Helping Home Fund, which we

¹⁶ US Census Bureau, American Community Survey 5-year Estimates (2013-2017); 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>.

1 continue to think could be a model for inclusion in the Company's ratepayer
2 programs funded through the DSM/EE Rider.

3 **2. Refine and expand existing program offerings**

4 Over the past year, Duke has shown a willingness to modify current
5 program offerings to deliver more impact to low-income customers, like adding
6 measures to the Neighborhood Energy Saver (NES) program,¹⁷ aiming to
7 overcome bottlenecks in the delivery of its Income Qualified Energy Efficiency
8 and Weatherization program, and potentially reallocating funds between the
9 programs to reach more low-income customers. While Duke has initiated some
10 discussions with the Collaborative on these subjects, more still needs to be done
11 to meaningfully engage the group on changes to existing program offerings. For
12 instance, we agree with Duke that there is a need for careful attention to the
13 Income Qualified program, which has fallen short of budget and participation
14 projections every year since its inception.

15 **3. Deploy new programs**

16 Delivering effective low-income efficiency programs is a priority for
17 utilities, Commissions, and stakeholders across the country. There are numerous
18 examples of programs aimed at meeting the unique needs of low-income
19 customers that could be adapted and implemented by DEC, such as programs for

¹⁷ While this program does not have income qualification eligibility requirements, the neighborhood selection process involves evaluation of US Census data to target communities with high levels of poverty.

1 manufactured homes, multifamily housing, and on-bill financing. Each of these
2 has been the subject of previous SACE and NC Justice Center testimony.¹⁸

3 **4. Prioritize increasing low-income customer impact through non-income**
4 **qualified programs**

5 While the NES program does not require income qualification for
6 participation, the program is designed to reach low-income customers, which is
7 part of how program performance is tracked. At the January Collaborative
8 meeting, Duke presented a chart¹⁹ showing low-income impact tracking across its
9 portfolio of residential programs. We strongly support this attention and look
10 forward to working with Duke to use data such as this to inform strategies for
11 capturing more impact for low-income customers in all residential programs
12 going forward.

13 We are committed to supporting DEC in each of the above areas, while
14 giving attention to achieving levels of cost effectiveness that are appropriate for
15 serving low-income customers.

16 **Q: WHAT ARE YOUR EXPECTATIONS REGARDING THE**
17 **COLLABORATIVE IN 2019?**

18 A: Stakeholders are aware of, and frustrated by, the lack of tangible results from the
19 work of the Collaborative in past years. Despite this, the NC Justice Center,
20 SACE, and a robust group of advocates have stepped up our commitments of
21 time and resources in the hopes of achieving more tangible results going forward.
22 If successful, we believe there is an opportunity to strengthen and expand

¹⁸ See, e.g., Exhibit FBW-2, Direct Testimony of Chris Neme, pp. 36-38.

¹⁹ Exhibit FBW-4, Duke Energy Community Outreach Programs Chart.

1 programs, increase portfolio savings impact, and enhance the value of program
2 and portfolio performance reporting. This in turn, we hope, could also narrow
3 the range of issues handled through contested dockets before the Commission.
4 Whether this goal is realized remains to be seen and will require additional good
5 faith efforts by all parties.

6 If, despite this additional effort, more substantive and tangible outcomes are
7 not achieved, there may be a need for deeper structural changes to the
8 Collaborative that would involve more direction and oversight by the
9 Commission.

10 **Q: WHAT LESSONS CAN BE LEARNED FROM STAKEHOLDER GROUPS**
11 **IN OTHER JURISDICTIONS?**

12 A: Some of the different structural approaches used by energy-efficiency stakeholder
13 working groups in other jurisdictions are instructive, a theme that witness Neme
14 explored in testimony last year. For additional context, we add the following
15 example from Arkansas.

16 The Arkansas Public Service Commission has a significant role in setting
17 the agenda for its stakeholder group, known as Parties Working Collaboratively
18 (“PWC”) and sets specific deliverables and deadlines that the group is required to
19 meet. In recent years, the Arkansas Commission has referred numerous important
20 issues to the group with expectations that they will work together to jointly
21 develop recommendations for consideration and final decision making by the
22 Commission. In recent years, these have included:

- 23
- setting 3-year utility energy savings targets

- 1 • coordination of gas and electric efficiency programs
- 2 • development of low-income programs
- 3 • standard annual reporting protocols

4 The work is supported by an independent facilitator selected through a
5 Commission administered RFP. Recommendations are submitted jointly by the
6 PWC following a Commission prescribed deadline. The approach is aimed at
7 building consensus between parties.

