FC1130 - 2024 - M - 779

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March 28, 2024

Ms. Brinda Westbrook,
Commission Secretary
Public Service Commission of the District of Columbia
1325 G Street, N.W. Suite 800
Washington, DC 20005

Re: FC-1130

Dear Ms. Westbrook:

The GRID2.0 Working Group submits the following comments to the DC Public Service Commission's October 25, 2023, public notice, and Order No. 21928 soliciting comments on the Value of Distributed Energy Resources (VDER) Study.

Sincerely,

Larry Martin
GRID2.0 Working Group

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE DISTRICT OF COLUMBIA

IN THE MATTER OF THE INVESTIGATION	**}**	
INTO MODERNIZING THE ENERGY	**}**	**FORMAL CASE NO. 1130**
SYSTEM FOR INCREASED SUSTAINABILITY	**}**	

The GRID2.0 Working Group submits the following comments to the DC Public Service Commission's (Commission) October 25, 2023 public notice soliciting comments on the Value of Distributed Energy Resources (VDER) Study and the subsequent Order No. 21928, dated November 16, 2023, stipulating the comment filing deadline of May 15, 2024, with replies due on or before July 1, 2024.

1. SUMMARY

GRID2.0 asserts that the VDER Study supports the basic contention that the *location of and timing* of energy inputs to the grid from behind the meter DER assets are primary factors in the value of the energy inputs. The value of DER is responsive to conditions on the District's approximately 765 different feeders, which are dynamic over time. The VDER Study is a value snapshot of a sampling of feeders. The transferability of the data analysis and findings from those feeders to the District's complete electric distribution grid is uncertain, and any findings derived by the VDER Study about the overall grid are similarly uncertain. That observation, however, is relatively inconsequential because the grid is highly dynamic over time and a snapshot is at best a point on a trend line. What is consequential is recognition that a continuous, ongoing stream of data about circuit, feeder and substation conditions is necessary to optimize the location, timing, and value of DER on the grid, and that conditions will be dynamic over time. Pepco's grid modernization efforts need to be aligned with DC's clean energy and DER programs for efficient deployment of public and private resources to meet DC's clean energy commitments. This challenge will require implementation of an integrated resource plan that is continually updated and transparent to energy service contractors (ESCOs).

2. BACKGROUND

On October 25, 2023, the Commission published a public notice soliciting comments on the Value of Distributed Energy Resources Study (VDER Study), addressing the following four questions:

a. Upon review of the Study's recommendations and proposed additional research, what are your comments, and are there any additional recommendations and/or additional research you would propose?

b. How can the Study, or successor studies, if any, contribute to the District's climate goals (specifically in the area of avoided greenhouse gas costs)?

c. How can the Study support the expansion of solar resources in the District?

d. What other recommendations, if any, do you have on the uses and applications of the VDER Study?

3. UPON REVIEW OF THE STUDY'S RECOMMENDATIONS AND PROPOSED ADDITIONAL RESEARCH, WHAT ARE YOUR COMMENTS, AND ARE THERE ANY ADDITIONAL RECOMMENDATIONS AND/OR ADDITIONAL RESEARCH YOU WOULD PROPOSE?

Overall, the findings and recommendations for incentive/rebate programs appear largely supported by the data analysis conducted in the VDER Study. There is some question about the transferability of the data analysis and findings from the feeders selected for analysis to the District's complete electric distribution grid. How representative the analyzed feeders are of the grid is difficult to ascertain. Thus,

the findings derived by the VDER Study about the analyzed feeders appear to have uncertain transferability to the overall grid.

