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VIA ELECTRONIC FILING

Hon. Kathleen H. Burgess
Secretary to the Commission
New York State Public Service Commission
Empire State Plaza, Agency Building 3
Albany, New York 12223-1350

Re: Case 15-E-0751, Case 15-E-0082, & Matter 17-01276

Dear Secretary Burgess:

Digital Energy Corp (Digital) submits these comments regarding Staff's Proposal on Value Stack Eligibility Expansion Dated May 22, 2018 (Staff Proposal). Digital Energy is a DER project developer and DER management and operations consulting company. Digital assists owners in operating CHP plants in New York City and provides other consulting services. Digital appreciates the opportunity to participate in this process and wishes to note that Staff's most recent draft discussion document¹ on this topic **did include** Non-NEM CHP (CHP or Efficient CHP) in the list of "Expanded Technologies" receiving the value stack.

As Digital is focused on CHP in New York City, Digital will focus its comments on how CHP may participate in VDER and how CHP is treated in the Con Edison electric tariff. The issue of allowing Efficient CHP to participate in VDER is fraught with contradictions. Support for CHP is broad throughout all levels of government in addition to the local utilities. This is demonstrated by the support from various governmental agencies and programs: Federal (e.g. the EPA², the IRS Investment Tax Credit (ITC)), New York State (e.g. NYSERDA PON 2568), New

¹ See Staff Discussion Document on VDER Value Stack Expedited Eligibility Expansion dated Dec 18, 2017 and found in DMM at <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?Mattercaseno=17-01276>

² <https://www.epa.gov/chp/chp-benefits>

York City (e.g. NYC SBS ECSP program), and Con Edison (e.g. the BQDM Program). Even with this support, there is reluctance to allow CHP to participate in VDER.

The explanation in the Staff Proposal to deny Efficient CHP access to the VDER value stack at this time as an “Expanded Technology” is stated in the Staff Proposal and quoted here:

“Staff considered expanding CHP eligibility beyond this very narrow class to all CHP below the maximum project size, currently at 5 MW, for any customer. While some stakeholders support this, others raise concerns that the record is not adequate to assure that the environmental impact of such resources would be “no worse” than bulk system power with respect to CO2 emissions or that such resources would not unreasonably increase local pollutants in environmental justice areas or similar locations. Staff agrees with these parties that further work is needed to define “VDER-eligible CHP” such that granting eligibility to such resources will not worsen environmental impacts.”

The basis for delaying or potentially denying CHP entry into VDER is not based on any factual record but appears to be based on some comments offered in the Value Stack Working Group. Comments submitted during the working group’s review of multiple versions of the Staff’s Proposal (i.e. draft discussion documents of the Staff Proposal) had always included CHP in the expanded technologies list.³ This is the first time that we are seeing that CHP has been removed or deferred from this document. Some stakeholders who have commented to delay allowing CHP to participate in VDER at this time argue:

1. There is no record to support that CHP is at least no worse than system power. We disagree and point to the EPA information.
2. These stakeholders also suggest there is evidence from other jurisdictions that CHP may already not meet this standard of “no worse than bulk system power”. They appear to rely on a paper⁴ based on California data that has many flawed assumptions about CHP system efficiency and thereby skew the results.

³ See Staff Discussion Document on VDER Value Stack Expedited Eligibility Expansion dated Dec 18, 2017 and found in DMM at <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?Mattercaseno=17-01276>

⁴ Sonika Choudhary, SamWade and RayWilliams. “Evaluating the GHG Performance of CHP Systems: A Summary for Californian Policymakers”. CRRI AnnualWestern Conference, June 2013. http://www.energy.ca.gov/chp/documents/2014-07-14_workshop/PGandE_CRRI_CHP_paper-June_2013.pdf

3. The operational characteristics of Efficient CHP is directly tied to the maintenance of the prime mover, and in my practical operational experience is best addressed through full coverage maintenance agreements from the manufacturer of the prime mover. The best agreements pay a fee per kWh generated, as this aligns the benefits derived by both parties to keep the unit(s) producing power.
4. The Standby Rate Pilot criteria is a perfectly valid factual outcome for at least a partial set of emissions criteria and was determined through stakeholder negotiations during the most recent Con Edison rate case.
5. Digital suggests that any technology that meets the criteria in the environment impacts principle (Principle 3) should receive the E-value. If and when the criteria for E-value is not met, then the CHP facility (or other DER technology) would no longer qualify, or would be derated, for the E-value. This suggestion is in alignment with the Technology Neutrality principle (Principle 5).
6. Efficient CHP reduces emissions as stated by the EPA and others, Digital supports allowing CHP to participate in all parts of the VDER values stack except the MTC based on how the MTC is allocated today.

The arguments against allowing CHP to participate under VDER because of environmental concerns appears focused on CO₂ emissions. It should be noted that CO₂ emissions from Efficient CHP are about the same as from fuel cells⁵ (a NEM and RES/CES technology) or from direct combustion Biomass.