8 By comparison, the North Carolina Utilities Commission has historically
9 referred issues raised in testimony to the Collaborative, without established
10 deliverables, timelines or requirements beyond DEC submitting a report stating
11 that the topics have been discussed.

12 **Q: WHAT SPECIFIC REQUESTS DO YOU HAVE OF THE COMMISSION**
13 **REGARDING THE COLLABORATIVE?**

14 Our primary ask is that the Commission observe the work of the
15 Collaborative this year to determine whether significant additional progress has
16 been made, particularly with regards to tangible impact resulting from the
17 Collaborative's work. Specifically, the current work tasks of the Collaborative
18 involve:

- 19 • Portfolio-level assessment of opportunities and challenges
- 20 • Expansion of efficiency savings impact for low-income customers
- 21 • Modification and additions to DEC efficiency programs reflecting
22 direct input from the work of the Collaborative

1 We respectfully request that in 2020, the Commission seek comment from
2 Collaborative participants on whether the Collaborative has sufficiently corrected
3 its course or indicate if changes are needed that would warrant Commission
4 action.

5 As part of the portfolio-level assessment of opportunities and challenges,
6 we suggest the Collaborative address the projected decline of annual savings
7 from over one-percent down to 0.84% in annual savings DEC forecasts for 2020,
8 such that there is a plan to maintain and grow current savings levels from what
9 DEC achieved in 2017 and 2018.

10 Finally, we suggest initiating development of a standard annual reporting
11 protocol akin to the one used in Arkansas and incorporating the tools developed
12 by the Lawrence Berkeley National Laboratory, as discussed below.

13 **Q: ARE THERE ANY OTHER ACTIONS THAT YOU RECOMMEND WITH**
14 **REGARD TO THIS DOCKET?**

15 A: Establishing standard annual reporting protocols for Duke's DSM/EE Recovery
16 Rider filings would provide numerous benefits for intervenors, Staff, the
17 Commission, and the public. While the majority of information needed for such
18 reporting is already prepared by Duke to support its annual filings, much of it can
19 only be acquired through data requests, which means only parties to the
20 proceeding have access to them.

21 Currently, the DEC DSM/EE Recovery Rider Application is not organized
22 in a way that is convenient for review and analysis, nor presented in a way that
23 would allow the Commission or the public to efficiently identify topline trends
24 and takeaways. For instance, the Merger Settlement set annual and cumulative

1 savings targets, but DEC does not report on progress towards meeting the target
2 in its Application filings.

3 As a point of comparison, Exhibit FWB-5 is the Excel workbook filed by
4 Entergy Arkansas. This document is provided alongside the narrative of its
5 annual efficiency performance filing and makes a considerable amount of topline
6 analysis available in an easy to use format. Key features of the reports are:

- 7 • Planned Versus Actuals - Side-by-side comparisons of projected and
8 actual program budgets, demand saving, and energy savings;
- 9 • Budget breakdowns - indicating expenditures on incentives / direct
10 install costs compared to marketing, administration, and EM&V
11 costs;
- 12 • Cost / Benefit - TRC and Program Administrator Cost test results
13 (also known as the Utility Cost Test), TRC Net Present Value;
- 14 • Levelized cost of energy saved;
- 15 • Annual % of savings compared to baseline year; and
16 • Historic comparisons on budgets and energy savings.

17 The Lawrence Berkeley National Laboratory has also developed a set of
18 standard annual reporting tools that can be used by adopted by individual
19 jurisdictions.²⁰

20 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

21 **A.** Yes.

²⁰ Alex Hofman, *et al.*, *Energy Efficiency Reporting Tool for Public Power Utilities*, Lawrence Berkeley National Lab, (March 2016), <https://emp.lbl.gov/publications/energy-efficiency-reporting-tool>.

CERTIFICATE OF SERVICE

I certify that the persons on the service list have been served with the foregoing Testimony of Forest Bradley-Wright on Behalf of the North Carolina Justice Center and Southern Alliance for Clean Energy either by electronic mail or by deposit in the U.S. Mail, postage prepaid.

This the 20th day of May, 2019.

/s Mindy D. Campbell

Mindy D. Campbell