

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-7, SUB 1146**

In the Matter of:)	
Application of Duke Energy Carolinas,)	NCSEA’S POST-HEARING
LLC for Adjustment of Rates and Charges)	BRIEF
Applicable to Electric Service in North)	
Carolina)	

NCSEA’S POST-HEARING BRIEF

NOW COMES the North Carolina Sustainable Energy Association (“NCSEA”), by and through the undersigned counsel, pursuant to North Carolina Utilities Commission (“Commission”) Rule 1-25, and hereby submits its Post-Hearing Brief and Partial Proposed Order in the above-captioned docket.

PROCEDURAL BACKGROUND

On July 25, 2017, Duke Energy Carolinas, LLC (“DEC”) filed *Duke Energy Carolinas, LLC’s Notice of Intent to File a General Rate Increase* in the above-captioned docket. On August 25, 2017, DEC filed its *Application to Adjust Retail Rates and Charges, Request for an Accounting Order and to Consolidate Dockets* (“*Application*”) in the above-captioned docket and in Docket No. E-7, Sub 819. On September 19, 2017, the Commission issued an *Order Establishing General Rate Case and Suspending Rates* and, on October 13, 2017, the Commission issued an *Order Scheduling Investigations and Hearings, Establishing Intervention and Testimony Due Dates and Discovery Guidelines and Requiring Public Notice* (“*Scheduling Order*”). The *Scheduling Order* was amended on October 20, 2017 when the Commission issued an *Amended Order Scheduling Investigation and Hearings, Establishing Intervention and Testimony Due Dates and Discovery Guidelines, and Requiring Public Notice* (“*Amended Scheduling Order*”).

The following parties petitioned for and were granted intervention in this docket: NCSEA; the Carolina Industrial Group for Fair Utility Rates III (“CIGFUR”); Carolina Utility Customers Association, Inc. (“CUCA”); Amy Brown and Deborah Graham, as rate-paying customers (“Rate-Paying Neighbors”); the Environmental Defense Fund (“EDF”); the North Carolina Farm Bureau Federation, Inc. (“NCFB”); North Carolina Waste Awareness and Reduction Network, Inc. (“NC WARN”); The Kroger Co. (“Kroger”); the Sierra Club (“Sierra Club”); Appalachian State University (“ASU”); the North Carolina League of Municipalities (“NCLM”); Piedmont Electric Membership (“Piedmont EMC”); Rutherford Electric Membership Corporation (“Rutherford EMC”); Haywood Electric Membership Corporation (“Haywood EMC”); Blue Ridge Electric Membership Corporation (“Blue Ridge EMC”); an association of large commercial customers of DEC collectively known as the Commercial Group (“Commercial Group”); Apple, Inc. (“Apple”), Facebook, Inc. (“Facebook”), and Google, Inc. (“Google”) (collectively, “Tech Customers”); the Cities of Concord, Durham, and Kings Mountain, NC (collectively, the “Cities”); and the North Carolina Justice Center (“NCJC”), North Carolina Housing Coalition (“NCHC”), Natural Resources Defense Council (“NRDC”), and the Southern Alliance for Clean Energy (“SACE”) (collectively, “NCJC et al.”). The North Carolina Attorney General’s Office (“AGO”) filed a notice of intervention pursuant to N.C. Gen. Stat. § 62-20. Participation of the Public Staff-North Carolina Utilities Commission (“Public Staff”) was recognized by the Commission pursuant to N.C. Gen. Stat. § 62-15(d) and Commission Rule R1-19.

The Commission held public hearings on: January 16, 2018 at the Macon County Courthouse in Franklin, North Carolina; January 24, 2018 at the Guilford County

Courthouse in Greensboro, North Carolina; and, January 30, 2018 at the Mecklenburg County Courthouse in Charlotte, North Carolina. An expert hearing before the Commission began on March 5, 2018 and concluded on March 22, 2018.

In its *Application*, the Company requests an increase in its annual revenue requirement of approximately \$611 million, which equates to approximately a 12.8 percent increase.¹ The Company also proposes to establish a new Grid Reliability and Resiliency Rider (“GRR Rider”) to recover ongoing investments in the Company’s distribution and transmission systems, primarily related to the Company’s “Power/Forward Carolinas” program.² Including the GRR Rider, the Company is requesting an increase in its annual retail revenue of approximately \$647 million, which represents an increase of 13.6 percent across its customer base.³ For a typical residential customer using 1,000 kWh of electricity per month, this equates to a monthly increase of \$18.72.⁴ In addition to its proposed revenue requirements, the Company proposes a “modification of certain rate schedules to reflect more accurately the cost of service” by increasing the fixed monthly basic facilities charge (“BFC”) for certain customer classes.⁵ For the standard residential rate tariff, Schedule RS, the Company is proposing to increase the BFC from the current \$11.80 to \$17.79.⁶

The Company’s request is driven by various investments and costs, including: capital investments related to “modernization,” including retiring, replacing, and upgrading

¹ *Application*, pp. 3-4.

² *Id.* at 4.

³ *Id.*

⁴ *Id.*

⁵ *Id.*

⁶ *Id.*

generation plants, including the Lee Combined Cycle facility, and the transmission and distribution systems; deploying Advanced Metering Infrastructure (“AMI”); investments in a new customer information system (“CIS”), named Customer Connect; costs associated with the management and storage of coal combustion residuals (“CCR”), also referred to as coal ash; development of Lee Nuclear Station Units 1 and 2 (“Lee Nuclear”); and “other costs” incurred in providing “efficient, high quality power” to North Carolina’s customers.⁷ Within the Company’s proposed increase in its annual revenue requirement, \$101 million of the requested annual increase is related to new and existing generation facilities; \$45 million for the replacement of existing metering systems with AMI; \$15 million for the new CIS system; \$53 million per year for twelve years for Lee Nuclear; and \$182 million for “further post test year additions, as well as capital costs.”⁸ The remaining increase in the annual revenue requirement is for CCR remediation, including recovery of \$135 million in deferred costs, amortized over five years, and ongoing compliance costs of \$201 million. The Company proposes to partially offset the proposed increase in the annual revenue requirement with \$64 million in deferred tax liability over a period of five years, as well as a net reduction of \$57 million related to other changes in revenue, expenses, and rate base.⁹ Apart from the proposed increase in annual revenue requirements, the Company’s proposed GRR Rider would recover \$36 million in actual expenses during its first year.¹⁰ The Company’s investments since its last general rate case include \$557 million in new

⁷ *Id.* at 4-5.

⁸ *Id.* at 5.

⁹ *Id.*

¹⁰ *Id.*

natural gas generation, \$156 million in new solar generation, and \$109 million associated with relicensing its Catawba-Wateree hydroelectric facility until 2055.¹¹

ARGUMENTS

As set forth in detail below, the Company has neither justified its proposed Power/Forward Carolinas investments nor has it shown that its proposed GRR Rider should be approved. Accordingly, the Commission should exercise thoughtful oversight over the Company's planning process and investments associated with grid modernization. Additionally, while the Company's proposed investments in AMI and a new CIS are reasonable and prudent, they are not used and useful and the Company has not shown that, in tandem, they are designed to meet the needs of its customers. Accordingly, the Commission should deny cost recovery for them at this time. Finally, the Company's *Application* raises various issues related to its proposed rate designs. The Company inappropriately proposes to recover CCR remediation costs through a demand-based allocation, rather than an energy-based allocation. Additionally, the Company has not proposed any innovative rate designs in its *Application*, despite having the resources to begin offering more innovative rates to its customers. Finally, the Company's discussion of its rates and rate design shows that issues of cross subsidization are properly addressed within the context of a general rate case, rather than in individual proceedings.

¹¹ *Id.* at 7.

I. THE COMPANY HAS NOT JUSTIFIED ITS PROPOSED POWER/FORWARD CAROLINAS INVESTMENTS

The Company presented evidence in support of its proposed Power/Forward Carolinas investments in the testimonies of Witness Fountain and Witness Simpson.¹² The testimony of Witness Simpson provided most of the support for the Company's proposed Power/Forward Carolinas investments. However, Company Witness Simpson is not credible. As discussed further in Section I.C., there are numerous inconsistencies and inaccuracies in Witness Simpson's testimony. While only certain inconsistencies and inaccuracies became apparent during Witness Simpson's testimony, they are grave enough to call the entirety of his testimony into question.

A. THE COMPANY'S PROPOSED POWER/FORWARD CAROLINAS INVESTMENTS REPRESENT A MAJOR CHANGE IN INVESTMENT STRATEGY

The Company's proposed Power/Forward Carolinas investments represent a major change in the Company's investment strategy. Accordingly, it is necessary and appropriate for the Commission to scrutinize the planned investments. The Company's proposed Power/Forward Carolinas investments represent an extraordinary level of spending. Combined, the Company and Duke Energy Progress propose to spend approximately \$16 billion in their North and South Carolina service territories in the Power/Forward Carolinas initiative.¹³ Approximately \$13 billion of the investment will be made in North Carolina.¹⁴ More specifically, DEC plans to spend approximately \$7.78 billion in North Carolina as a

¹² See generally, Tr. Vol. 6, pp. 154-215; Tr. Vol. 16, pp. 84-124; and Tr. Vol 23, pp. 148-212.

¹³ Tr. Vol. 7, p. 28.

¹⁴ *Id.* at 28-29.

part of its proposed Power/Forward Carolinas investments.¹⁵ Traditionally, this level of spending was only associated with new generation. However, the proposed Power/Forward Carolinas initiative will invest in the Company's transmission and distribution systems.

Furthermore, the Company's proposed Power/Forward Carolinas investments will not encompass the Company's traditional spending on its transmission and distribution systems, but rather will be supplemental spending. Over the next four years, the Company expects to spend a total of \$3.4 billion, or \$850 million per year, on "customary investments" in its transmission and distribution systems.¹⁶ This itself represents a large increase from historical spending levels. From 2008 to 2016, the company invested an average of \$568 million per year in its transmission and distribution systems.¹⁷ Thus, even without accounting for its proposed Power/Forward Carolinas investments, the Company plans to increase spending on "customary investments" in its transmission and distribution systems by roughly 50 percent. If combined, the Company's proposed Power/Forward Carolinas investments and "customary investments" represent a total spend of over \$20 billion in the next ten years.¹⁸

In its testimony, the Company attempts to provide various justifications for its proposed Power/Forward Carolinas investments. However, the fundamental purpose of the proposed Power/Forward Carolinas investments, although undiscussed by the Company, is to drive earnings. During cross examination, Company Witness Fountain testified that

¹⁵ Tr. Vol. 6, pp. 428-429.

¹⁶ Tr. Vol. 14, p. 25.

