

PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA

NOTICE OF INQUIRY

FORMAL CASE NO. 1166, IN THE MATTER OF THE INVESTIGATION INTO ENERGY STORAGE AND DISTRIBUTED ENERGY RESOURCES IN THE DISTRICT OF COLUMBIA,

1. The Public Service Commission of the District of Columbia (Commission) has been prescribed a critical regulatory role that requires the Commission and the utilities we regulate to take into account, in all cases, meaningful steps to achieve the District of Columbia's (District) energy and climate change commitments while ensuring affordable, reliable, and secure electric and natural gas distribution service for all customers.¹ Through various orders, the Commission has evaluated and progressed initiatives that modernize the District's plan to meet targeted energy and climate goals.² By Order No. 20364, the Commission directed Commission Staff to initiate a Notice of Inquiry (NOI) to address the issue of ownership of energy storage³ devices and other distributed energy resources⁴ (DERs). Commission Staff is directed to accomplish this task by soliciting public comments and by setting out the recommendations from the Final Working Group Report (Report) in this proceeding, with appropriate modifications.⁵ In soliciting public comment, the Commission will consider stakeholders' opinions and solutions offered, decide on the novel regulatory issues related to deployment and growth DERs in the District, and ultimately develop rules around the ownership of DER, thus providing clarity to all market participants.⁶ For administrative efficiency,

¹ *Formal Case No. 1130, In the Matter of the Investigation into Modernizing the Energy Delivery System for Increased Sustainability (Formal Case No. 1130), Order No. 20364, June 5, 2020, ¶1.*

² *Formal Case No. 1130, Order No. 19984, rel. August 2, 2019; Order No. 20286, rel. January 24, 2020; Order No. 20364, rel. June 5, 2020 (Order No. 20364).*

³ Energy storage is defined in 15 DCMR §4099.1 (2019) as a resource capable of absorbing electric energy from the grid, from a behind-the-meter generator, or other DER, storing it for a period of time and thereafter dispatching the energy for use on-site or back to the grid, regardless of where the resource is located on the electric distribution system. These resources include all types of energy storage technologies, regardless of their size, storage medium (e.g., batteries, flywheels, electric vehicles, compressed air), or operational purpose.

⁴ Distributed energy resource is defined in 15 DCMR §4099.1 (2019) as a resource sited close to the customer's load that can provide all or some of the customer's energy needs, can also be used by the system to either reduce demand (such as demand response) or increase supply to satisfy the energy, capacity, and/or ancillary service needs of the distribution or transmission system. Types of DER include, but are not limited to: photovoltaic solar, wind, cogeneration, energy storage, demand response, electric vehicles, microturbines, biomass, waste-to-energy, generating facilities, and energy efficiency.

⁵ *Formal Case No. 1130, Final Report V1.0 of the DCPSC MEDSIS Stakeholder Working Group, May 31, 2019; Order No. 20364, ¶ 90, (Final Working Group Report).*

⁶ *Formal Case No. 1130, Order No. 20364, ¶17.*

the Commission opens a new case, *Formal Case No. 1166, In the Matter of the Investigation into Energy Storage and Distributed Energy Resources in the District of Columbia*, to consider the issue of ownership of energy storage devices and other distributed energy resources.

2. The Report was developed by various stakeholders, many of them expressing opposing views. The Energy Storage Association (ESA) advocated for ownership rules to seek to maximize the value of storage.⁷ Regulations, according to ESA, should be updated to reflect storage's unique qualities.⁸ Fluence, ESA and Tesla recommended that performance requirements that require assets serving grid reliability should be handled through bilateral contracts between a third-party and utility.⁹ Most stakeholders conveyed their general agreement that the Commission should classify energy storage by its primary function and regulate it accordingly, and that utilities should be allowed to, among other things: (1) operate energy storage assets in wholesale markets; (2) own front-of-the-meter energy storage assets for providing grid reliability services; (3) control energy storage assets behind-the-meter if they are to be used as a grid reliability asset and only if customers and third-party providers consent to such control; and (4) own solar photovoltaic (PV), wind, biomass, waste-to-energy, cogeneration and/or microturbine assets as long as it is not for the purposes of selling retail electricity to customers.¹⁰ With some exceptions, there is general agreement amongst the stakeholders that utilities should not be allowed to own storage assets behind-the-meter at this time.¹¹

