VILLAGE OF HYDE PARK
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August 16, 2023

Holly Anderson, Clerk
Vermont Public Utility Commission
112 State Street, 4th Floor
Montpelier, VT 05620-2701

Re: Status Update - Case Nos. 21-1939-PET, 21-1940-PET, & 21-1941-PET

Dear Ms. Anderson:

Regarding the above-referenced cases, The Village of Hyde Park Electric Department ("HPE") submits the following update to the Vermont Public Utilities Commission ("Commission") and the parties. The information in this update is also relevant to presently outstanding interconnection applicants in the HPE interconnection queue. HPE notes it filed a prior update in these cases on July 11, 2023.

Historically, HPE has stated that it believed new interconnections to its system may be harmful to the operation of the utility due to certain technical and economic conditions. HPE has begun a series of efforts and studies to assess its electrical system conditions. On August 2, 2023, HPE received a report from PLM Engineering that confirms there are system limitations for allowing new interconnections, however, a solution to address the technical parameters of those conditions is available to HPE. This solution would have equipment additions be placed both internally and externally to HPE. One initial conversation with an affected external utility identified that this solution may encounter resistance to implementation, thus, HPE will need to have further discussion with them before any conclusions can be made. HPE is also seeking coordination with neighboring utilities for support during times when system improvements will take place.

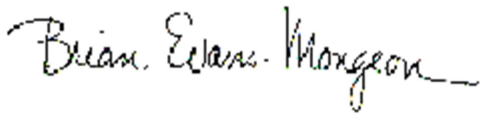
The engineering report identifies the primary limiting factor on the HPE system to be transient ground fault overvoltage (TGFOV), and also provides a technical solution for addressing present and future interconnection needs and requests. The solution requires upgrading lightning arresters on its' B-15 interconnection with GMP. These arresters will avert TFGOV concerns should certain loading conditions occur within the HPE system. These technical improvements will permit the addition of all currently outstanding interconnection requests. HPE has already begun identifying sources for the lightning arresters and looking at possible timeline scenarios for purchase, installation, and commencement of operation. Initial estimates show that this timeline could be six to nine months. Additionally, as some of the arresters need to be installed outside of the HPE system, HPE will need to coordinate the supply and installation with those utilities.

The HPE system analysis was conducted as a whole system. Preliminary internal system analysis has indicated that there are phase loading imbalances within the distribution feeder system. Depending upon where each interconnection request is located within the HPE system, a rebalancing of loads may be necessary to allow for the addition of some or any of the outstanding NMR requests. HPE has begun work to assess what the present phase line loading looks like and to analyze that against the geographic locations for the current proposed interconnection sites and future requests. HPE is also looking to see if additional internal protection system equipment will be necessary to protect the system from internally system driven events.

That being said, while the technical requirements have been identified, there are still economic and market tariff conditions that will also need to be factored into any actions moving forward. The August engineering report provides HPE with some parameters that will be used to further study and assess economic conditions that affect the utility's cost of power supply. The study shows that increased generation within the HPE system will increase the number of hours of exporting power out of HPE and onto the GMP transmission system. Economically, this can mean increased power costs for all HPE customers. At times, the zonal market price for load in Vermont can be negatively valued. When HPE exports power and the zonal price is negative, the formulaic result means increased costs to HPE. While it will be virtually impossible to absolutely predict when these conditions will occur, HPE will likely need to conduct some level of probabilistic analysis, as well as additional production cost modeling, to assess the future potential cost impacts. This effort will also take into consideration the value/cost of the added generation coming from the new interconnection of generation resources against the present and future expected resource mix.

HPE is proceeding with addressing these matters and will continue to provide monthly updates as we move forward.Thank you for your attention to this matter.

Sincerely,



Brian Evans-Mongeon
Acting General Manager