¹⁷ *Id.*

¹⁸ *Id.* at 62.

the Company's proposed Power/Forward Carolinas investments are seen by the Company as a means of driving earnings growth:

Q. And is it true that Duke Energy sees grid mod investment as a means of driving earnings growth?

A. . . . Having said that, there, you know, are also benefits to continuing to invest in rate base that enure to the benefit of shareholders. So it's really a good, you know, balanced approach for both customers and shareholders.¹⁹

Company Witness Fountain further testified that the proposed Power/Forward Carolinas investments are "a big part" of what will be driving Duke Energy's expected growth in earnings.²⁰ NCSEA Witness Golin testified that:

In an era of flat or declining electricity demand, Duke Energy Corporation is shifting from being a company that primarily invests in generation to a company that primarily invests in distribution and transmission infrastructure. More specifically, for Duke Energy Corporation, the ability to continually maintain or grow profit margins for shareholders is dependent on a continued expansion of the rate base. As a result, Duke Energy Corporation plans to expand its rate base through investments in the transmission and distribution system and not through investments in generation.²¹

Any capital investments made by the Company will ultimately provide a return to its shareholders.²² However, the timing of the Company's announcement of its proposed Power/Forward Carolinas initiative, coinciding with the Company's decision to abandon Lee Nuclear, which would have represented a capital investment on the order of \$10

¹⁹ Tr. Vol. 6, pp. 432-433.

²⁰ Tr. Vol. 7, pp. 26-27

²¹ Tr. Vol. 14, p. 55

²² *See generally*, Tr. Vol. 6, pp. 435-436 ("As I said earlier, there are also, you know, benefits to the Company and shareholders by continuing to invest in our, you know, complex interlocking system of transmission, distribution, generation infrastructure.").

billion, is cause for scrutiny, especially given that the Company's initial plan was to invest \$10 billion in its transmission and distribution systems.²³

The Company describes their proposed Power/Forward Carolinas investments as a discrete, ten-year program to invest in the grid.²⁴ However, the Company also describes the investments as foundational, implying that investments will continue after the initial ten-year program ends.²⁵ Given the major shift in spending at the current time, and the potential for the level of spending to continue indefinitely, the Commission should carefully scrutinize the Company's proposed Power/Forward Carolinas investments.

B. THE COMPANY HAS NOT SUPPORTED ITS CLAIMS THAT THE PROPOSED POWER/FORWARD CAROLINAS INVESTMENTS BENEFIT RELIABILITY

Company Witness Simpson testifies that "The Company's Power/Forward Carolinas initiative will primarily focus on projects that: Improve the reliability and hardiness of the system while making it smarter[.]"²⁶ Specifically, Witness Simpson testifies that "These programs combined will reduce SAIDI and SAIFI by 40 to 60 percent."²⁷ However, it is important to note that "the Company projects that the

²³ Tr. Vol. 18, pp. 136-137.

²⁴ Tr. Vol. 16, pp. 126-127.

²⁵ Tr. Vol. 18, p. 185 ("The investments within the Self-Optimizing Grid and Power/Forward Carolinas overall are important foundational steps[.]"). *See also, Id.* at 244-245:

Q. . . . But if you're looking at projects on an ongoing basis and evaluating their drop in -- the drop in cost, could it then happen that it would be outside the 10-year period and therefore not be within the Power Forward Scope?

A. It's possible, yes.

²⁶ Tr. Vol. 16, p. 107. *See also, Tr. Vol. 23, p. 151* ("The primary goals of Power/Forward Carolinas are to significantly reduce the number and duration of outages the system experiences[.]").

²⁷ Tr. Vol. 23, p. 177.

Power/Forward investments will improve the reliability of the grid by 40-60% *versus taking no action beyond normal spend.*²⁸ The Company's proposed Power/Forward investments will not improve SAIDI and SAIFI scores by 40 to 60 percent from their current levels; rather, they will improve SAIDI and SAIFI scores by 40 to 60 percent of where the Company estimates they will be in 2028. Moreover, the Company has not shown that there is a need for improved reliability. The Commission has not adopted requirements for SAIDI and SAIFI scores.²⁹ Similarly, while the SAIDI and SAIFI calculations were adopted by IEEE, IEEE has not adopted industry standards for SAIDI and SAIFI performance.³⁰

Moreover, despite asserting that its proposed Power/Forward Carolinas investments will improve SAIDI and SAIFI scores by 40 to 60 percent, the Company has provided no evidence to substantiate the assertion.³¹ NCSEA does not dispute that the types of investments contained in the Company's Power/Forward Carolinas proposal *may* lead to improved reliability. However, correlation does not imply causation. Accordingly, the Company has failed to prove that its proposed Power/Forward Carolinas investments will result in the claimed reliability benefits, and thus has failed to meet its burden.³²

²⁸ Official Exhibits, Vol. 14, Part (Exhibits CG-6).

²⁹ Tr. Vol. 16, pp. 172-173.

³⁰ *Id.* at 173.

³¹ *See generally*, Tr. Vol. 14, p. 80 (“Unfortunately, I haven’t seen how the investment spend presented by the Company translates to those 40 to 60 percent improvement in scores.”).

³² Moreover, NCSEA notes that the Company has failed to adequately show that the Company's estimated degradations in SAIDI and SAIFI scores are likely to materialize.

C. THE COMPANY HAS NOT SUPPORTED ITS CLAIMS THAT THE PROPOSED POWER/FORWARD CAROLINAS INVESTMENTS BENEFIT DISTRIBUTED ENERGY RESOURCES

Much of the support for the Company's assertion that its proposed Power/Forward Carolinas investments will benefit distributed energy resources was offered by Company Witness Simpson. However, Witness Simpson did not provide credible testimony. First, Witness Simpson's testimony that the Company already has a project in Hot Springs, North Carolina that includes both solar generation and energy storage is not supported by the evidence.³³ As a preliminary matter, the town of Hot Springs, North Carolina is not in the Company's service territory, but rather is in Duke Energy Progress' service territory. There is also no evidence that either the Company or Duke Energy Progress has built solar generation in Hot Springs.³⁴

Second, Witness Simpson's testimony about the amount of distributed energy resources that are interconnected to the Company's grid is not supported by the evidence. Witness Simpson testifies that "The Company has interconnected over 2,500 MW of DER in North Carolina by the end of 2017, with 68 percent [or approximately 1,700 MW] of this located on the Company's distribution system."³⁵ However, the evidence shows that the Company has interconnected approximately 708 MW of DER in its North Carolina service territory, or approximately 28% of the 2,500 MW that Witness Simpson claims is

³³ Tr. Vol. 23, p. 193.

³⁴ *Id.* at 224-227. *See also*, Official Exhibits, Vol. 24, Part 1 (NCSEA Simpson Rebuttal Cross Exhibit 1).

³⁵ Tr. Vol. 23, pp. 185-186. In his rebuttal testimony, Witness Simpson defines "the Company" to be Duke Energy Carolinas, LLC. *Id.* at 149.

interconnected.³⁶ Moreover, the evidence shows that the Company has only interconnected approximately 484 MW of DER to its distribution system in its North Carolina service territory, again approximately 28% of the 1,700 MW that Witness Simpson claims is interconnected.³⁷

Despite acknowledging the considerable discrepancies between his testimony and the evidence,³⁸ Witness Simpson testifies that his assertions are correct.³⁹ Witness Simpson blames the discrepancy between his testimony and the evidence on DER owned by the Company.⁴⁰ However, Company-owned solar should proceed through the interconnection process just as any other new generation process would, and thus should be included in the numbers discussed. If Company-owned solar is not reflected in the numbers discussed, the Company has constructed 75 MW of solar;⁴¹ even if Company-owned solar is not included in the numbers discussed, major discrepancies still exist between Witness Simpson's testimony and the evidence. Witness Simpson then went on to testify that any apparent discrepancies in the amount of interconnected DER is due to intervenors not understanding

³⁶ *Id.* at 228-234. *See also*, Official Exhibits, Vol. 24, Part 1 (NCSEA Simpson Rebuttal Cross Exhibits 2 and 3).

³⁷ Tr. Vol. 23, p. 230.

³⁸ *Id.* at 235 (“Q. Okay. And we’ve established that at best, there’s a pretty large discrepancy between the interconnection queue and what’s in your testimony? A. There is a discrepancy[.]”).

³⁹ *Id.* at 234 (“[B]ut I do know the testimony is correct[.]”).

⁴⁰ *Id.*

⁴¹ *Application*, p. 7.

the interconnection process,⁴² dismissing the extensive experience that NCSEA and other intervenors have with the interconnection process.⁴³

Finally, Witness Simpson's testimony is inconsistent about whether preparing the Company's grid for increased adoption of DER is a primary or secondary goal for the Company's proposed Power/Forward Carolinas investments. Witness Simpson initially testifies that preparing the grid for increased adoption of DER is a primary purpose for the Company's proposed Power/Forward Carolinas investments,⁴⁴ but then amends his position to state that it is a secondary purpose.⁴⁵ Regardless of whether preparing the grid for increased adoption of DER is a primary or secondary goal for the Company's proposed Power/Forward Carolinas investments, the evidence shows that the investments do very little to advance this goal. NCSEA Witness Golin testified that:

A very small fraction of the P/F proposal to do with DERs. The proposed \$103 million Power/Forward Carolinas investment in Advanced Enterprise Systems, specifically a Distribution Management System, may enable DER

⁴² Tr. Vol. 23, p. 236 ("I'm testifying that interpreting the information is something that you need someone that understands it to sit down with you and make sure you're interpreting correctly.")

⁴³ See, *Progress Energy Carolinas, Inc., Duke Power, A Division of Duke Energy Corporation, and Virginia Electric and Power Company Petition for Approval of "Model" Small Generation Interconnection Standards and Associated Application to Interconnect and Interconnection Contract Forms*, para. 7, Docket No. E-100, Sub 101 (June 4, 2004) ("Representatives of PEC, Duke Power, Dominion North Carolina Power, North Carolina Sustainable Energy Association ('NCSEA'), and North Carolina Solar Center have worked collaboratively for several months in an effort to develop the Model Interconnection Standard and related criteria applicable to small customer-owned generators in North Carolina who desire to interconnect and operate their generators in parallel with either PEC's, Duke Power's, or Dominion North Carolina Power's distribution system.")

⁴⁴ Tr. Vol. 16, p. 107 (The Company's Power/Forward Carolinas initiative will primarily focus on projects that: . . . Further integrate and optimize intermittent distributed renewable generation[.]").