3. The Report did not offer a consensus opinion on the issue of ownership of energy storage devices and other DERs, but included additional comments and issues for consideration.¹² For example, the Edison Electric Institute argues that there is no economic or legal basis or justification for preventing utility ownership of behind-the-meter energy storage (or any other resource), and that prohibiting ownership in this manner could ultimately harm consumers, as well as limit the growth of energy storage.¹³ NV5 Global Inc. states that allowing utilities to participate in ancillary services wholesale markets opens the door to a pseudo-vertically integrated entity.¹⁴ Further, some stakeholders believe that with the imminent deployment of advanced inverters under the Institute of Electrical and Electronics Engineers 1547-2018 Standard, DERs will increasingly play a dual function by providing services behind the meter as well as to the grid, which will require

⁷ *Formal Case No. 1130*, Final Working Group Report at 105.

⁸ *Formal Case No. 1130*, Final Working Group Report at 105.

⁹ *Formal Case No. 1130*, Final Working Group Report at 106.

¹⁰ *Formal Case No. 1130*, Final Working Group Report at 108-109.

¹¹ *Formal Case No. 1130*, Final Working Group Report at 108-109.

¹² The Commission recognizes that stakeholders offered differing opinions relating to a utility's ability to own and operate energy storage in the District. The Commission does not expect to reach a determination on that issue through this NOI. The NOI will assist the Commission in developing rules that relate to operating energy storage in the District.

¹³ *Formal Case No. 1130*, Final Working Group Report at 110.

¹⁴ *Formal Case No. 1130*, Final Working Group Report at 110. For a full account of all comments on this matter, see Report, Section 5.2.5 Learning – Stakeholder Input on DCPSC Rules Around Ownership of DERs, at 105-113.

an adaptation in regulation.¹⁵ The Department of Energy and Environment (DOEE) recommends that the only DER that requires additional rule-making is storage, because it is not a standard generating asset and provides additional functionality that requires additional regulatory treatment. DOEE believes that other generating assets do not require additional treatment, because this would require a change to the statutory obligations of the Potomac Electric Power Company (Pepco).¹⁶

4. Given the wide range of varying opinions included in the Report, by this NOI, the Commission invites comments on the issues related to the classification of energy storage, energy storage operation in the wholesale market, ownership of energy storage, behind-the-meter energy storage control, solar PV ownership, and other DERs (i.e. Solar PV, wind, biomass, waste-to-energy, cogeneration, fuel cells, microturbine assets and/or combined facilities such as solar and storage) as well as demand response, as the District moves forward with modernizing its energy delivery system.¹⁷ The Commission expects the commenters to discuss and consider the role that Pepco, the Washington Gas Light Company, and their affiliates play in energy storage and DER deployment in the District.¹⁸

5. Additionally, the Commission expects commenters to consider actions taken by other jurisdictions. For example, Maryland enacted legislation that requires utilities to develop two energy storage pilot programs. Utilities are required to use two different models from the following methods in their proposals: 1) A utility-only model under which the electric company owns and controls the project for grid reliability and operates it in wholesale markets when it is not providing grid services; 2) A utility and third-party model under which the electric company owns and controls the project for grid reliability and a third party operates it in wholesale markets when it is not providing grid services; 3) A third-party ownership model under which the utility contracts with a project owned by a third party for grid reliability and allows the third party to operate the project owned by a third party for grid reliability and allows the third party to operate in wholesale markets when the project is not providing grid services; and 4) A virtual power plant model under which the utility aggregates, or uses a third-party aggregator, to receive grid services from distributed energy storage projects owned by customers or a third party. The virtual project would be used by customers or the third party for other applications when it is not providing grid services.¹⁹ The Maryland Public Service Commission directed investor-owned electric companies to solicit offers to develop energy storage projects and submit them to the Commission for approval in accordance with the standards and timelines prescribed in the Energy Storage Pilot Project Act. The Maryland Public Service Commission further directed that energy storage project applications address the impact of each project on Maryland's policy goals, including environmental and clean energy objectives and the development of Maryland's retail energy markets.²⁰

¹⁵ *Formal Case No. 1130*, Final Working Group Report at 109.

