

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

<b>In the Matter of:</b>	)	<b>NCSEA’S RESPONSE TO</b>
<b>Application of Duke Energy Carolinas,</b>	)	<b>DUKE ENERGY</b>
<b>LLC for Adjustment of Rates and Charges</b>	)	<b>CAROLINAS, LLC’S</b>
<b>Applicable to Electric Service in North</b>	)	<b>MOTION TO STRIKE</b>
<b>Carolina</b>	)	<b>DIRECT TESTIMONY OF</b>
	)	<b>MICHAEL MURRAY</b>

NOW COMES North Carolina Sustainable Energy Association (“NCSEA”), by and through the undersigned counsel, and responds to Duke Energy Carolinas, LLC’s (“DEC” or “Movant”) Motion to Strike Direct Testimony of Michael Murray (“Motion”), filed in the above-captioned docket with the North Carolina Utilities Commission (“Commission”) on January 25, 2018.

In its Motion, DEC requests the Commission to strike the majority of the Direct Testimony of Michael Murray (herein “Murray Direct”) because, according to DEC, Murray Direct is “identical to the testimony filed in Duke Energy Progress, LLC’s (“DEP”) 2017 rate case, Docket No. E-2, Sub 1142”<sup>1</sup> that was struck by the Commission. However, the testimony filed by Witness Murray in the DEP Rate Case, which is *not* identical to Murray Direct, was struck by the Commission because it was deemed irrelevant as the application for adjustment of rates in the DEP Rate Case did not include a request for cost recovery for smart meter and customer data aggregation program implementation. Murray Direct is different testimony in substance and is relevant to the cost recovery sought by

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<sup>1</sup> More specifically styled: *In the Matter of Application of Duke Energy Progress, LLC for Adjustment in Rates and Charges Applicable to Electric Service in North Carolina*, Docket No. E-2, Sub 1142 (herein “DEP Rate Case”).

DEC in its application for adjustment of rates and also the future innovative rate designs related thereto flouted by DEC in their filed testimony.

## **I. Background**

- a. DEC's Application seeks cost recovery based upon deployment of smart meters and data collection technologies.

On August 25, 2017, DEC filed its verified Application to Adjust Retail Rates and Charges, Request for an Accounting Order and to Consolidate Dockets in Docket No. E-7, Sub 1146 (herein "Application"). In its Application, DEC seeks authority from the Commission to adjust and increase its retail electric rates. DEC partially bases this request upon the implementation of a smart meter program and new customer data system. According to DEC, these two programs will work together to aggregate customer data as the smart meter with collect customer data and then the customer data system will sort and organize that data according to DEC's parameters.

Specifically, in paragraph 6 of the Application, DEC stated, in pertinent part:

[DEC's] request [to increase rates] is driven by (a) capital investments made by [DEC] since its last rate case, including the further implementation of DE Carolinas' modernization program that consists of . . . Advanced Metering Infrastructure ("AMI") which also include smart meters; (b) investments in customer service technologies, referred to as the Customer Connect Customer Information System ("CIS" or "Customer Connect"); . . .<sup>2</sup>

In paragraph 7 of the Application, DEC states that \$15 million of the annual additional revenue that it requests is related to the CIS program and that \$45 million of its requested increase in annual revenue requirement arises from its meter replacement

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<sup>2</sup> Application, p. 4.

program related to AMI deployment.<sup>3</sup> According to this, DEC seeks in its Application an annual revenue increase of \$60 million related to the implementation of the AMI and CIS programs.<sup>4</sup>

In paragraph 9 of its Application, DEC states: “AMI is a key component of a smarter grid and an enhanced customer experience-while not part of the [Grid Resiliency Rider (herein “GRR”)], the AMI and smart meters will work with other Power/Forward Carolinas investments as well as the upgraded Customer Connect CIS to provide customers more information about their service than ever before.”<sup>5</sup>

Regarding CIS, DEC states that the new CIS system will be “complementary to future technology, and includes the ability to interface with new smart meters to enable customers to more easily start and stop service, ask questions about their bills, view their usage, and allow [DEC] to identify the optimal rate plan for each customer when asked.”<sup>6</sup>

