Energy Policy Council

NORTH CAROLINA ENERGY POLICY COUNCIL
MEETING MINUTES
10:00 a.m., Wednesday, February 19, 2020
Archdale Building
Ground Floor Hearing Room
512 N. Salisbury Street, Raleigh, NC 27604

Energy Policy Council Members Present:
Steven Walker
Sushma Masemore
Bruce Barkley
Jenny Kelvington
Herb Eckerlin
Gus Simmons
Rachel Estes
Rick Feathers
Scott Tew
John Hardin

CALL TO ORDER

Mr. Steven Walker called the Energy Policy Council (EPC) meeting to order at 10:00 a.m. on Wednesday, February 19, 2020. After welcoming the Council members, staff and the public to the meeting, Mr. Walker asked for approval of the November 18, 2019 EPC meeting minutes. Mr. Rick Feathers moved for approval of the meeting minutes, Mr. Gus Simmons seconded the motion and the minutes were unanimously approved by the Council. Mr. Walker then reviewed the agenda and introduced the first presenter.

PRESENTATIONS

Duke Energy Carolinas and Duke Energy Progress Grid Improvement Plans Filed with the N.C. Utilities Commission

Mr. Jay Oliver, General Manager, Grid Strategy and Asset Management Governance, Duke Energy

Mr. Jay Oliver provided an overview of the reasons for making grid improvements. He shared the dynamic drivers for grid improvement which include: environmental trends; distributed technologies; threats to grid infrastructure; customer expectations; impacts of weather events; grid advancements; and concentrated growth. Mr. Oliver presented specific details about these drivers and their impacts on the grid. He stated that Duke Energy's four goals for grid improvement are to: 1) give more options and control over energy use, and tools to save money; 2) improve reliability, avoid outages and speed-up restoration; 3) strengthen the grid against physical and cyber impacts; and 4) expand solar and innovative technology through a two-way smart-thinking grid. For outage prevention, the plan includes hardening and resiliency. The plan also addresses microgrids, solar, EV charging, battery storage to expand solar and other innovative technologies.

Mr. Oliver then discussed how the Grid Improvement Plan's framework. It is intended to optimize the total customer experience, leverage modernized enterprise systems and technology advancements, protect against grid threats, and serve customers in a manner that meets industry safety, reliability and environmental standards. Mr.

Oliver concluded his presentation by sharing the social, economic and environmental benefits of the Grid Improvement Plan.

During the presentation, Mr. Steven Walker asked how much is Duke Energy investing in energy storage. Mr. Oliver stated the Duke currently does not have a great deal of storage, but relies more on islanding. Mr. Bruce Barkly asked Mr. Oliver to explain how clean energy initiatives were affected by the plan. Mr. Oliver stated that important control measures were in place for clean energy and DERs. He said that protection and controls were essential to islanding and moving power from different areas through their required 2-way system flow. Mrs. Rachael Estes pointed out that Microsoft just announced plans to capture all carbon emissions, and she shared her hopes that this type of investment can be made in our grid. She then asked Mr. Oliver if he could share more about build-out and infrastructure plans to assist with the regional effects of additional solar on our grid. Mr. Oliver stated that Duke Energy has a three-year plan to address Duke's 44KV system and 100KV system to allow for more potential solar.

Mrs. Sushma Masemore then asked how Duke make a business case for these improvements, investments for avoiding future downtime costs and how they justify the additional investments for something that has not happened yet? Mr. Oliver said that Duke considers three options to evaluate such scenarios. He said that they consider: 1) less money spent repairing infrastructure; 2) reliability benefits that customers can see; and 3) capacity added and the value-added for two-way power integration on the grid.