Additional study is recommended. While the VDER Study provides a useful methodology for evaluating the District's grid at a scale useful for planning, it is only a point-in-time assessment. It models an analytical method that can be used to evaluate the condition of all approximately 765 District feeders in an ongoing, methodical process to guide Pepco's grid modernization efforts to align with DC's clean energy and DER programs, as is called for in FC-1167[1]. In other places such as Commissioner Beverly's statement in Order #20286, this is referred to as an integrated resource plan[2]. Such a planning process, referred to here as an integrated resource plan (IRP) is necessary for efficient deployment of public and private resources to meet DC's clean energy commitments. An IRP will need regular and methodical updating; and to be useful as a planning tool it will need to be available to energy service contractors (ESCOs) as well as developers.

GRID2.0 was skeptical of an IRP when it was introduced as an option in FC-1130 because of the expense. We explained our position as "why replicate data collection that the utility should already assemble to support the Annual Consolidated Report (ACR) to the Commission?" The ACR provides information on project updates, reliability, and planned improvements. This information should inform an integrated resource planning process were the utility incentivized to conduct one – which from all indications it is not. Because of this, the Commission should oversee a third party to maintain an IRP that is designed to inform decisions about where to modernize and upgrade the electric grid to best incorporate DER to control peak load demand and reduce new demand on the grid. This will optimize the value of DERs as well as inform the cost-effective design for grid modernization. The Commission should use the findings of the IRP to inform decisions on FC1167 as well as evaluating the prudence of utility rate base requests. Such information will also be valuable in the ongoing performance indicator metrics deliberation in FC-1156.

4. HOW CAN THE STUDY, OR SUCCESSOR STUDIES, IF ANY, CONTRIBUTE TO THE DISTRICT'S CLIMATE GOALS (SPECIFICALLY IN THE AREA OF AVOIDED GREENHOUSE GAS COSTS)?

As noted in #3, above, the information provided by the VDER Study and subsequent IRP process will contribute to mapping the cost-effective path for grid modernization to optimally incorporate DER, including clean energy and energy efficiency. Through so doing, data will inform the FC-1167 proceeding "…to consider whether and to what extent utility or energy companies under our purview are meeting and advancing the District of Columbia to achieve its energy and climate goals and then take action, where necessary, to guide the companies in the right direction." (see footnote #1, below). A dimension of the IRP process envisioned here that is not developed in the VDER Study is how to integrate the gas infrastructure into a comprehensive plan to decarbonize the District's energy resources. That aspect of the IRP will need to be developed in parallel to the integration of DER on the grid.

5. HOW CAN THE STUDY SUPPORT THE EXPANSION OF SOLAR RESOURCES IN THE DISTRICT?

The VDER Study can support optimal location of solar DER in DC through advancing an IRP that will both accommodate existing conditions on feeders as well as, more importantly, map requirements for grid modernization to cost-effectively and methodically improve the grid to accommodate more DER in areas prioritized for load management, electrification, and grid-edge energy generation.

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[1] FC-1167 Order #20662, November 18, 2020 Sec. I, #1, pg.1 "…the Commission opens a new proceeding to commence a climate policy proceeding to consider whether and to what extent utility or energy companies under our purview are meeting and advancing the District of Columbia to achieve its energy and climate goals and then take action, where necessary, to guide the companies in the right direction."

[2] FC-1130, Order #20286, January 24, 2020

6. WHAT OTHER RECOMMENDATIONS, IF ANY, DO YOU HAVE ON THE USES AND APPLICATIONS OF THE VDER STUDY?

In summary, GRID2.0 recommends that the VDER Study serve as a prototype of sorts to establish an IRP process that the Commission, utility, developers and ESCOs can use to plan and budget resources for grid modernization and the decarbonization of the District's energy resources. In this scenario the IRP process will inform the optimal location of and timing for DER energy inputs to the grid as well as demand management, reliability, and resilience. Such information can be used to prioritize feeder improvements to receive/manage DER and to incentivize DER priorities through existing programs such as Solar for All and the programs of the DC Sustainable Energy Utility. Ultimately, grid modernization should lead to a transactional energy market for the District where "prosumers" are empowered to buy and sell power through a bidirectional grid managed by the utility.