DEC further states in its Application that it “is implementing AMI-smart meter technology- as well as investing billions in grid infrastructure over the next decade in North Carolina, improving performance and capacity of the grid, making it smarter and more resilient and give (sic) customers greater convenience, control and choice over their electricity usage.”<sup>7</sup>

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<sup>3</sup> See *Application*, pp. 4, 6-7, 9 (“By November 30, 2017, [DEC] will have replaced over 1 million meters with AMI technology. This application includes approximately \$11 million annually for return and depreciation related to these assets”), 11, 14, and 15.

<sup>4</sup> DEC’s cost recovery requests related to AMI are not exactly clear because in direct testimony filed with the Commission, only \$11 million annually is sought by DEC for AMI as opposed to the \$45 million stated in the Application. There may be a discrepancy between the entirety of AMI projected costs and just the costs associated with depreciation referenced in Footnote 3. See *Direct Testimony of David B. Fountain for Duke Energy Carolinas, LLC*, p. 15, Docket No. E-7, Sub 1146 (August 25, 2017).

<sup>5</sup> *Application*, pp. 6-7.

<sup>6</sup> *Id.*, pp. 8-9.

<sup>7</sup> *Id.*, p. 11.

As set forth more fully below, the implementation of AMI and CIS will allow DEC to utilize customer data in a number of ways, including, but not limited to, designing current and future rates. However, DEC has not sufficiently included in its proposal how the customer data will be protected and how customers and/or third parties may (or may not) be provided access to the data.

- b. The Direct Testimony filed by DEC confirms that the AMI and CIS programs for which it seeks cost recovery are interconnected and that the underlying collected data will be utilized in rate design.

The Application provides DEC's skeletal plan to implement the AMI and CIS programs to gather, sort, and utilize customer data to the benefit of DEC. The Direct Testimony of Donald Schneider, Jr. for Duke Energy Carolinas, LLC (herein "Schneider Direct") further confirms the intentions of DEC, namely, that the AMI and CIS programs will be utilized by DEC in order to gather and evaluate customer data and such data collection will affect rate design.

In Schneider Direct, Witness Schneider, when referencing the AMI program described in the Application, stated, in part:

In addition to changing out the meters, AMI covers all of the components necessary to communicate with the advanced meters *and collect usage data* and event information from them. The system includes advanced meters, a two-way communication network, and central computer systems.<sup>8</sup> (emphasis added).

Witness Schneider is referring directly to the collection of customer data from the smart meters implemented in the AMI program. Later in his testimony, Witness Schneider specifically stated the "benefits" he perceives the AMI program will provide for customers

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<sup>8</sup> *Schneider Direct*, p. 6.

and how the data, available to customers through the “Duke Energy customer portal”, will affect rate design:

Customers with smart meters will have access to detailed information about their hourly and daily usage patterns through the Duke Energy customer portal so they can make more informed choices regarding how they use energy. With the capability to record interval usage data, smart meters are a foundational technology that can enable new rate designs, as referenced in Witness Pirro’s testimony. This additional data, combined with the new Customer Information System, referenced in Witness Hunsicker’s testimony, *will provide the Company with expanded options and flexibility in supporting enhanced services and rate offerings.*<sup>9</sup> (emphasis added).

The Direct Testimony of Michael J. Pirro for Duke Energy Carolinas, LLC (herein “Pirro Direct”) confirmed the statements made in Schneider Direct regarding the AMI implementation being directly tied to rate design, stating:

DE Carolina is in the process of deploying Advanced Meter Infrastructure (AMI) that offers this level of meter sophistication as discussed in testimony of Company Witness Schneider. *The Rate Design Team is working closely with the billing and metering projects to ensure that they will support the types of rate designs that our customers will need in the future.*<sup>10</sup> (emphasis added).