⁴⁵ Tr. Vol. 23, p. 151 ("Secondary—but also important—goals include . . . preparing the grid for the increased adoption of distributed energy resources ('DER').")

integration. However, this represents 0.8% of the total program cost. Over 99% of the proposed investment will have no impact on the Company's ability to integrate DER. The Company acknowledges this, stating that none of the proposed Power/Forward investments are "specifically intended to accommodate renewables" and the program is "incremental spend focused strictly on reliability."⁴⁶

D. THE COMPANY HAS NOT PROVIDED COST-BENEFIT ANALYSES

The Company has not demonstrated that their proposed grid investment plan is cost effective or that it is reasonable and prudent. In fact, the Company's proposed Power/Forward investments would fail most cost tests.⁴⁷ Most tellingly, however, is the fact that the Company has failed to provide any cost-benefit analyses in support of its proposed Power/Forward Carolinas investments. There is a simple rationale for this failure. In determining whether an investment is cost effective, both the cost and the benefits must be known and quantifiable. It is clear that the Company has quantified the total cost of its proposed grid investment plan: \$7.78 billion over 10 years.⁴⁸ However, as discussed above, the Commission has not been presented with quantifiable, precise information about the benefits of the Company's proposed investments. Thus, it is impossible for an adequate cost benefit analysis to be performed.

Nonetheless, the Company asserts that it has provided a cost-benefit analysis of its proposed Power/Forward Carolinas initiative, in the form of an economic analysis.⁴⁹

⁴⁶ Tr. Vol. 14, p. 41. *See also*, Official Exhibits, Vol. 14 (Exhibits CG-9 and CG-10).

⁴⁷ Tr. Vol. 14, p. 38 ("If assessed against a Ratepayer Impact Measure test, a Participant Cost Test, or even a Utility Cost Test, the P/F proposal would not pass. This is because the P/F proposal projects an upward pressure on rates, not offering any tangible benefits to the customer, and also increasing the overall expenditure for the utility.").

⁴⁸ Tr. Vol. 6, pp. 428-429

⁴⁹ *See generally*, Official Exhibits, Vol. 24, Part 1 (Simpson Rebuttal Exhibit 1).

However, this study is not a cost-benefit analysis; rather, the “study presents the potential economic impacts related to Duke Energy’s proposed Power/Forward grid improvement program in North Carolina[.]”⁵⁰ Rather than examining whether the Company’s proposed Power/Forward Carolinas investments produce more benefits to ratepayers than it costs, the study examines the trickle-down economic impact of the Company’s investments.⁵¹ By any definition of the term, the study proffered by the Company is not a cost-benefit analysis.

In addition, the Company has not examined, much less shown, whether alternative solutions that could provide the same reliability benefits as its proposed Power/Forward investments. Intervenors questioned the Company about whether it had investigated several alternatives to its proposed Power/Forward Carolinas investments to see whether they could provide the same benefits at a lesser cost. The Company universally stated that it had not examined alternatives, be they non-wires alternatives,⁵² joining a regional transmission organization,⁵³ or improving its vegetation management practices.⁵⁴

The Company claims that decisions on what to include in its proposed Power/Forward Carolinas investments are based on cost-benefit analyses.⁵⁵ However, the Company has failed to produce cost-benefit analyses that include sufficient detail to justify

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² Tr. Vol. 14, pp. 50-51 (“[T]he Company neglected to evaluate DER as an alternative to any element of the proposal and this is a significant missed opportunity.”). *See also*, Official Exhibits, Vol. 14 (Exhibits CG-13 and CG-14).

⁵³ Tr. Vol. 6, p. 437.

⁵⁴ Tr. Vol. 24, p. 27

⁵⁵ Tr. Vol. 23, p. 243

this claim. Moreover, the Company was unable to provide answers to relatively simple, high-level questions about the proposed Power/Forward Carolinas investments, such as whether they would result in the early retirement of any existing plant that is not fully depreciated.⁵⁶

II. THE COMPANY'S PROPOSED GRR RIDER SHOULD BE DENIED

Despite the numerous flaws with the Company's proposed Power/Forward Carolinas investments, the Company proposes to recover most of these costs through a new GRR Rider, and requests in its *Application* that the Commission approve its request. However, as discussed below, the Commission should deny the Company's request.

A. THE COMPANY'S PROPOSED GRR RIDER IS CONTRARY TO LAW AND POLICY

In its *Application*, the Company asserts that the Commission is authorized to consider and establish the GRR Rider in the context of a general rate case pursuant to *State ex rel. Utilities Com. v. Edmisten* ("Edmisten III").⁵⁷ This assertion, while true in a limited context, minimizes the analysis that the Commission must do to review and approve a rider without specific statutory authority. As set forth below, the Company has failed to demonstrate that the Commission has sufficient authority to implement the GRR Rider that has been proposed. Historically, the creation of a rider without specific statutory authority has been limited to compelling circumstances and the Commission has been reticent to create a rider without clear authority and reason. The Commission's past orders, along with

⁵⁶ Tr. Vol. 24, p. 17, pp. 19-21.

⁵⁷ *State ex rel. Utilities Com. v. Edmisten*, 294 N.C. 598, 610 (1978).

case law substantiating those orders, provide the precedential basis by which the Commission should deny the Company's request for the GRR Rider.

The Commission may only lawfully approve riders under certain circumstances. Under North Carolina law, there are explicit limits on the Commission's authority to revise the rates of a public utility: (1) a general rate case pursuant to G.S. § 62-133; (2) a proceeding pursuant to a specific, limited statute, such as G.S. § 62-133.2; (3) a complaint proceeding pursuant to G.S. § 62-136(a); or (4) a rulemaking proceeding.⁵⁸ Rider proceedings fall within this purview, and, accordingly, riders have been analyzed by North Carolina courts and the Commission under these four tenets. In the current proceeding, the Company's GRR Rider proposal was made within the context of the general rate case tenet pursuant to N.C. Gen. Stat. § 62-133. In fact, most riders approved by the Commission have been proposed in general rate case proceedings.⁵⁹

One of the Company's proposed justifications for the GRR Rider is to advance distributed energy resources and the interconnection, distribution, and storage of energy on

⁵⁸ See, *State ex. re. Utilities Commission v. Nantahala Power and Light Company*, 326 N.C. 190, 195, (1990).

⁵⁹ See, e.g., *In re Nantahala Power and Light Company*, Docket No. E-13, Sub 142 (October 19, 1989) (approving an alteration of the method for recovery of purchased power expenses, which had been approved in the public utility's most recent general rate case); *State ex rel. Utilities Commission v. Edmisten*, 291 N.C. 327 (1976) (approving a fuel adjustment clause, which had been approved in conjunction with a general rate case); *Order Approving Partial Rate Increase and Requiring Conservation Initiative*, Docket No. G-9, Sub 499 (November 3, 2005) (approving a Customer Utilization Rider within the context of a general rate case); *Order Approving Stipulation and Deciding Non-Settled Issues*, Docket No. E-7, Sub 828 (December 20, 2007) (allowing deferral and amortization of costs associated with an attempt to form a regional transmission organization within a general rate case).

the grid,⁶⁰ and the Commission has previously considered a request to establish a rider for recovery of costs for similar investments.⁶¹ In its *Save-a-Watt Application*, the Company requested that the Commission approve a rider to recover costs for certain energy efficiency measures.⁶² At the time the Company filed the *Save-a-Watt Application* there was not statutory authority for such a rider, so the Company relied upon a broad reading of other statutes to demonstrate the Commission's authority to create such a rider. The Company stated:

Approval of this Application also is within the Commission's statutory authority under N.C. Gen. Stat. §§ 62-30 and 62-130(a). Section 62-30 expressly grants the Commission general power and authority to supervise and control the public utilities of this State "as may be necessary to carry out the laws providing for their regulation, and all such other powers and duties as may be necessary or incident to the proper discharge of its duties." Additionally, § 62-130(a) grants the Commission power to "make, fix, establish or allow just and reasonable rates" for Duke Energy Carolinas.⁶³

In its initial comments in the Save-a-Watt proceeding, the Public Staff disagreed with the Company's assertion that the Commission had the authority to create the requested rider but, since the Public Staff was sympathetic to the proposed program, it provided other avenues for cost recovering, stating that:

Nevertheless, although its statutory authority to approve Duke's request remains unclear at this time, the Commission is not required to dismiss Duke's application outright. The Public Staff believes that the Commission may proceed in one of three ways. First, the Commission could consolidate

⁶⁰ See generally, Tr. Vol. 16, pp. 152-154.

⁶¹ See generally, *Application of Duke Energy Carolinas, LLC for Approval of Save-a-Watt Approach, Energy Efficiency Rider and Portfolio of Energy Efficiency Programs*, Docket No. E-7, Sub 831 (May 7, 2007) ("*Save-a-Watt Application*").

⁶² *Id.* at 3 ("Additionally, Duke Energy Carolinas proposes that the Commission approve an energy efficiency rider (as more fully described in Attachment B) that will compensate and reward the Company for delivering verified energy efficiency results.").

⁶³ *Id.* at 13.

this proceeding with Duke's next general rate case, Docket No. E-7, Sub 828, so that the Commission could consider [Save-a-Watt] in the aggregate with other ratemaking issues, pursuant to G.S. 62-133.⁶⁴

The Public Staff also stated that the Save-a-Watt program could be implemented through a deferred accounting from another demand-side management programs or the Commission could allow the program to progress and hold cost recovery in abeyance until the Commission received "some *legislative guidance*["]⁶⁵

As acknowledged by the Public Staff in their Initial Comments, legislative guidance was forthcoming. Senate Bill 3 was passed by the General Assembly and signed into law by the Governor on August 20, 2007.⁶⁶ The legislation included, among other things, a provision authorizing riders for the recovery of costs associated with energy efficiency and demand-side management programs, eventually codified as N.C. Gen. Stat. § 62-133.9.⁶⁷

However, between the Company's May 7, 2007 *Save-a-Watt Application* and Senate Bill 3 becoming law on August 20, 2007, the Commission did not have legislative guidance as to how to handle the Company's request for the Save-a-Watt rider. The Commission addressed this period in order, stating that:

Prior to the passage of SB 3, the Commission's authority to authorize cost recovery pursuant to a rider for EE programs was unclear. The Commission requested comments on its authority to consider the Company's Application and eventually consolidated Docket No. E-7, Sub 831 with the Company's general rate proceeding. (Order Requesting Comments in Docket No. E-7, Sub 831 (May 31, 2007); Order Consolidating Issues for Hearing in Docket No. E-7, Sub 831 (August 2, 2007).) Although the Commission acknowledged that the pending SB 3 would expressly address whether the Commission possessed this authority, because enactment was possibly

⁶⁴ *Public Staff's Initial Comments*, p. 5, Docket No. E-7, Sub 831 (June 22, 2007).

