NORTH CAROLINA PUBLIC STAFF UTILITIES COMMISSION

June 9, 2020

Ms. Kimberley A. Campbell, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

Re: Docket No. E-7, Sub 1230 – Application Pursuant to N.C.G.S. 62-133.9 and Commission Rule R8-69 for Approval of Demand-Side Management and Energy Efficiency Cost Recovery Rider

Dear Ms. Campbell:

In connection with the above-referenced docket, I transmit herewith for filing on behalf of the Public Staff the following:

1. Testimony summary of David M. Williamson, Utilities Engineer, Electric Division; and

2. Testimony summary of John R. Hinton, Director, Economic Research Division.

By copy of this letter, we are forwarding copies to all parties of record.

Sincerely,

/s Nadia L. Luhr
Staff Attorney
nadia.luhr@psncuc.nc.gov

Attachments

Summary of Testimony

David M. Williamson

Docket No. E-7, Sub 1230

My testimony addresses a number of topics, including a review of the performance and cost-effectiveness of Duke Energy Carolinas' portfolio of DSM and EE programs, potential concerns with the portfolio going forward, and a review of the Company's EM&V reports filed in this proceeding.

PERFORMANCE AND COST-EFFECTIVENESS OF DUKE ENERGY CAROLINA'S PORTFOLIO OF DSM AND EE PROGRAMS

I reviewed Duke Energy Carolinas' portfolio of 21 approved DSM and EE programs. Each of these approved programs is eligible for cost recovery pursuant to the Commission's rules and the cost recovery mechanism approved in Docket No. E-7, Sub 1032 and revised in Sub 1130. My testimony highlights the metrics used to evaluate cost-effectiveness in the annual rider proceedings. I review trends of cost-effectiveness to develop an expectation of each program's performance, costs, and measure life benefits in the upcoming rate period, as well as its ongoing cost-effectiveness. I rely on these trends, as illustrated in my exhibits, to develop my recommendations concerning whether a program should be continued, modified, or terminated. Several factors such as changes in participation, standards, or avoided costs also impact cost-effectiveness.

My testimony also provides a number of recommendations to the Commission with regard to lighting standards and grid improvement impacts.

EE LIGHTING TRENDS AND THEIR IMPACT ON THE COMPANY'S LIGHTING PROGRAMS

First, I recommend that, beginning in 2021, only specialty light emitting diode, or LED, lighting be considered for recognition as an EE measure eligible for cost recovery. Over the years, the Public Staff has commented on the rate of market transformation in North Carolina with regard to lighting. The second phase of the 2007 Energy Independence and Security Act, or EISA, which would have made LED the standard lighting technology and baseline for the residential market, was scheduled to begin on January 1, 2020. However on December 27, 2019, the rules governing the second phase were re-evaluated and it was determined that the rules did not need to be amended. Regardless, the Public Staff continues to believe that the EE lighting market in North Carolina has transformed at a faster rate than that of federal guidelines. The Company, in its last rider proceeding, acknowledged the potential impacts that were going to result from the EISA 2020 rules and began working to minimize those impacts. Based on the Public Staff's review in this case, we can confirm that the Company's portfolio is already focusing more on specialty LED bulb technologies. The Public Staff agrees with this approach.

IMPACTS RELATED TO THE COMPANY'S GRID IMPROVEMENT PLAN

Second, I recommend that the Company, in the next rider proceeding, assess the costs and benefits of continuing to offer the MyHER program, which is a comparison of energy consumption and EE tips, versus providing the same comparison and tips through another channel.

Next, I recommend that the Company perform an analysis of its Grid Improvement Plan, or GIP, to explain how it will affect the ability of DSM/EE programs to produce peak demand and energy savings. I further recommend that the Company, in the next rider proceeding, explain how it will distinguish the peak demand and energy savings resulting from GIP from those resulting solely from DSM and EE programs.

These recommendations stem from the Company's pending rate case, where it is proposing, among other items, a plan to drive enhancements to capacity, data analytics/collection, and power flow capabilities on almost all of the circuits within its service territory. These enhancements are also being driven by the Company's acknowledgement that customer needs and expectations are evolving. My recommendations related to the Company's GIP proposal are centered on the potential impacts toward the Company's MyHER and DSM programs. These programs are heavily reliant on data analytics and base level system capacity on the Transmission and Distribution grids. As the Company deploys GIP, with particular regard to the availability of customer data and demand reduction, these programs will need to be re-evaluated (both internally by the Company and through EM&V) to ensure that they remain cost effective offerings, and to determine whether or not they have become standard operating procedures. To that end, I also recommend in my testimony that the Company provide in its next rider filing a list of GIP projects that have been implemented and information on how those projects have affected the performance of the Company's DSM/EE portfolio, if at all.