Witness Pirro further testified that “[m]etering installed for the majority of current customers doesn’t yet provide the interval level data that is required to bill [for innovative rate designs]”<sup>11</sup>. Witness Pirro went on to state that DEC is “in the process of deploying” AMI in order to gather the data necessary which allow for such innovative rate design.<sup>12</sup>

In the Direct Testimony of Retha Hunsicker for Duke Energy Carolinas, LLC (herein “Hunsicker Direct”), Witness Hunsicker testified as to data gathering being used

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<sup>9</sup> *Schneider Direct*, pp. 7-8.

<sup>10</sup> *Pirro Direct*, p. 12.

<sup>11</sup> *Id.*, pp. 11-12.

<sup>12</sup> *Id.*, p. 12; *see also*, *Hunsicker Direct*, p. 10 (reiterating Witness Pirro’s testimony on the need for upgraded data collection to allow for more innovative rate design).

for future rate and rider adjustments and also regarding AMI smart meter deployment and the related utilization of the new CIS:

Through the consolidation of the older customer information systems into a new customer information system, DE Carolinas will be able to deliver a customer experience that will simplify, strengthen and advance our ability to serve our customers. Key customer benefits include the following:

- ...
- Ability to quickly help customers, provide the best, most cost effective rate structure for them, and allow the company to more quickly introduce and integrate new rates, riders and programs to better serve customers' unique needs
  - Flexibility and scale in leveraging Advanced Metering Infrastructure ("AMI") and providing customers alternative rates and enhanced basic services (pick your own due date, usage alerts, Prepaid Advantage, etc.)
  - More opportunities for advanced pricing structures and billing options[.]<sup>13</sup>

Witness Hunsicker further testified that coding the current customer information system is burdensome and time-consuming, but the implementation of the new CIS will allow for easier data integration, and that DEC plans to upgrade its meters under the AMI program with the intent that the new CIS will "support evolutions in rate designs for [DEC's] customers" by utilizing the data collected by the new meters.<sup>14</sup>

- c. Murray Direct provides expert testimony regarding DEC's proposed data collection and organization through AMI and CIS and such testimony is relevant to customer benefits related to these proposed expenditures.

Within the approximately 39 pages<sup>15</sup> sought to be struck in Murray Direct by DEC, Witness Murray presented a detailed expert analysis of DEC's AMI and CIS program proposals and also a review and evaluation of DEC's data access techniques and also the

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<sup>13</sup> *Hunsicker Direct*, p. 9.

<sup>14</sup> *See Id.*, p. 10.

<sup>15</sup> Specifically, DEC seeks to strike 39 of the 45 pages of Murray Direct.

potential customer benefits from improved data access through the adoption of “best practices” data access methods.<sup>16</sup>

While it is impractical and unnecessary to summarize here each point of Witness Murray’s testimony sought to be struck by DEC, as set forth herein, Witness Murray’s testimony directly analyzes the AMI and CIS expenditures – and the related best uses of such technologies as implemented across the country.

Regarding the purpose of his testimony, Witness Murray testified:

[DEC] seeks to recover its costs of AMI and CIS deployment in the present case. It is important that customers directly receive the full range of benefits from these investments before full cost recovery is permitted. While the deployment of AMI offers significant operational benefits to utilities, between 33% and 66% of the total potential benefits of AMI may be customer benefits, such as bill savings, as I explain below. A major lesson from prior state deployments of AMI and CISs is that full realization of consumer benefits from efficiency (or time-shifting of usage) will not occur unless consumers have convenient access to their own energy data made available by advanced meters. It is also critical that such policies are timely and consistently implemented. My objective is to highlight DEC’s shortfalls in these areas so that important consumer benefits are fully realized for DEC’s customers.<sup>17</sup>

Witness Murray also testified specifically regarding the proposed implementation of data collection through AMI and data utilization through CIS, and the lack of clarity from DEC regarding the utilization of these programs.<sup>18</sup> Witness Murray stated:

Similarly, [DEC] provides no detail about how customers will have “greater control over [their] information,” although this is touted as one of the primary benefits of the CIS. The definition of control is “to exercise authoritative or dominating influence over.” But there is nothing in DEC’s application about how customers can meaningfully exercise their purported control over their information, other than the ability to *see* one’s information on a website in the context of paying a bill.<sup>19</sup>

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<sup>16</sup> See generally *Murray Direct*.