⁶⁵ *Id.* at pp. 5-6 (emphasis added).

⁶⁶ S.L. 2007-397.

⁶⁷ *Id.*

several weeks away, the Commission consolidated the dockets, reserving the right to reconsider its decision. Duke requested reconsideration of consolidation shortly after the General Assembly ratified SB 3. SB 3 became law soon thereafter, and the Commission accordingly granted the Company's request and bifurcated Docket No. E-7, Sub 831 from Duke's general rate case.⁶⁸

Essentially, the Commission consolidated the Save-a-Watt proceeding with a general rate case, which provided the Commission with the authority to consider the rider and also allowed itself the opportunity to reconsider its decision on the proposed rider should the legislative guidance not arrive. When Senate Bill 3 became law, it provided the necessary statutory authority and rulemaking authority necessary to allow the Commission to conclude in its first and second findings of fact that "it has the authority to consider the relief the Company is seeking in this docket."⁶⁹

In the present proceeding, the Company proposed the GRR Rider in conjunction with a general rate case. Therefore, unlike the Save-a-Watt proceeding, the Commission can, as a matter of law, review the GRR Rider without consolidating dockets. However, the Save-a-Watt proceeding remains instructive – despite ample opportunity, neither the Company, intervenors, nor the Commission was able to provide definitive authority that the Commission could authorize the Save-a-Watt rider in the absence of Senate Bill 3. In fact, both the Commission and the Public Staff suggested that waiting for legislative guidance was the best way to establish that the Commission had the requisite authority to authorize the Save-a-Watt rider even *after* the docket had been consolidated with a general

⁶⁸ *Order Resolving Certain Issues, Requesting Information on Unsettled Matters, and Allowing Proposed Rider to Become Effective Subject to Refund*, p. 12, Docket No. E-7, Sub 831 (February 26, 2009) ("*Save-a-Watt Order*").

⁶⁹ *Id.* at pp. 12-13.

rate case.⁷⁰ In the Save-a-Watt proceeding docket, as in the current proceeding, there was no clear legal authority to support the Company's assertion that the Commission is empowered to implement such a unique cost recovery mechanism. It can therefore be construed that, absent legislative authority, a rider proposed within a general rate case may lack the necessary elements for the Commission to authorize its creation.

In the current proceeding, the Company has followed the correct procedural course by attempting to receive approval for a Commission through an ancillary cost recovery request made in conjunction with a general rate case.⁷¹ However, contrary to the Company's position, this does not mean that there is sufficient authority for the Commission to authorize the GRR Rider because the Company has failed to provide a sufficient underlying legal basis for its proposed GRR Rider. While a rider may be appropriately brought as an ancillary issue in a general rate case, this does not mean the rider will escape scrutiny or even be approved at all. "In general rate cases, the Commission has been reluctant to approve riders for specific cost items *except under particularly compelling circumstances.*"⁷² There is no such compelling circumstance here.

In 2008, the Company petitioned the Commission to establish a rider to recover costs associated with protecting its customers from the "impacts of the prolonged drought

⁷⁰ *Id.* at 12.

⁷¹ However, as set forth below, the Company has failed to provide proper documentation necessary for the current proceeding to be considered an initial rider proceeding, even under the Company's proposal. Therefore, the Company's request for a GRR Rider should either be denied on that basis or brought in a stand-alone docket with the sufficient documentation to allow proper review by interested parties and the Commission.

⁷² *Order Denying Request to Implement Rate Rider and Scheduling Hearing to Consider Request for Creation of Regulatory Asset Account*, p. 18, Docket No. E-7, Sub 849 (June 2, 2008) ("*Drought Rider Order*") (emphasis added).

... affecting the Company's service territory.⁷³ The Drought Rider proceeding is instructive because it considered a request for a rider to provide cost recovery for expenditures caused by extreme weather. Specifically, the Company claimed that “[u]nlike other exceptional events affecting utility service, the drought is an ongoing and evolving series of circumstances. The current exceptional conditions may abate in the future or may be the harbinger of ongoing weather patterns.”⁷⁴ The Company further detailed that while a drought is “not like a storm event[,]” it does include a series of changing circumstances which cause, year to year, for water supplies to rise and fall and such water is necessary for energy generation.⁷⁵ As such, the Company sought to recover costs for the purchase of energy from third parties, as the Company struggled to maintain a healthy fuel reserve in its hydroelectric and fossil-fueled generation plants during the drought.⁷⁶ The Company promoted the energy purchase and related rider proceeding to the Commission as “proactive steps to protect its customers from future adverse implications of the drought conditions.”⁷⁷ The Company also stated that the “purchase of this additional capacity is a reasonable cost of providing adequate, reliable and cost-effective electricity to its customers, which, due to hydrological conditions beyond the Company's control, is potentially volatile” and that “[r]ate cases generally are not sufficient to allow for recovery

⁷³ *Application of Duke Energy Carolinas, LLC for Approval of Rate Rider to Allow Prompt Recovery of Costs Related to Purchases of Capacity Due to Drought Conditions*, p. 1, Docket No. E-7, Sub 849 (March 3, 2008) (“*Drought Rider Application*”).

⁷⁴ *Id.*

⁷⁵ *See, Id.* at 6-8.

⁷⁶ *Id.* at 1-2.

⁷⁷ *Id.*

of these types of unforeseeable, variable expenses, which are beyond the Company's control."⁷⁸

In the current proceeding, the Company similarly cites unpredictable major weather events as a rationale for a cost recovery rider, this time for costs associated with the targeted undergrounding of power lines. Specifically, Company Witness Simpson testified, "[a]s severe weather events have increased, so have the number of outages affecting the system" when discussing the primary components of the Power/Forward initiative and, specifically, the proposed targeted undergrounding program.⁷⁹ Company Witness Simpson also proffered the Power/Forward Carolinas Executive Technical Overview, which states:

Our grid is responding to an increasing number of storms. The National Weather Service has cited an 80% increase in the number of severe weather events impacting the U.S. from 2000 to 2016, which has led to an increase in major event days (MEDs). Wind and ice storms are two of the leading causes of outage conditions for our power systems, and flooding has also become an increasing concern.

Within North Carolina, we have seen the impact firsthand from such storms. Analysis of the past 10 years of North Carolina outage data shows that in an average year, nearly 1.2 million North Carolina homes and businesses are impacted. During Hurricane Matthew in 2016, North Carolina households and businesses experienced over 950 million minutes of power interruption, with some communities without power for more than six days.⁸⁰

In the *Drought Rider Order*, the Commission determined that the Company's rationale that a rider was necessary due to extreme weather was inconsistent with North Carolina law. Specifically, the Commission agreed with the Attorney General which stated

⁷⁸ *Id.* at 13.

⁷⁹ Tr. Vol. 23, p. 177.

⁸⁰ Official Exhibits, Vol. 24, Part 1, p. 44.

that, while under rare “compelling circumstances” the North Carolina Supreme Court has upheld riders brought in general rate cases and in rulemaking proceedings, the drought at issue in that docket was no longer an “emergency” evidencing the compelling circumstances required for a rider as recent rains had softened the effects of the drought.⁸¹ The Commission further found that an annual review of costs in a rider proceeding, and outside of a general rate case, even if originally brought during a general rate case, can be prohibitive of the implementation of a rider:

Moreover, even in general rate cases, the Commission has been reluctant to approve riders for specific cost items except under particularly compelling circumstances. For example, in the general rate case in Docket No. E-22, Sub 314, the Commission rejected the request of Virginia Electric and Power Company, d/b/a North Carolina Power, for annually adjustable nonutility generation riders. *The Commission explicitly held that an annual adjustment for purchases of this type outside a general rate case is not authorized under current North Carolina law and that there was insufficient justification for treating purchased power expenses any differently from other expense items in the ratemaking process.*⁸²

The Commission has also held that a “proposal to recover these and other future non-utility generation expenses through purchased capacity and purchased energy riders

⁸¹ *Drought Rider Order*, pp. 4, 8. The Commission agreed with the Public Staff and Attorney General’s analysis of law and incorporated it within their conclusions of law section without restating it: “The parties who oppose Duke’s proposal have correctly stated the law on this point. In deciding this issue, the Commission has placed particular reliance on the comments filed by the Public Staff and the Attorney General which fully, accurately, and comprehensively discuss the general principles of ratemaking, regulatory policy, and case law which are relevant to and require denial of Duke’s rate rider proposal. Those comments will not be repeated here, but they are fully summarized in the prior section of this Order entitled “Summary of Comments.” *Id.* at 18.

⁸² *Id.* at 4 (emphasis added).

outside of the framework of a general rate case is rejected.”⁸³ In support of this finding, the

Commission stated:

The Commission concludes that an annual adjustment of this type outside a general rate case is not authorized under current North Carolina law. Our fuel charge adjustment statute has been narrowly construed. The annual fuel charge adjustment proceedings held by the Commission are specifically provided for in G.S. 62-133.2. Prior to the amendment of G.S. 62-133.2 to specifically allow for a true-up, the North Carolina Court of Appeals in *State ex rel. Utilities Commission v. Thornburg*, 84 N.C. App. 482, 353 S.E.2d 413 (1987), cert. denied, 320 N.C. 517, 358 S.E.2d 533 (1987), held that the Commission’s use of an experience modification factor to allow Carolina Power & Light Company to recover a past underrecovery of fuel costs was in excess of the Commission’s statutory jurisdiction. Given this holding, the Commission concludes that an adjustment to base rates outside a general rate case, for which there is no specific statutory authority, to reflect a true-up of NUG expenses would be found unauthorized.⁸⁴

The *NC Power Order*, and as echoed in the *Drought Rider Order*, exhibits that the Commission does not grant cost recovery riders without the requisite authority to do so, and will not do so on an annual, recurring basis without an accompanying general rate case. In the instant case, the Company seeks cost recovery in the GRR Rider, through an annual rider proceeding, for investments in six major areas: Targeted Underground; Distribution, Hardening & Resiliency; Transmission Improvements; Self-Optimizing Grid; Communications Network Upgrades; and, Advanced Enterprise Systems.⁸⁵ The Company has not provided statutory authorization for cost recovery for any of these six major areas

⁸³ *Order Approving Partial Rate Increase*, p. 7, Docket Nos. E-22, Sub 314 and E-22, Sub 319 (February 14, 1991) (“*NC Power Order*”).

⁸⁴ *Id.* at 19.

⁸⁵ *See*, Official Exhibits, Vol. 24, Part 1. *See also*, Tr. Vol. 16, p. 161 and Tr. Vol. 17, p. 152.

for which it seeks cost recovery in the proposed GRR Rider and its accompanying annual proceeding.