¹⁶ *Formal Case No. 1130*, Final Working Group Report at 110.

¹⁷ *Formal Case No. 1130*, Order No. 20364, ¶ 27.

¹⁸ *Formal Case No. 1130*, Order No. 20364, ¶ 26.

¹⁹ *Maryland Law creates energy storage pilot program*, American Public Power Association, (May 16, 2019) <https://www.publicpower.org/periodical/article/maryland-law-creates-energy-storage-pilot-program>.

²⁰ Maryland Public Service Commission Case No. 9619, Order No. 89240, filed August 23, 2019.

6. The New Hampshire Public Utilities Commission approved a behind-the-meter (BTM) pilot program on January 17, 2019.²¹ As part of the pilot program, the utility was approved to install and lease BTM battery storage to study the impacts on the local grid.²² There is a “bring your own device” provision that allows for customer ownership, but utility control.²³ Vermont has a similar “bring your own device” pilot program that allows customer ownership of BTM storage.²⁴ Additionally, the California Public Utility Commission has established a Self-Generation Incentive Program to encourage consumer battery storage ownership.²⁵ The Commission notes that this is not an all-inclusive summary of other jurisdictional actions and proceedings. The Commission encourages stakeholders to consider similar projects and jurisdictional actions in their recommendations.

7. Before deciding on the regulatory treatment by the Commission of DERs and energy storage, we request that interested persons file comments addressing these additional questions:

- 1) Generally, how should the Commission classify and regulate energy storage? Please provide specific examples of proposed classifications such as generation, distribution transmission or distributed generation assets and other areas to be addressed by potential regulations. Please consider within the discussion the different types of storage (i.e., mechanical, electrical, chemical, and thermal).
- 2) What, if any, regulations should the Commission consider for front-of-the-meter energy storage?
- 3) What, if any, regulations should the Commission consider for behind-the-meter energy storage?
- 4) As the District moves forward with grid modernization what, if any, DERs (i.e., Solar PV, wind, biomass, waste-to-energy, fuel cells, cogeneration microturbine assets and/or combined facilities such as solar and storage) should utilities be encouraged to invest in? How should regulations be structured to incentivize this growth? Please provide specific examples.

²¹ *DE 17-189, Liberty Utilities (Granite State Electric) Corp. d/b/a/ Liberty Utilities Petition to Approve Battery Storage Pilot Program*, Order No. 26,209, (N.H.P.U.C.), filed January 17, 2019 (NH Order).

²² NH Order at 1.

²³ NH Order at 1.

²⁴ Green Mountain Power Corporation Bring Your Own Device Program, Second Revised Tariff Sheets 311-314 (June 1, 2020), <https://greenmountainpower.com/wp-content/uploads/2020/06/GMP-BYOD-Tariff-2nd-Revision-6-1-20.pdf>.

²⁵ *Behind-The-Meter Batteries: Innovation Landscape Brief*, International Renewable Energy Agency (2019), https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Sep/IRENA_BTMBatteries_2019.pdf.

- 5) What regulations should the Commission consider that will assist in alternative DER deployment in the District? Please provide specific language or examples of proposed regulations, if applicable.
- 6) Should additional provisions be added to the Commission's regulations to further protect consumers and the reliable operation of the distribution system? If yes, please provide specific proposed language.
- 7) Are there any parameters or steps the Commission should consider or implement before approving any potential storage pilot projects?
- 8) Should the Commission, when evaluating potential storage pilot projects, include a benefit/cost analysis? Are there unique features only applicable to storage evaluation in a benefit/cost analysis?

8. Pursuant to Order No. 20364, persons interested in commenting on the issues presented above shall file their comments no later than November 16, 2020, reply comments will not be permitted. Comments may be filed with Brinda Westbrook-Sedgwick, Commission Secretary, Public Service Commission of the District of Columbia, at the Commission's website at https://edocket.dcpsc.org/public/public_comments. Persons with questions concerning this Notice should call the Commission Secretary's Office at 202-626-5150 or send an email to psc-commissionsecretary@dc.gov.