<sup>17</sup> *Id.*, pp. 3-4.

<sup>18</sup> See *Id.*, pp. 23-24.

<sup>19</sup> *Id.*, p. 24.

Murray further details that, despite asking for significant cost recovery for the AMI and CIS programs, DEC has not proposed in its Application or the related materials (or anywhere, for that matter) any valuable customer features commonly associated with similar data collection through smart meters throughout the country, including those customer benefits outlined in jurisdictions where a state commission *required* the implementation of customer-friendly smart meter and data access programs.<sup>20</sup> In short, in Murray Direct, Witness Murray analyzes the CIS and AMI proposals made by DEC to the Commission and provides his expert analysis and suggestions related thereto.

## II. Legal Standard

“When acting as a court of record, the [North Carolina Utilities Commission] shall apply the rules of evidence applicable in civil actions in the superior court, insofar as practicable, but no decision or order of the Commission shall be made or entered in any such proceeding unless the same is supported by competent material and substantial evidence upon consideration of the whole record.” N.C. Gen. Stat. § 62-65.

In actions before the superior court, “[a]ll relevant evidence is admissible, except as otherwise provided by the Constitution of the United States, by the Constitution of North Carolina, by Act of Congress, by Act of the General Assembly or by these rules. Evidence which is not relevant is not admissible.” N.C. Gen. Stat. § 8C-1, Rule 402. “The test of relevancy of evidence is whether it has ‘any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.’ . . . [t]he burden is on the party who asserts that evidence was improperly admitted to show both error and that he was prejudiced by its admission.”

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<sup>20</sup> See *Id.*, pp. 31-32.



*State v. Gappins*, 320 N.C. 64, 68, 357 S.E.2d 654, 657, 1987 N.C. LEXIS 2177, \*8 (internal citations omitted).

“Testimony of an expert in the form of an opinion is properly admitted in evidence if the expert's specialized knowledge will assist [a factfinder] in understanding the evidence or in determining a fact at issue in the case . . . . The expert's testimony, even if relevant, must also have probative value that is not outweighed by the danger of unfair prejudice, confusion, or undue delay . . . . The trial court is afforded a wide latitude of discretion in making a determination regarding the admissibility of expert testimony.” *Thomas v. Dixson*, 88 N.C. App. 337, 342, 363 S.E.2d 209, 213, 1988 N.C. App. LEXIS 27, \*12 (internal citations omitted).

### III. Analysis

- a. Murray Direct is not identical to the direct testimony Michael Murray submitted in E-2, Sub 1142 and struck by the Commission.

In its Motion, DEC seeks to label Murray Direct as identical to the testimony struck by the Commission in E-2, Sub 1142. The DEP and DEC rate cases are fundamentally different as the DEC proceeding includes a request by DEC for cost recovery arising from the implementation of AMI and CIS technologies. Perhaps more troubling, DEC is blatantly misrepresenting in its Motion that the testimony in this proceeding is “identical” to the testimony in the prior proceeding in an effort to preclude analysis of the actual substance of Murray Direct.

DEC *repeatedly* makes the claim that the two testimonies are identical. On page 1 of its Motion, DEC states that Murray Direct is “essentially identical” to the testimony offered by Michael Murray in Docket No. E-2, Sub 1142 and which was struck, in majority part, by the Commission in that proceeding. DEC repeats this claim on page 2, this time

stating: “Further, Mr. Murray’s testimony is *identical* to the testimony filed in Duke Energy Progress, LLC’s (“DEP”) 2017 rate case, Docket No. E-2, Sub 1142 [.]” (emphasis added). Motion, p. 2. On page 4, DEC goes back to the well, stating: “The Commission’s decision to strike the bulk of *identical testimony* by Mr. Murray in DEP’s 2017 general rate case is directly on point” and also: “*Identical* to this case, Mr. Murray submitted . . .” (emphasis added). Motion, p. 4. Finally, on page 6, DEC again states that Murray Direct is “identical” to the testimony filed in the 2017 DEP rate case proceeding and “nearly indistinguishable from the customer access data policies” previously discussed by NCSEA in front of the Commission in Docket No. E-100, Sub 147. Motion, p. 6.