In fact, the Company's only justification for utilizing an annual rider proceeding for cost recovery is the assertion that such a method is a "more fair method" for the Company recover its costs.⁸⁶ Specifically, Company Witness McManeus testified, in response to a question as to why the costs for the above-listed projects should be recovered through a rider rather than through base rates, that: "The proposed GRR Rider is a rate adjustment mechanism that will enable DE Carolinas to recover the cost of multi-year, planned, system upgrades on an annual basis as opposed to the traditional method of recovering costs only after project completion through a rate case."⁸⁷ There is no compelling reason set forth in Witness McManeus' testimony, or the testimony of any other witness, that shows a rationale for how the Company's proposed GRR Rider benefits anyone other than the Company itself. Furthermore, Witness McManeus' explanation ignores the numerous compelling reasons that ratepayers would object to the GRR Rider. This simply fails to meet the Company's burden of providing a "compelling" reason for seeking a rider for cost recovery that is typically required by the Commission, but rather calls for the Commission to authorize cost recovery in an annual rider proceeding without a corresponding general rate case, which conflicts with Commission precedent.

Under North Carolina law, riders are limited to certain circumstances, including when brought with a general rate case or when statutorily directed by the General

⁸⁶ See, Tr. Vol. 6, pp. 270-271.

⁸⁷ *Id.* at 270.

Assembly. Even when brought within a general rate case, the applicant must provide a compelling reason for the Commission to approve a rider. As discussed above, the Commission has historically denied riders where the request includes an annual review proceeding without an accompanying general rate case. The Company has failed to meet its burden for each of these requirements, and the Commission is without any compelling reason to grant the Company's request to establish a GRR Rider.

Finally, the General Assembly has prescribed, in great detail, how the Commission is to set rates for utilities such as the Company, and the Company's proposed GRR Rider does not comply with these directives. N.C. Gen. Stat. § 62-133(b) sets forth, in detail, the procedures that the Commission is to follow in setting rates. These procedures include checks and balances to ensure that rates are fair to both utilities and ratepayers, and "enable[s] the public utility by sound management to produce a fair return for its shareholders[.]"⁸⁸ However, the Company now claims that these consumer protections hinder its ability to provide a fair return for its shareholders, and thus is requesting the Commission approve the GRR Rider.⁸⁹ Additionally, despite claiming that an annual rider proceeding will allow for stakeholder engagement, the Company would do away with the statutory requirement for hearings to be held within its service territory.⁹⁰

⁸⁸ N.C. Gen. Stat. § 62-133(b)(4).

⁸⁹ *See generally*, Tr. Vol. 6, pp. 270-271 ("DE Carolinas believes timely rider recovery is a more fair method for recovering the cost of large dollar investments that are being placed into electric service rapidly.").

⁹⁰ N.C. Gen. Stat. § 62-81(d) ("In all proceedings for an increase in rates and all other proceedings declared to be general rate cases under G.S. 62-137, the Commission shall conduct the hearing or portions of the hearing within the area of the State served by the public utility whose rates are under consideration[.]").

B. THE COMPANY'S PROPOSED GRR RIDER REPRESENTS A MAJOR CHANGE IN COST RECOVERY

Company Witness Fountain testified that the Company's proposed GRR Rider represents a change from historical cost recovery practices, stating that "what we are proposing is a different model to go forward because we are living in a different era now[.]"⁹¹ The Company's assertion that an annual rider proceeding will "provide an annual transparent stakeholder process reviewed before this Commission where projected programs and costs would be reviewed in a very public space[.]"⁹² an annual rider proceeding does not provide ratepayers with the same statutory protections that are provided by a general rate case, as previously discussed.

Moreover, the impacts of the GRR Rider on customer rates is extraordinary. Despite Company Witness Fountain's contradictory testimony, the Company claims its proposed Power/Forward Carolinas investments will result in a 29 percent rate increase for residential customers.⁹³ Intervenors have claimed the Company's proposed Power/Forward Carolinas investments will result in as much as a 52.5 percent rate increase for residential customers.⁹⁴ Regardless of which party's calculations prove to be correct, the Company's proposed Power/Forward Carolinas investments, in conjunction with its proposed GRR

⁹¹ Tr. Vol. 7, p. 31.

⁹² *Id.*

⁹³ *Compare*, Official Exhibits, Vol. 18 (DEC O'Donnell Cross Exhibit 1) and Tr. Vol. 7, pp. 55-56,

[Q.] How much do you think a residential customer's bill is gonna go up from the GRR Rider?

A. Well, based on our review, you know, the cumulative average retail rate impact increase over the next 10 years would be about a total of 16 percent adjusted for, you know, the Tax Act.

⁹⁴ Tr. Vol. 18, p. 29.

Rider, will result in extraordinarily large rate increases without the protection of a general rate case.

Finally, the Company has said it will make its proposed Power/Forward Carolinas investments even if the Commission denies its request for the GRR Rider.⁹⁵ All of the current statutorily-approved riders allow recovery of costs that are outside the control of an electric public utility;⁹⁶ however, the Company's decision to make its proposed Power/Forward Carolinas investments lies squarely within its control. Regardless of the level of transparency that an annual rider proceeding may or may not provide, the fact remains that the Company is proposing to increase rates dramatically outside of a general rate case, which represents a major shift in cost recovery for utilities.

C. THE COMPANY'S APPLICATION FAILS TO CONTAIN SUFFICIENT INFORMATION FOR THE PRESENT PROCEEDING TO BE AN INITIAL RIDER PROCEEDING

The Company proposes that "The GRR would operate and be adjusted within an annual proceeding, similar to the Commission's review and approval of analogous

⁹⁵ See, Tr. Vol. 6, p. 431. See also, Tr. Vol. 23, p. 221 ("But the second point is we did this [EY cost-benefit] study to inform as to some potential impacts to the state, but Power Forward, the decision to move forward with Power Forward does not at all depend on this study.").

⁹⁶ See, N.C. Gen. Stat. § 62-133.2 (rider for recovery of fuel and fuel-related costs), N.C. Gen. Stat. § 62-133.8 (rider for recovery of costs for complying with the statutorily required Renewable Energy and Energy Efficiency Portfolio Standard), N.C. Gen. Stat. § 62-133.9 (rider for recovery of costs for providing statutorily required demand-side management and energy efficiency programs), and N.C. Gen. Stat. § 62-133.14 (rider for recovery of costs for legislatively-required purchase of generating facilities).

riders[.]”⁹⁷ “Analogous” rider proceedings require the Company to provide extensive information in its applications.⁹⁸ To this end, Company McManeus testifies that:

The process of cost recovery through a rider incorporates the same key components that are part of a general rate case:

- Expert witness testimony is required to support the Company’s request for cost recovery.
- Calculations and supporting work papers are required to be filed.
- Interested parties are allowed to intervene in the proceeding and participate in a discovery process.
- Public hearings are conducted.
- A detailed review and audit of costs is performed by the Public Staff.
- The Company bears the burden of proof in demonstrating that the costs for which it seeks recovery, whether they are capital or O&M costs, are reasonable and prudently incurred.⁹⁹

However, the Company has neither provided the same level of detail in this proceeding as is required to be included in applications for analogous riders nor met the standards set forth by Witness McManeus.

Applications for all other riders are required to set forth the amount that the utility is seeking to recover in the rider. The Company’s *Application* states that \$36 million would be recovered during the GRR Rider’s first year.¹⁰⁰ However, Company Witness Simpson testified that \$90 million would be recovered via the GRR Rider for the Company’s

⁹⁷ *Application*, note 2.

⁹⁸ See generally, for fuel rider applications, Commission Rule R8-55(e) and *Duke Energy Carolinas, LLC’s Application*, Docket No. E-7, Sub 1163 (March 7, 2018); for Renewable Energy and Energy Efficiency Portfolio Standard rider applications, Commission Rule R8-67(e) and *Application for Approval of REPS Cost Recovery Rider and 2017 REPS Compliance Report*, Docket No. E-7, Sub 1162 (March 7, 2018); and for demand-side management and energy efficiency rider applications, Commission Rule R8-69(e) and *Application of Duke Energy Carolinas, LLC for Approval of Rider 10*, Docket No. E-7, Sub 1164 (March 7, 2018).

⁹⁹ Tr. Vol. 6, pp. 334-335.

¹⁰⁰ *Application*, pp. 5-6.

Power/Forward Carolinas investments made in 2017.¹⁰¹ The Company has provided no explanation or justification for this significant discrepancy. The lack of clarity about the level of spending continues for the Company's Power/Forward Carolinas investments in 2018, where the Company was unable to specify whether it would spend \$410 million or \$519 million.¹⁰²

While Witness Simpson testified that the Company spent \$90 million on Power/Forward Carolinas projects in 2017, he did not provide specificity about what those investments and projects were.¹⁰³ During discovery and at the hearing additional detail was made available, but the detail provided still falls short of the detail provided in analogous rider applications.¹⁰⁴ Furthermore, the Company did not file a detailed work plan for its proposed Power/Forward Carolinas investments to be made in 2018 in the current proceeding.¹⁰⁵

Finally, as acknowledged by Company Witness McManeus, "The Company bears the burden of proof in demonstrating that the costs for which it seeks recovery, whether they are capital or O&M costs, are reasonable and prudently incurred."¹⁰⁶ Given the lack of information about the projects for which the Company is seeking cost recovery in the GRR Rider, it is apparent that the Company has not met its burden of proof to demonstrate that the costs were reasonably and prudently incurred.

¹⁰¹ Tr. Vol. 23, pp. 258-259.

¹⁰² *Id.* at 262-263.

¹⁰³ Tr. Vol. 16, p. 38.

¹⁰⁴ *See generally*, Official Exhibits, Vol. 24, Part 1 (Simpson Rebuttal Public Staff Cross Examination Exhibit 4).

¹⁰⁵ *See generally*, Tr. Vol. 16, pp. 169-170.

¹⁰⁶ Tr. Vol. 6, pp. 334-33.