AVOIDED COST

In addition to my recommendations, my testimony also discusses concerns regarding the Company's use of avoided capacity benefits applied to its portfolio of programs. Specifically, I express the following concerns:

1. The Company's incorporation of a 17% reserve margin adder to all avoided capacity benefits associated with its EE programs, beginning in Vintage year 2021, is inappropriate; and
2. The Company's allocation of 100% of avoided capacity benefits to summer capacity for DEC's legacy DSM programs is inappropriate.

These concerns are discussed in further detail by Public Staff witness Hinton. The impacts of his recommendations on program cost-effectiveness are provided as part of Williamson Exhibit 3.

REFERRAL CHANNEL

The Company's contractor referral service for its Residential Smart Saver EE program is, for marketing purposes, titled "FindItDuke." This service was originally approved on February 9, 2016, when the program was known as the HVAC EE program and focused on HVAC equipment. Now that the program offering has been expanded to include additional household-related measures, the Company has also recently expanded its referral services. These services include: Heating and Air Conditioning, Insulation, Plumbing, Electrical, Pool, Solar, and Tree Removal services.

While the Public Staff does not believe that the Company has violated any

Commission rules or the Flexibility Guidelines that address how program modifications are to be handled, this expansion of the referral channel into areas not specifically related to DSM and EE programs, and services that may be otherwise recovered through base revenues, does seem to be the type of program change that should be brought to the Commission's attention for approval in advance of the change.

The Public Staff will continue to discuss this matter with the Company, and such discussions could include the potential for revisions to the Flexibility Guidelines to specifically address this type of program modification.

REVIEW OF THE COMPANY'S EM&V REPORTS FILED IN THIS PROCEEDING

With regard to the EM&V reports filed by the Company in previous DSM/EE rider proceedings, I believe the Company has complied with the Public Staff's earlier recommendations concerning EM&V, as ordered by the Commission. The Public Staff generally agrees with the findings of the EM&V reports filed in this proceeding. With respect to this proceeding, the EM&V reports filed as Evans Exhibits A through E should be considered to be complete for purposes of this proceeding.

SUPPLEMENTAL TESTIMONY

On June 8, 2020, I filed supplemental testimony to correct two values in my direct testimony and to provide an updated Williamson Exhibit 3, which is where those impacts are realized.

This concludes my summary.

Summary of Testimony

John R. Hinton

Docket No. E-7, Sub 1230

My testimony discusses DEC's proposed methods of determining the appropriate avoided capacity cost-benefits and avoided energy cost-benefits used to evaluate the cost effectiveness of DSM/EE programs and to determine the Company's portfolio performance incentive or PPI. In this proceeding, the Company proposed changes to the methods used to calculate avoided capacity cost-benefits associated with energy efficiency programs. In this filing, I do not support the 17% reserve margin adder that increases the avoided capacity-benefits associated with the load reductions from EE programs. As noted in my testimony, the Company is requesting ratepayers to pay 17% more for the same load reduction associated with EE programs over DSM programs. Secondly, including the reserve margin adder would be somewhat duplicative since the 1.05 Performance Adjustment Factor is incorporated in the avoided capacity costs. Lastly, I do not believe that this increase in the valuation of EE programs should be approved in isolation from the overall review of the DSM/EE cost recovery mechanism. The DSM/EE cost recovery mechanism involves the review of several factors; such as the overall PPI, sharing rate(s), and lost revenue.

My testimony does not support DEC's proposal that limits the application of seasonal allocation factors to future DSM programs; while current or legacy DSM programs are valued with a 100% weighting for load reductions associated with the summer season. Rather, I believe that both legacy and incremental DSM programs should be valued with the approved seasonal allocation factors, 90% to load reductions during the winter season and 10% to the summer season. My principle reasons relate to the Company's ongoing reserve adequacy studies, 2016 and 2018 IRPs, and the Company's testimony for the last two Biennial Avoided Cost Proceedings, all of which assert that DEC is winter planning. This would not devalue, but appropriately value the capacity benefits of the load reductions associated with the Company's summer season DSM programs, principally its summer season residential Power Manager program.

This concludes my summary.