The direct testimony prepared by Michael Murray in the DEP Rate Case is four pages longer than the testimony filed in the current proceeding.<sup>21</sup> Furthermore, the substance of the testimony is fundamentally different. In the DEP rate case testimony, Witness Murray limits his testimony regarding the implementation of the CIS program in conjunction with the AMI program – he only mentions it on page 7 and page 20 of his direct testimony.<sup>22</sup> Meanwhile, in Murray Direct, CIS is discussed in depth on pages 3-4, 7-8, 13, 16, 23-24, 31, 41 and 43. Notably, Murray testified: “[t]he issue is that DEC seeks to recover 100% of its costs of up to \$285 million to \$295 million for its CIS, and \$197 million for AMI, yet the valuable customer features I describe are not in service.”<sup>23</sup> This substantive utility position is *not* contained in Witness Murray’s DEP rate case testimony because cost recovery was not sought in the DEP rate case. This statement alone provides

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<sup>21</sup> See *Direct Testimony of Michael E. Murray on Behalf of North Carolina Sustainable Energy Association*, Docket No. E-2, Sub 1142 (October 20, 2017), in comparison to *Murray Direct* filed in this proceeding, Docket No. E-7, Sub 1146, on January 23, 2018.

<sup>22</sup> *Direct Testimony of Michael E. Murray on Behalf of North Carolina Sustainable Energy Association*, pp. 7, 20, Docket No. E-2, Sub 1142 (October 20, 2017).

<sup>23</sup> *Murray Direct*, p. 31.

a substantive difference between the two Murray testimonies and defeats DEC's repeated claim in its Motion that the testimonies are "identical". Without outlining each and every difference contained in the two filed testimonies, it's clear that the testimony simply is not identical and many of the differences are substantively related to DEC's cost recovery request in the current rate case and its implementation of the AMI and CIS programs together.

Furthermore, DEC's position in its Motion that the two testimonies are "identical" is problematic and should be noted as such. This claim was not merely asserted in the Motion at issue here – a similar argument was made in its Motion to Strike Direct Testimony of Paul J. Alvarez filed on January 26, 2018.<sup>24</sup> DEC has absolutely no basis for its claim that the two testimonies are "identical" and DEC relies on this inaccurate claim in an attempt to exclude testimony related to the AMI and CIS programs and data access. DEC's claim that the two testimonies are "identical" serves only to streamline DEC's apparent *res judicata* argument, but this claim simply and materially misstates facts. This position is not well-grounded in fact, not warranted under law, and interposed specifically for the improper purpose of ushering in an order from the Commission striking relevant testimony.

- b. Unlike DEP, DEC is seeking authority from the Commission to recover costs for the implementation of CIS and AMI.

Aside from DEC's misstated facts regarding the two testimonies of Witness Murray, there are substantive differences between the two rate cases some of which include facts that render Murray Direct relevant. In the DEP rate case, the utility was not seeking

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<sup>24</sup> See *Duke Energy Carolinas, LLC's Motion to Strike Direct Testimony of Paul J. Alvarez*, p. 3, Docket No. E-7, Sub 1146 (January 26, 2018) ("The Commission's decision to strike the bulk of identical testimony by Mr. Murray in DEP's 2017 general rate case is directly on point.").

cost recovery for both its AMI and CIS programs. In the current case, DEC seeks to recover significant costs related to the implementation of both its AMI and CIS programs.

As such, the Commission will need to consider the prudence of the CIS and AMI investments proposed by DEC in its Application, whether such smart meter and data collection investments, as presented, are in the best interests of ratepayers, and what constitutes a reasonable ask from DEC. “The Commission must determine, in accordance with the direction of this section, what constitutes a reasonable charge for proposed services.” *State ex rel. Utilities Comm'n v. Carolina Util. Customers Ass'n*, 351 N.C. 223, 228, 524 S.E.2d 10, 15, 2000 N.C. LEXIS 6, \*6.