III. THE COMMISSION SHOULD EXERCISE ADDITIONAL OVERSIGHT OVER THE COMPANY'S PLANNING PROCESS

The level of spending set forth in the Company's proposed grid investment plan is unprecedented and warrants extensive Commission oversight. Moreover, the Company has not demonstrated that the process used in developing its proposed grid investment plan is reasonable and prudent or is in the best interest of customers. Despite its claims to the contrary, the Company has not engaged in an open and transparent planning process, which concerns the Commission.¹⁰⁷ The Company's proposed Power/Forward Carolinas investment plan was never presented to the Commission until it was included in the Company's *Application* and supporting testimony. The Company has failed to show that its planning process is likely to produce the best outcomes for ratepayers. NCSEA Witness Golin testified that the Company's proposed grid investment plan has been developed without engaging in the best practices for grid modernization.¹⁰⁸ Witness Golin stated that these best practices are (1) establishing clear and measurable goals; (2) stakeholder engagement; (3) integrated distribution planning; and (4) cost-benefit analyses.¹⁰⁹

Company Witness Simpson asserts that the goal of the Company's proposed Power/Forward Carolinas investment is to reduce outage events by 30 to 40 percent and SAIDI and SAIFI scores by 40 to 60 percent.¹¹⁰ While these are worthwhile goals, they are not precise and thus are insufficiently defined. Moreover, given the confusion about the Company's other primary or secondary goals for its proposed Power/Forward Carolinas

¹⁰⁷ *Id.* at 230.

¹⁰⁸ Tr. Vol. 14, p 65.

¹⁰⁹ *Id.*

¹¹⁰ Tr. Vol. 23, p. 177.

investments, it is clear that the Company has not established clear outcomes and defined goals.

The Company provided no rebuttal to intervenor testimony that it should perform integrated distribution planning.¹¹¹ Integrated distribution planning could provide the key insights, long-term plans, and cost-benefit analyses that intervenors have universally stated are necessary before the Company makes its proposed Power/Forward Carolinas investments.¹¹²

Given the magnitude of the Company's proposed grid investment plan, multiple witnesses recommended that the Commission exercise an increased level of oversight. NCSEA Witness Golin testified that the scope and salience of the Company's proposed grid investment plan necessitates a stronger evaluation process.¹¹³ To perform this evaluation, Witness Golin recommended "that the Commission order the Company to open a stand-alone docket in order to thoroughly and thoughtfully define and plan for a modernized grid."¹¹⁴ Similarly, EDF Witness Alvarez recommended "the Commission establish a distinct proceeding to enable Commission review of, and stakeholder

¹¹¹ Tr. Vol. 14, p. 65 ("From my assessment, the Company has failed to engage in any of the following best practices of grid investment: . . . Integrated Distribution Planning[.]").

¹¹² *Id.* at 84 ("The integrated distribution resource planning I think is absolutely key. That's happening in California right now. And the goal there is really to say we recognize that technology is changing. We recognize that solutions to meet concerns of reliability, concerns over integrating DERs, concerns over interconnection, concerns over, you know, resiliency, the technologies to meet those questions are changing day by day. We need to actually assess what's going to happen within the next two to three years and how we can integrate in the system.").

¹¹³ *Id.* at 18.

¹¹⁴ *Id.* at 69.

participation in, so-called ‘grid modernization’ plans before investments are made.”¹¹⁵ Finally, CUCA Witness O’Donnell recommended that “the Commission open a separate public docket to investigate the need for Duke’s proposed grid investments.”¹¹⁶

While the Company is not required by law to seek Commission approval before making its proposed grid investments, the Commission is afforded broad authority to oversee the Company’s activities. In particular, N.C. Gen. Stat. § 62-30 states that: “The Commission shall have and exercise such general power and authority to supervise and control the public utilities of the State as may be necessary to carry out the laws providing for their regulation, and all such other powers and duties as may be necessary or incident to the proper discharge of its duties.” NCSEA believes that the magnitude of the cost of the Company’s proposed Power/Forward Carolinas investments necessitates additional oversight to ensure that ratepayers are adequately protected and that the Commission is empowered by N.C. Gen. Stat. § 62-30 to exercise this type of general oversight.

NCSEA requests that the Commission open a new generic docket to consider the plans of the Company and other electric utilities to invest in and modernize their transmission and distribution systems. NCSEA further requests that the Commission direct the Company to include in its 2018 integrated resource plan filing a full and detailed discussion of its integrated distribution planning process, including how that process relates to both its integrated resource planning process and its smart grid planning process. Finally, NCSEA requests that the Commission receive comments from stakeholders in the 2018

¹¹⁵ Tr. Vol. 26, p. 290.

¹¹⁶ Tr. Vol. 18, p. 51.

integrated resource plan and smart grid technology plan docket about whether the rules governing integrated resource plans and smart grid technology plans should be amended to include integrated distribution planning, and if so, to accept proposed rule revisions.

IV. THE COMPANY'S PROPOSED BASIC FACILITIES CHARGE FOR RESIDENTIAL CUSTOMERS SHOULD BE REJECTED

In its *Application*, the Company proposes to increase the basic facilities charge (“BFC”) for residential customers from its current amount of \$11.80 to \$17.79.¹¹⁷ Put in context, the Company’s proposed increase in the residential BFC represents an increase of more than 50 percent for Schedule RS, the most common of the Company’s residential rate tariffs, which is already above the average for utilities nationally and for utilities identified by the Company as “comparable” for purposes of return on equity analysis.¹¹⁸ For the reasons set forth below, the residential BFC should be maintained at its current amount.¹¹⁹ If, however, the Commission determines that an increase in the residential BFC is necessary, the increase should be no more than the percentage increase set forth in the overall revenue requirement adopted for each residential sub-class.¹²⁰

A. COMMISSION PRECEDENT DOES NOT SUPPORT THE USE OF THE MINIMUM SYSTEM ANALYSIS TO SET THE RESIDENTIAL BASIC FACILITIES CHARGE

Company Witness Hager testifies that “the minimum system study has long been used [by the Company] in the cost of service study to develop the customer-related costs that are then passed to rate design and are the basis of rates that are ultimately approved by

¹¹⁷ *Application*, p. 20.

¹¹⁸ Tr. Vol. 20, pp. 63, 67-68.

¹¹⁹ *Id.* at 65.

¹²⁰ *Id.*

the Commission.”¹²¹ However, Witness Hager’s assertion that historically a minimum system study underlies the Company’s Commission-approved residential BFC is not supported by the evidence. In none of the Company’s last three general rates case has the Commission-approved residential BFC been based on a minimum system study; instead, the residential BFC was set based on the increase in rates for a schedule or the overall rate increase.¹²² In the Company’s 2013 general rate case, increases in all BFCs, including the residential BFC, were based on the overall rate increase for each rate schedule. The Commission ordered “That the Company shall limit any increase in the BFC for any rate schedule to no more than four times the percentage increase assigned to that rate schedule[.]”¹²³ Similarly, in the Company’s 2012 general rate case, the increase in all BFCs, including the residential BFC, was again based on a specific percentage increase.¹²⁴ Finally, in the Company’s 2009 general rate increase, the increase in all BFCs, including the residential BFC, was limited to the percentage increase of rates overall.¹²⁵ While the

¹²¹ Tr. Vol. 19, pp. 138-139.

¹²² See generally, *Order Granting General Rate Increase*, p. 122, Docket No. E-7, Sub 1026 (September 24, 2013); *Order Granting General Rate Increase*, p. 43, Docket No. E-7, Sub 989 (January 27, 2012); *Order Granting General Rate Increase and Approving Amended Stipulation*, p. 71, Docket No. E-7, Sub 909 (December 7, 2009).

¹²³ *Order Granting General Rate Increase*, p. 122, Docket No. E-7, Sub 1026 (September 24, 2013).

¹²⁴ *Order Granting General Rate Increase*, p. 43, Docket No. E-7, Sub 989 (January 27, 2012) (“The Stipulation provides that each rate component for each rate schedule, including the Basic Facility Charges, shall be modified by an equal percentage to arrive at a 7.21% increase.”).

¹²⁵ *Order Granting General Rate Increase and Approving Amended Stipulation*, p. 71, Docket No. E-7, Sub 909 (December 7, 2009) (“The Stipulating Parties agree upon the following regarding the rate design and changes to the service regulations proposed by Duke Energy Carolinas: A. The Basic Facilities Charges and Standby Charges will be increased commensurate with the level of overall increase in rates. The Extra Facilities

Company may have proposed residential BFCs based on minimum system analyses, contrary to Witness Hager's testimony, a minimum system analysis has not underpinned the Commission's approved residential BFC in any of the Company's three most recent rate cases.

B. THE MINIMUM SYSTEM ANALYSIS IS FLAWED

The minimum system methodology "assumes that some costs of the shared distribution system are effectively incurred solely for the purpose of connecting each customer and that these costs should therefore be classified as customer-related."¹²⁶ In effect, the minimum system methodology "double counts" demand-related costs because a minimum system is still capable of serving some level of demand.¹²⁷ In the case of the Company's minimum system study, it results in the double counting of more than \$542 million in plant in service.¹²⁸

The minimum system analysis is susceptible to large variations based on the inputs used by utilities.¹²⁹ This can lead to illogical results, namely the fact that a theoretical

Charge shall be adjusted consistent with the cost of capital and capital structure described in Paragraph 2.A. of the Amended Stipulation and associated income tax effects.").

¹²⁶ Tr. Vol. 20, pp. 75-76.

¹²⁷ *Id.* at 76. *See also*, Tr. Vol. 19, p. 36 ("But if someone, for whatever reason, wants electricity to light a single 100-Watt light bulb, that customer will require distribution assets such as poles and conductors and transformers to deliver that electricity."). NCSEA notes that, while small, a single 100-watt light bulb would nonetheless impose demand on the grid. *See also*, Official Exhibits, Vol. 20 (NCJC, et al., Hager/Pirro Cross Exhibit 1) ("Cost analysts disagree on how much of the demand costs should be allocated to customers when the minimum-size distribution method is used to classify distribution plant. When using this distribution method, the analyst must be aware that the minimum-size distribution equipment has a certain load-carrying capability, which can be viewed as a demand-related cost.").

¹²⁸ Tr. Vol. 20, pp. 93-94.

¹²⁹ Official Exhibits, Vol. 20 (NCJC, et al. Hager/Pirro Cross Exhibit 1) ("The results of the minimum-size method can be influenced by several factors. The analyst must determine

minimum system to serve a customer may not be the same as the Company's actual minimum system. This issue was acknowledged in the testimony of Company Witness Hager:

- Q. So it's fair to say that the minimum system that would be installed would be capable of powering more than just that 100-watt light bulb in the real world?
- A. That is likely true.¹³⁰

Moreover, a minimum system analysis can conflate the two separate issues of allocating costs between customer classes and rate design.¹³¹ The minimum system methodology also distorts whether revenue is collected via fixed, demand, or energy charges when those charges are based on the classification of costs, as the Company does.¹³² This distortion is highlighted by the fact that, when the minimum system is removed from the BFC and appropriately categorized as demand, the residential BFC decreases from \$23.59 per month to \$11.08 per month, which is less than the Company's current residential BFC.¹³³ This extreme variation highlights the fact that the minimum

the minimum size for each piece of equipment: "Should the minimum size be based upon the minimum size equipment currently installed, historically installed, or the minimum size necessary to meet safety requirements?" The manner in which the minimum size equipment is selected will directly affect the percentage of costs that are classified as demand and customer costs.").

