TO: Marco Padula and Staff

RE: Standby Rate Pilot Perspective from Demand Energy

Demand Energy has been an active participant in the evolution of rate design as a method to enhance the overall system efficiency of the emerging digital grid as outlined by the Reforming the Energy Vision (REV) in New York State. We have used the ability to leverage Standby Rates as a path to more rate granularity and optionality to drive benefits for commercial customers that are willing to participate while delivering load management to help optimize the efficiency of the electricity delivery system which includes Generation, Transmission, and Distribution as the key components of the grid.

Our use of the Standby Rate structure may confuse some in the rate collaborative as to our goal; System Efficiency. As the opening paragraph of the ORDER ON NET ENERGY METERING TRANSITION, PHASE ONE OF VALUE OF DISTRIBUTED ENERGY RESOURCES, AND RELATED MATTERS (Issued and Effective March 9, 2017) states: “This order achieves a major milestone in the Reforming the Energy Vision (REV) initiative by beginning the actual transition to a distributed, transactive, and integrated electric system. Our decisions here represent the first steps in the necessary evolution of compensation for Distributed Energy Resources (DER) from the mechanisms of the past to the accurate models needed to develop the modern electric system envisioned by REV through the development of Value of Distributed Energy Resources (VDER) tariffs.”

Our concept in this rate design will allow storage to be used as a grid resource that Con Edison can derive benefits from as well as provide for higher system capacity factors that support lower cost distribution grid operations. Through use of an innovative voluntary load reduction rate, participating customers will benefit from reduced delivery costs. In exchange, timely load reductions will be achieved through use of locational and time-based marginal pricing. These pricing models will allow Con Edison and the PSC to test the transformation of the current analog rate structures to rates that support the emerging digital power market for distribution. The proposed pricing model will test if load is elastic to price as we believe. To date our discussions with Con Edison in the Rate Collaborative meetings have resulted in only offering locational and temporal based differentiation during the four-month summer period. The company’s view is that load reduction is only necessary during the summer air-conditioning season and there are no marginal benefits to be derived by load shifting in the winter period. While this may be the classic view of rate design at the distribution level, we believe that the entire delivery system benefits from load leveling year-round by improving:

- Generation- by creating more load at night which will convert more load following generators to operate as base load systems which will improve the heat rate per kilowatt-hour and reduce greenhouse gas emissions.
- By moving this extra generation through the transmission systems at off-peak hours reducing congestion at the peak periods.
- By reducing the I²R losses experienced by both the Transmission and Distribution systems everyday by time shifting load to the lower trough period in the day and reducing the amount of energy being transmitted during the peak period of everyday.
- By lowering the wear and tear on the delivery system by reducing the heating effect of the I²R losses which accelerate the decay of underground conductor insulation and reducing the potential of shorting in the underground wires that disrupt service.
- By improving network utilization factors within in the Con Edison service territory which supports the concept of Non-Wires Alternatives that are currently being implemented.
We believe strongly that the opportunity to improve system efficiency via a voluntary rate that is based on locational, environmental, and temporal values embraces the future and provides market based signals to willing participants that agree to take the risk of a higher rate structure in order to provide system benefit and be rewarded as active market participant.

Our suggestion is that we expand the period 1 and period 2 structure that the company has suggested into the winter period. The company has suggested that 25% of the revenue from period 2 in the summer (8am to 10pm) be shifted to period 1 (8am to 6pm) except in Tier 2 DLRP networks where the company has requested a 35% revenue shift. Period 1 will be reduced from a 10-hour period to a 4-hour period that is coincident with the CSRP call window for each network. Our suggestion is that a Period 1 be created for the winter and follows the same revenue shifting percentage to the Tier 1 and Tier 2 networks. This level of differentiation will help move the large commercial loads in New York City to become participants in the pilot where there is strong interest but current standby rates are punitive.

Thank you and we look forward to our discussion.

Doug Staker

Vice President of Global Business Development

Demand Energy