Recent EMC Distributed Energy Resources (DER) Initiatives
Mr. Charles Bayless, Vice President, Senior Regulatory Counsel for Raleigh-Durham Area, NC Electric Membership Corporation

Mr. Charles Bayless began his overview of North Carolina's Electric Membership Cooperatives (NCEMC) by stating that they have 103,000 miles of distribution lines, which is equivalent to 70% of Duke Energy's 145,000 miles of distribution lines. He provided information on why we need a brighter energy future. For businesses, a brighter energy future is needed to meet their sustainability goals and their need to be "green". For consumers, their environmental awareness and focus on saving money were the reasons for a brighter energy future. He stated that the NCEMC's are committed to the goal of reaching a brighter energy future through low carbon, grid flexibility and beneficial electrification.

Mr. Bayless then provided information on some of the NCEMC's microgrid projects. The projects he discussed included the Consumer Microgrid at Butler Farms, the System Microgrid on Ocracoke Island, the Heron's Nest Project at Brunswick EMC, and one at Rose Acre Farms. Some features of the projects include islanding with solar, battery storage and generators. Mr. Bayless then shared information about the NCEMC Device Development project. This demand response project promotes thermostats and water heater installations in the participating EMC's service territory. In phase one of this project, NCEMC anticipates installation of 21,000 smart thermostats and 8,000 water heaters. The project requires participants to make a three-year commitment that allows their thermostats to be adjusted (by no more than 3 degrees for up to hours) during demand response events. Mr. Bayless completed his presentation by sharing information on distribution operator platform aggregation. It offers services that meet consumer needs where they are, includes involvement levels of aggregator or virtual power plant, and brings aggregation resources to scale.

During Mr. Bayless presentation, Mr. Walker asked if there was power line interconnection between the Co-Ops. Mr. Bayless said that some have absolutely no interconnection, while some others that are located nearby are

interconnected. Mr. Scott Tew asked how soon is the aggregation project would be available. Mr. Bayless stated that they are currently working with Duke Energy on the project and have already started aggregation in the PJM territories. Mrs. Estes asked about the NCEMC's generation mix. Mr. Bayless said that they have the Catawba power plant which has 600 MW of natural gas combustion turbines, 18 MW of diesel generation, 19 MW of solar generation and storage (with plans for an additional 70 MW of solar), and an additional 1,600 – 1,700 MW of generation from Duke Energy. Mr. Gus Simmons asked if the NCEMCs have looked at the impact of out-of-date residential equipment versus more updated equipment in homes. Mr. Bayless stated that they have, especially for outdated air conditioners and water heaters, and that the cost to operate older equipment is major. Mrs. Jenny Kelvington asked if the cost of thermostats was cheaper than new generation, to which Mr. Bayless said yes.

SUBCOMMITTEE REPORTS

ENERGY ASSURANCE (EA)

Mrs. Jenny Kelvington reported that the EA subcommittee met twice since the last EPC meeting. The focus of the meetings was on preparing a response and recommendation for the EA section of the 2020 Biennial EPC Report. Topics discussed at the meeting included the resilience and security the electric grid and petroleum pipelines, and petroleum supply and redundancy for motor fuels from the two pipelines serving NC.

ENERGY EFFICIENCY (EE)

Mr. Scott Tew reported for the EE subcommittee and shared that the subcommittee met immediately after the November full EPC meeting to discuss the energy efficiency section of the 2020 EPC Report. During the meeting committee members identified gaps and areas of refinement from the previous report, alignments with the NC Clean Energy Plan, ways to include financing for energy efficiency, and carbon emissions topics.

ENERGY INFRASTRUCTURE (EI)

Mr. Gus Simmons reported that the EI subcommittee met immediately following the full EPC Meeting in November. The committee discussed reorganization of the content in the energy infrastructure section in the 2020 EPC Report, reallocation of material and creation of more current information for the Report.

CLOSING COMMENTS

Mr. Steven Walker opened the floor for public comments, but none were presented. Mr. Walker provided additional closing remarks and concluded the meeting. A motion to adjourn was made by Mr. Gus Simmons and seconded by Mr. Bruce Barkley. The meeting adjourned at 11:40 a.m.

Approved by Energy Policy Council Members
On August 19, 2020