Furthermore, the Commission will need to determine that such programs are “used and useful” pursuant to N.C. Gen. Stat. § 62-133 so as to allow for the related costs to be included in the rate base. *See State ex rel. Utilities Com. v. Thornburg*, 325 N.C. 484, 385 S.E.2d 463, 1989 N.C. LEXIS 538. Therefore, the proposed AMI and CIS programs must be scrutinized by the Commission in order to make such determination and, as set forth below, Witness Murray’s testimony provides an expert analysis of what makes a prudent smart metering and data collection program such that it would validate the considerable investments that DEC is requesting be funded.

- c. Murray Direct is relevant as it directly details the best practices for the implementation the AMI and CIS programs.

Murray Direct provides a roadmap as to how DEC can implement a smart meter and data collection combined program that utilizes “best practices” and, therefore, is a prudent investment which provide tangible customer benefits. Under North Carolina law, as set forth above, in order for the Commission to allow cost recovery for an expenditure included in “rate base”, such expenditure must be a prudent and useful investment to the

benefit of the rate paying customers. Here, Witness Murray specifically directs how the AMI and CIS programs – of which DEC has provided very little information regarding specifically how the related data collection will be utilized for the benefit of the consumer – can be implemented in a beneficial way for rate payers. Witness Murray does this by evaluating the proposal by DEC and then providing examples and suggestions of how to implement the programs, including providing information and analysis that DEC has not provided itself in its Application and related filings with regard to customer data access in the CIS and AMI programs.

This Motion should be denied. DEC seeks cost recovery for the CIS and AMI programs, both of which they admit will affect rate design, and Murray Direct, including all the portions sought to be struck by DEC, provides an expert analysis related to the implementation of those programs and their related consumer data access issues. For DEC to argue that such testimony is irrelevant undermines DEC's own testimony that directly links implementation of the AMI and CIS programs with how customer data will be utilized both to the alleged benefit of DEC's customers and to future rate designs.

DEC seeks to avoid the discussion of data access in its CIS and AMI programs, but the issue is inherent to those programs. The CIS and AMI programs are costly endeavors that will utilize smart meters to collect customer data and allow DEC to utilize that data as they see fit. Apparently, DEC seeks to avoid discussion regarding the collection and access to that data, despite their own testimony that such data will affect rate design.

A discussion of prudent data collection, including access, must be included in this proceeding case because it is directly relevant to the substantial investment in both AMI

and CIS that DEC seeks to recover. NCSEA is troubled by DEC's attempts to strike relevant testimony in order to once again avoid scrutiny by the Commission.

#### **IV. Conclusion**

For all the reasons set forth above, DEC's Motion should be denied. Murray Direct is relevant testimony, unique both in substance and application to the requests for cost recovery made in this proceeding, and as such should be allowed into the record of this proceeding.

**WHEREFORE**, for the reasons set forth above, NCSEA prays that Duke Energy Carolinas, LLC's Motion to Strike the Direct Testimony of Michael Murray be denied and for such other and further relief as this Commission deems just and proper.

This the 1<sup>st</sup> day of February, 2018.

Respectfully submitted,



Benjamin W. Smith  
N.C. State Bar No. 48344  
Regulatory Counsel  
NCSEA  
4800 Six Forks Road  
Suite 300  
Raleigh, NC 27609  
(919) 832-7601 Ext. 111  
ben@energync.org

**CERTIFICATE OF SERVICE**

I hereby certify that all persons on the docket service list have been served true and accurate copies of the foregoing Response to Duke Energy Carolinas, LLC's Motion to Strike Direct Testimony of Michael Murray 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 1<sup>st</sup> day of February, 2018.



Benjamin W. Smith  
N.C. State Bar No. 48344  
Regulatory Counsel  
NCSEA  
4800 Six Forks Road  
Suite 300  
Raleigh, NC 27609  
(919) 832-7601 Ext. 111  
ben@energync.org