¹³⁰ Tr. Vol. 19, pp. 140-141.

¹³¹ *Id.* at 138.

¹³² Tr. Vol. 20, p. 77. *See also*, Official Exhibits, Vol. 20 (NCJC, et al., Hager/Pirro Cross Exhibit 1) ("When allocating distribution costs determined by the minimum-size method, some cost analysts will argue that some customer classes can receive a disproportionate share of demand costs. Their rationale is that customers are allocated a share of distribution costs classified as demand-related. Then those customers receive a second layer of demand costs that have been mislabeled customer costs because the minimum-size method was used to classify those costs.").

¹³³ Tr. Vol. 20, pp. 77-78.

system methodology is highly susceptible to variations based on the assumptions used by the utility.

C. THE COMPANY'S "MODIFIED" MINIMUM SYSTEM ANALYSIS HAS NOT BEEN APPROVED BY THE COMMISSION

Company Witness Hager testifies that the Company uses a variation, or modified version, of the minimum system analysis. Thus, the Company is not using the minimum system analysis as it is described in the National Association of Regulatory Utility Commissioner's *Electric Utility Cost Allocation Manual*. The Commission has never approved the Company's "modified" minimum system analysis, and Witness Hager's testimony calls into question whether the Commission should approve its use. As a threshold matter, Witness Hager utilizes a definition for customer-related costs that differs from the standard definition. Witness Hager defines customer-related costs as "costs incurred primarily as a result of the number of customers being served."¹³⁴ However, this differs from the standard definition of customer costs as "costs that vary *directly* with the number of customers."¹³⁵

Furthermore, the Company's modified minimum system methodology does not examine actual costs, but rather defines costs for specified components and extrapolates those costs across the Company's system.¹³⁶ In the case of poles and conductors, this results in more items being included in the minimum system study than are actually on the Company's system and results in a negative assignment for these components in the

¹³⁴ Tr. Vol. 19, p. 23.

¹³⁵ Tr. Vol. 20, p. 74.

¹³⁶ *Id.* at 86.

demand charge.¹³⁷ Additionally, the Company's modified minimum system methodology contains flaws in its analysis of poles and structures, overhead conductors, line transformers, and service drops.¹³⁸

D. THE COMPANY'S PROPOSED RESIDENTIAL BASIC FACILITIES CHARGE VIOLATES N.C. GEN. STAT. § 62-155

It is the policy of the State of North Carolina to adopt electricity rates that encourage the conservation of energy and resources and that reduce demand for electricity.¹³⁹ More specifically, "It is the policy of the State to conserve energy through efficient utilization of all resources."¹⁴⁰ However, the Company's proposed residential BFC does not comply with this policy objective.¹⁴¹ It is well established that customers respond to the price signals sent by variable, volumetric charges.¹⁴² However, by shifting costs away from variable, volumetric charges and into the fixed BFC, residential consumers have less of an economic incentive to attempt to control their bill by adopting energy efficiency or other conservation

¹³⁷ *Id.* at 87.

¹³⁸ *See, Id.* at 90-94.

¹³⁹ N.C. Gen. Stat. § 62-2(a)(3a) ("To assure that resources necessary to meet future growth through the provision of adequate, reliable utility service include use of the entire spectrum of demand-side options, including but not limited to conservation, load management and efficiency programs, as additional sources of energy supply and/or energy demand reductions. To that end, to require energy planning and *fixing of rates in a manner to result in the least cost mix of generation and demand-reduction measures* which is achievable, including consideration of appropriate rewards to utilities for efficiency and conservation which decrease utility bills[.]") (emphasis added); N.C. Gen. Stat. § 62-2(a)(4) ("To provide just and reasonable rates and charges for public utility services without unjust discrimination, undue preferences or advantages, or unfair or destructive competitive practices and *consistent with long-term management and conservation of energy resources by avoiding wasteful, uneconomic and inefficient uses of energy*[.]") (emphasis added).

¹⁴⁰ N.C. Gen. Stat. § 62-155(a).

¹⁴¹ Tr. Vol. 8, p. 24 ("By diminishing the incentive to participate and benefit from energy-efficiency programs, the Company's proposal is counter to the policy of the State of North Carolina.").

¹⁴² *See generally, Id.* at 29, 73; Tr. Vol. 20, p. 71.

measures.¹⁴³ The impact of such a shift can be substantial: “if the fixed charge increase reduced overall residential class energy efficiency savings by only 1%, the level of forgone savings for the residential class as a whole would exceed \$1.2 million annually.”¹⁴⁴ Because the Company’s proposed residential BFC diminishes ratepayer’s economic incentives to conserve electricity, it violates the policy directive of N.C. Gen. Stat. § 62-155 and should be rejected by the Commission.

E. THE COMMISSION SHOULD INVESTIGATE METHODOLOGIES FOR SETTING THE BASIC FACILITIES CHARGE

While the minimum system method is one methodology for calculating the BFC, it is not the only possible methodology. In fact, the minimum system method is not utilized to calculate the residential BFC in the Company’s South Carolina service territory because the South Carolina Public Service Commission determined that it was necessary to use a “more appropriate allocation factor.”¹⁴⁵ In this proceeding, the Commission has heard testimony about the zero- or minimum-intercept method¹⁴⁶ and the basic customer method¹⁴⁷ for calculating BFCs.

¹⁴³ Tr. Vol. 8, p. 29 (“The Company’s proposal, by shifting costs away from volumetric charges and onto the fixed, basic facilities charge, would lessen the incentive to save on utility bills by reducing usage, investing in more efficient homes and appliances, and participating in energy-efficiency programs.”); *Id.* at 73 (“When more of a utility’s costs are recovered through a fixed charge that does not vary according to usage, the incentive to save energy is reduced.”); Tr. Vol. 20, p. 71 (“Higher fixed customer charges result in more revenue being collected under fixed fees, which in turn reduces the energy and demand rates necessary to raise the remaining portion of the revenue requirement. Lower variable charges provide less of an incentive for customers to reduce their demand or overall energy use. In effect, customers see less savings as a result of conservation, so they are less motivated to reduce their overall energy usage or demand.”).

¹⁴⁴ Tr. Vol. 20, p. 72.

¹⁴⁵ *Id.* at 82.

¹⁴⁶ *Id.* at 76, 78.

¹⁴⁷ *Id.* at 79.

Company Witness Hager testifies that the minimum intercept method “tends to produce similar results” to the minimum system method.¹⁴⁸ However, this testimony is undermined by Witness Hager’s subsequent testimony that she has never worked with the minimum intercept method:

- [Q.] I understood your testimony that -- that, in your engagements for Duke Energy Carolinas, you haven’t done any work using the minimum intercept or zero intercept methodology?
- A. That’s correct.
- Q. Have you used or applied that methodology yourself in any other engagements or assignments that you’ve had for any other companies?
- A. No, but -- but I have not had any other related to cost of service.
- Q. Oh, okay. So -- so you are not familiar with methods that can be used to adjust the statistical anomalies and eliminate the statistical anomalies in the zero intercept method?
- A. No, I’m not.

The fact that the Company asserts that the minimum intercept method is “more complicated than the minimum system method”¹⁴⁹ is not a sufficient justification for refusing to use the minimum intercept method to calculate BFCs if it produces more accurate results.

The Company’s proposed Power/Forward Carolinas investments will also have a significant impact on residential BFCs. Under the Company’s proposal, approximately 72 percent of the investments will be recovered from residential customers.¹⁵⁰ Because the Company’s proposed Power/Forward Carolinas investments focus on the transmission and distribution systems, if the minimum system methodology is used to calculate the residential BFC it will result in approximately 57 percent of these costs being recovered

¹⁴⁸ Tr. Vol. 19, p. 137.

¹⁴⁹ *Id.*

¹⁵⁰ Tr. Vol. 20, p. 5.

through the BFC.¹⁵¹ The Company's use of its modified minimum system methodology also leads to illogical results in the context of calculating the GRR Rider. For example, by including services and meters in the minimum system study, despite the fact that costs for these investments are not being recovered in the GRR Rider, results in the share of the GRR Rider that is allocated to residential customers increasing from 54.5 percent to 62.6 percent.¹⁵² These flaws will only be exacerbated as the GRR Rider grows from \$36 million in its first year to recovering the full amount of the Company's planned \$7.78 billion spend.

As previously discussed, the Commission has never formally adopted a position on the proper methodology for calculating the BFC, but rather has approved BFCs based on the unique circumstances of each case. The Commission certainly has not adopted a policy that the minimum system methodology is to be used to calculate the BFC. It is important to maintain flexibility in future rate design, particularly as the Company makes significant investments with the goal of providing customers greater control of their energy consumption. Such control is valuable but becomes meaningless if the BFC is too high to result in meaningful savings for customers. The BFC is an integral part of innovative rate designs and can be leveraged to send economic signals to customers. However, this benefit can only be utilized if the base customer charge is set properly. Multiple witnesses testified that the BFC proposed by the Company would dampen economic signals to ratepayers, thereby decreasing adoption of energy efficiency measures.¹⁵³ Thus, it is appropriate for the Commission to examine the methodology utilized to calculate the BFC to ensure that

¹⁵¹ *Id.*

¹⁵² *Id.* at 97-99.

¹⁵³ *Id.* at 62.

the methodology is consistent with the concepts of flexibility and innovation to be implemented in future rate designs. The evidence and testimony presented in this proceeding support a conclusion that it is necessary for the Commission to exercise greater oversight over the methodology used to calculate the BFC, particularly for residential customers. In order to exercise such oversight, the Commission should direct the Company to include in all future general rate case applications an analysis to identify the BFC under each of the three methodologies discussed in this section, and to provide a justification for and explanation of why it is recommending its chosen methodology for calculating the BFC.

V. AMI AND CIS AS INTERLOCKING ASSETS

In its *Application*, the Company seeks to recover costs associated with its deployment of AMI and its new CIS, Customer Connect.¹⁵⁴ Company Witness Fountain testified that the two systems are interlocking components;¹⁵⁵ if properly implemented together, the two systems can provide customers with access to their energy consumption data to enable them to effectively conserve electricity. “[B]etween 33% and 66% of the total potential benefits of AMI may be customer benefits, such as bill savings[.]”¹⁵⁶ This benefit is apparent to the Company, and was highlighted by Witness Fountain in his testimony.¹⁵⁷ In order to fully enable the benefits of AMI, the Company must ensure that its new CIS is capable of providing customers with easy and automatic access to their

¹⁵⁴ See, *Application*, p. 4.