There are many beneficial reasons to support CHP, besides emissions benefits⁶, in the context of New York State's stated policy goals of grid resiliency, jobs creation, lower electric prices, greater reliability, and greater efficiency. In addition, the EPA has done work in this area and

⁵ <https://www.bloomenergy.com/datasheets/energy-server-es5-200kw>; Stated CO₂ emissions: 679-833 lbs/MWh

⁶ https://www.epa.gov/sites/production/files/2015-07/documents/fuel_and_carbon_dioxide_emissions_savings_calculation_methodology_for_combined_heat_and_power_systems.pdf

has stated that CHP has efficiency benefits, environmental benefits, economic benefits, and reliability benefits.⁷

Digital advocates for the inclusion of all DER technologies in VDER on a technology neutral basis. Digital believes all technologies should be eligible for as many parts of the value stack for which they may qualify. In addition, all technologies should be allowed to interact with other DERs and with Energy Storage Resources (ESRs) to provide the most efficient configurations possible. This would include the pairing of Efficient CHP with intermittent resources (e.g. solar, wind) and with ESRs. Currently the Con Edison tariff prevents these types of configurations, even the simple configuration of CHP with an ERS. Any questions about what resources should be receiving what parts of the value stack can be handled through metering and the development of proper procedures.

Other Issues and Miscellaneous Items

Standby and Buy-back Rates

Digital supports giving DERs the option to select either the Standard Rate or the Standby Rate. Digital's experience with the managing DER facilities (i.e. CHP plants) is that some DER facilities benefit from being on the Standby Rate while others do not. However, it is our observation that those facilities that benefit run at low electric load factors. Digital's experience is with electrical load following CHP facilities, with absorption chillers that utilize almost all of the thermal energy produced. However, there are plants that are either sized to have a higher electrical load factor, or are thermal load following where a forced implementation of the Standby Rate would damage the economic performance of the facility. Digital supposes that DER customers selecting the Standard Rate are paying their fair share of costs for back up service since any interruption of DER generation for 15-30 minutes will set the peak demand for the month – a large penalty. In addition, since each facility must supply a load letter to notify the utility of maximum projected peak demand, the utility should be prepared to handle the peak load.

⁷ <https://www.epa.gov/chp/chp-benefits>

Digital requests the removal of the barrier in the Con Edison SC-11 Buy-back tariff that prevents inverter based Efficient CHP from exporting to the Secondary Network. All rules in the tariff safeguarding the distribution system and the utilities' equipment would still apply.

Miscellaneous Items

There are several miscellaneous items Digital would like to mention as these items are related to VDER:

1. Digital suggests that another method be offered for dispatchable resources other than Alternate 3 for capacity, since Alternate 3 can result in capacity being determined (I assume on an annual basis) based on only one hour of performance during the summer season. This assigns a disproportionate amount of risk to the developer of the DER site for this part of the value stack. A DER can go down anytime due to electrical or mechanical failures. In addition, the utility could trip the DER offline at any time. Equipment is under stress during the hottest days during the summer which almost always coincided with the NYISO peak day, peak hour. Digital suggests an average kW measurement using between 10-20 data points.
2. Since NWAs are being offered as an alternative to the LSRV portion of the value stack (although not in this proposal), Digital requests the Commission order the utilities to file reports with the Commission on the performance of their NWA solicitations. Digital is unaware of any NWA performance information that has been made public by the utilities about these solicitations. Digital is requesting this information so the public and the developer community can understand whether the NWA market, as structured by the utilities, is working. The utilities set the rules for their NWA solicitations but have failed to provide general information about the responses they have received. These NWA proposals take a great deal of time to prepare properly and without feedback the goals of using NWAs are less likely to be realized. Some key metrics that would help the developer community understand the state of the NWA market are: the number of responses, the type of solutions being offered, how many of each solution type, ranges for the \$/kW, range of \$/kW by solution type, etc. This
3. Currently inverter-based Efficient CHP is prevented from exporting to the Secondary Network in Con Edison territory under the Buy-back tariff (SC-11). Digital requests this prohibition be removed. All other technologies are allowed to export to this network under Con Edison's

Rider R or SC-11. Digital understands from informal conversations with Staff and Con Edison representatives that there appears to be no objection to removing this barrier.

4. The Con Edison Buy-back tariff does not include a prescriptive payment for capacity as in the tariffs of the other investor owned utilities. Digital requests such an omission be corrected, and a capacity payment be prescribed into the Con Edison Buy-back tariff.

Summary

In summary, Digital requests the Commission include Efficient CHP in the list of expanded technologies. Not including CHP violated the Technology Neutrality Principle as stated in the Staff's Proposal. The argument that Efficient CHP CO2 emissions are greater than bulk system power does not appear to be valid, especially in the Con Edison territory. Digital believes all DER technologies that can meet the Environmental Impacts Principle should be allocated the E-value of the value stack.

Under Miscellaneous items Digital requests: 1. A replacement/alternative method be offered to Alternate 3 for the capacity portion of the value stack; 2. Transparency on the performance of NWA solicitations; 3. Removal of the barrier preventing inverter based Efficient CHP from exporting onto the Secondary Network in the Con Edison Buy-back tariff SC-11; and 4. The Con Edison Buy-back tariff be changed to include a capacity payment.

Digital supports VDER and the VDER process and appreciates the opportunity to participate. The market as structured by the regulations will decide whether projects are developed, whether they succeed or fail. Digital believes greater transparency will facilitate more efficient markets.

Digital regretfully files these comments late and requests the Commission accept them in view of the recent hot & humid weather in New York City causing the need to allocate more time to managing facility operations. Thank you for your consideration in this matter.

Respectfully Submitted,



Jonathan Lilian

Vice President, Digital Energy Corp