¹⁵⁵ Tr. Vol. 7, p. 60.

¹⁵⁶ Tr. Vol. 26, p. 399.

¹⁵⁷ Tr. Vol. 7, pp. 61-67.

energy consumption data and historic billing information in a machine-readable format and allowing customers to easily authorize third parties to access such data.¹⁵⁸

The evidence suggests that the Company's investments in AMI and a new CIS are necessary and NCSEA is generally supportive of them, but only if they are designed to provide customers with the features that they expect. It is well-established, and NCSEA does not dispute, that the Company's current CIS is outdated and needs to be upgraded.¹⁵⁹ Likewise, NCSEA has consistently supported DEC's deployment of AMI. However, the Company has failed to show that AMI and the new CIS, as interlocking components, will provide customers with the features that they desire.

As with any investment, it will prove to be more cost effective to incorporate these features into the Company's AMI deployment and new CIS from the beginning, rather than retrofitting them at a later date. However, the evidence shows that the Company's new CIS will not provide consumers with access to their energy consumption data. In response to a discussion about consumer access to energy consumption data, Company Witness Hunsicker asserts that "the new Customer Connect platform will be capable of enabling new capabilities such as these, should they arise."¹⁶⁰ Witness Hunsicker later testified that "we really have no issue with providing capabilities, and the platform in which we are

¹⁵⁸ Tr. Vol. 26, pp. 401-404.

¹⁵⁹ Tr. Vol. 18, p. 276 ("We understand our customers have come to expect the same thing from all service providers, including their utility, and we are confident that the SAP platform gives us the technology we need to meet this expectation. To that end, during the Design phase, using the collective experiences with its current CIS, the Company will take an opportunity to redesign outdated business processes that have been in place for more than 20 years.").

¹⁶⁰ *Id.* at 278.

going to be building will be provide for those capabilities.”¹⁶¹ Despite recognizing the benefit of providing consumers with access to their energy consumption data, investing in technology capable of providing consumers with access to their energy consumption data, and having no issue with providing consumers with access to their energy consumption data, the Company is not doing so.

The Commission has directed the Company to meet with NCSEA and other stakeholders to discuss implementing the Green Button Connect protocol for access to energy consumption data, and NCSEA is looking forward to engaging on the issue.¹⁶² However, in the context of the current proceeding, the Company has not shown that their proposed method of meeting that need is reasonable and prudent because they have not provided sufficient evidence that the proposed CIS will meet customer needs, comply with industry standards, or is capable of complying with directives from this Commission. Accordingly, the Company’s request for cost recovery for its new Customer Connect CIS should be denied at this time.

VI. RATE DESIGN ISSUES

The Company’s *Application* also raises several issues related to rate design. Specifically, the Company incorrectly proposes to recover CCR remediation costs using a demand allocator. In addition, the Company’s *Application* does not propose any innovative rate designs that would advance policy objectives, despite the opportunity to do so without incurring significant costs related to AMI or a new CIS.

¹⁶¹ *Id.* at 299.

¹⁶² See generally, *Order Accepting DENC’s and DEC’s SGTP Updates, Requiring Additional Information from DEP, and Directing DEC and DEP to Convene a Meeting Regarding Access to Customer Usage Data*, Docket No. E-100, Sub 147 (March 7, 2018).

A. CCR REMEDIATION COSTS ARE ENERGY RELATED

In its *Application* and this proceeding, the Company has incorrectly classified CCR remediation costs as related to production demand.¹⁶³ The Company's position is inconsistent with the Commission's previous orders on the issue.¹⁶⁴ NCSEA Witness Barnes asserted that CCR is a by-product of the use of coal to generate energy and, therefore, costs associated with its remediation should be classified as energy-related costs, not demand-related costs.¹⁶⁵ The testimony of Company Witness Hager also undermines the Company's position that CCR remediation costs are demand-related.

Q. Okay. Is coal ash a by-product of a generating unit or a by-product of the fuel used in the generating unit?

A. Coal ash is a by-product of the fuel.

...

Q. Does the quantity of coal ash vary whether 1 ton of coal was combusted or a million tons were combusted?

A. It does.

Q. And does DEC recover its fuel cost using an energy allocator or a demand allocator?

A. Energy.¹⁶⁶

The Company's classification of CCR remediation costs as demand-related significantly affects the allocation of such costs between customer classes. Classifying CCR remediation costs as demand-related results in improper adjustments to allocators for each of the customer classes.¹⁶⁷ This is highlighted specifically by the lighting classes

¹⁶³ See generally, *Application*.

¹⁶⁴ See generally, *Order Accepting Stipulation, Deciding Contested Issues and Granting Partial Rate Increase*, Finding of Fact 19, Docket Nos. E-2, Sub 1131, E-2, Sub 1142, E-2, Sub 1103, and E-2, Sub 1153 (February 23, 2018).

¹⁶⁵ Tr. Vol. 20, p. 105.

¹⁶⁶ Tr. Vol. 19, p. 147.

¹⁶⁷ Tr. Vol. 20, pp. 105-106.

which, despite the utilizing electricity generated from coal, would not be allocated any CCR remediation costs despite probable causation.¹⁶⁸ The evidence presented in this proceeding supports a conclusion that costs associated with coal ash remediation are appropriately classified as energy-related costs and not demand-related costs. Therefore, NCSEA respectfully requests that the Commission direct the Company to reclassify coal ash remediation costs as energy-related.

B. THE COMPANY DOES NOT PROPOSE INNOVATIVE RATE DESIGNS

Company Witness Pirro testified that the Company is not proposing any innovative rate designs at this time, but that it “continues to review and analyze rate designs that offer customers opportunities to respond to price signals to achieve a lower cost for electric service.”¹⁶⁹ Witness Pirro testifies that offering innovative rate designs at this time “is premature because AMI technology is not fully deployed within DE Carolinas’ service territory.”¹⁷⁰ However, this is not necessarily an appropriate justification for the Company’s failure to propose innovative rate designs.

1. RESIDENTIAL TIME-OF-USE RATES

The Company’s *Application* also fails to propose rate offerings that are increasingly becoming standard and are offered by most utilities. Most notably, the Company’s *Application* does not include a residential time-of-use rate tariff that does not include a demand charge, despite the fact that its similarly-situated sister utility Duke Energy Progress offers one. During cross examination, Company Witness Pirro was unable to

¹⁶⁸ *Id.* at 106.

¹⁶⁹ Tr. Vol. 19, p. 58.

¹⁷⁰ *Id.* at 87.

provide a justification for the Company's failure to include an energy-only residential time-of-use rate:

- [Q.] Are either of you aware of Duke Energy Progress's R-TOU rate tariff?
- A. (Michael Pirro) I'm familiar with that. That is correct.
- Q. Would you agree that that's a residential time-of-use rate tariff that does not include a demand charge?
- A. That is correct.
- Q. Does Duke Energy Carolinas offer a similar rate?
- A. We — we have a residential time of use as well.
- Q. Does that include a demand charge?
- A. Let me just look real quick at something. I — I believe it does.
- Q. So would it be fair to say that that's more comparable to Progress's R-TOUD rate tariff?
- A. That would be correct.
- Q. So why does Duke Energy Carolinas not offer a rate tariff for this similar to Progress's R-TOU?
- A. I — I don't know if I have that answer here today. I mean, both companies have different pricing structures. We continue to try to align the two closer. And with — with the advancement of AMI and our implementation of billing structures, we continue to — to move closer to alignment between the two companies.
- Q. Would you agree that Duke Energy Carolinas is further along in its deployment of AMI than Duke Energy Progress?
- A. I believe that is correct, yes.
- Q. And would you agree that both companies are similarly situated in terms of having antiquated billing software?
- A. We are in the same position of upgrading our billing infrastructure. That is correct.
- Q. So neither of those is a solid justification for why Progress can offer R-TOU rate tariff and Carolinas could not?
- A. I do know that the billing infrastructures for DEP and DEC are — are both, you know, in — in progress of being updated. However, they both are different in nature, and each one has their own different limitations.¹⁷¹

¹⁷¹ *Id.* at 151-152.

The Company has provided no justification for why it does not offer an energy-only residential time-of-use rate offering. Company Witness Pirro's proffered justification, that the Company has not fully deployed AMI, is unreasonable, as Duke Energy Progress offers an energy-only residential time-of-use rate despite having fewer AMI deployed than the Company. As previously discussed, it is the policy of the State of North Carolina to adopt electricity rates that encourage the conservation of energy and resources and that reduce demand for electricity.¹⁷² As such, the Commission should direct the Company to include an energy-only residential time-of-use rate offering in its compliance filing.

2. RATE DESIGN FOR ELECTRIC VEHICLES

In addition to not providing residential customers with an energy-only time-of-use rate option, the Company could easily offer customers time-of-use rate options that incent the charging of electric vehicles at times that would be economically advantageous for both the Company and ratepayers. Rather than addressing the issue of increased demand on the grid from electric vehicle charging by using rate design to incent charging at beneficial times, the Company instead proposes to address the issue through its \$7.78 billion proposed Power/Forward Carolinas investments:

- Q. Okay. And you testified yesterday that electric vehicles are not a part of Power/Forward, but does Power/Forward prepare the grid to handle the increased electric usage that is going to come from increased electric vehicles over the next 10 years?
- A. Power/Forward prepares the grid for the future, in terms of DER, in general, and electric vehicles is another example of that."¹⁷³

¹⁷² N.C. Gen. Stat. § 62-2(a)(3a); N.C. Gen. Stat. § 62-2(a)(4).

¹⁷³ Tr. Vol. 17, pp. 28-29.

Moreover, the Company has not examined the economic benefits or increased jobs that would result from expanding electric vehicle infrastructure, despite the fact that it has previously offered electric vehicle pilots.¹⁷⁴ In addition to being fully capable of offering residential customers an energy-only time-of-use rate tariff, the Company is fully capable of offering rate tariffs that incent the charging of electric vehicles at times that are beneficial to the grid. As such, NCSEA respectfully requests that the Commission direct the Company to include in its compliance filing rate tariffs for both residential and general service customers that incents the charging of electric vehicles at times that are beneficial to the grid.

CONCLUSION

Based on the foregoing, NCSEA respectfully requests that the Commission incorporate these comments into its final order in this proceeding.

Respectfully submitted, this the 27th day of April, 2018.

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¹⁷⁴ Tr. Vol. 23, p. 241. Tr. Vol. 18, p. 349.

CERTIFICATE OF SERVICE

I hereby certify that all persons on the docket service list have been served true and accurate copies of the foregoing Comments by hand delivery, first class mail deposited in the U.S. mail, postage pre-paid, or by email transmission with the party's consent.

This the 27th day of April, 2018.

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