



STATE OF CONNECTICUT

PUBLIC UTILITIES REGULATORY AUTHORITY

CONNECTICUT DISTRIBUTED GENERATION TECHNICAL WORKING GROUP

REGULAR MEETING AGENDA

Tuesday, October 19, 2021

9:00 AM – 11:00 AM

Location: [Microsoft Teams](#)

9:00 AM – 9:05 AM Introduction and Adoption of Meeting Minutes

- Carl Nowiszewski suggested that the final meeting of 2021 be a planning meeting at which the group can decide the 2022 meeting schedule, meeting topics, and wrap up any outstanding issues.

Solar plus Storage Discussion (9:05 AM – 11:00 AM)

- Automatic Transfer Switches (“ATS”)
 - The Green Bank is looking for clarity on ATS requirements in order to island and on the approval process for new devices
 - Per Eversource, the approval process for meter socket devices requires greater scrutiny than other ATS because there are standard meter sockets in the I&R book and these devices are outside of standard configurations
 - Eversource does not approve ATS devices on the customer-side; that’s up to the local building inspector
 - Despite the prohibition on meter socket devices, some contractors are still installing unapproved meter-socket devices
 - Mike Farrell noted that sometimes he finds unapproved GenerLink switches, which must be removed as they are not compatible with solar systems
 - From the EDC perspective, the main concern with meter socket switches is preventing power flow back onto the grid and ensuring that technicians are properly trained so they can safely interact with these devices in the field
- Terminology Discussion on Storage
 - David Ferrante noted that the term “standalone storage” is being used improperly to refer to storage located behind a load, e.g. a battery installed in a residence without on-site generation. “Standalone storage” should be used only for systems not behind another load.
 - Mike Farrell agrees that the term is confusing and that a more appropriate set of terminology is “storage with solar” and “storage without solar.”
 - The working group agrees to use these terms
- Discussion on Solar and Storage Configurations under new tariffs
 - Working group viewed draft wiring diagrams for various residential solar and/or storage configurations
 - Adding a second solar system to an existing net metering system would not require new screens to be developed; EDC would aggregate the two systems and use the existing screens.

- The EDCs look at the aggregate AC value of a system and not the DC rating because the AC rating of the inverter is the chokepoint of the system
- Sam asked a question about whether a residence can have a system in excess of 25kW if the surplus load was metered separately
- Green bank stated that this would be possible but the system beyond 25kW would have to be separately metered and under a different tariff
- Carl noted that the new program administrators, Hannah and Marissa, have been doing presentations on this topic and could provide clarity
- Green Bank asked whether it was possible to charge a battery in a storage with solar system set up in the buy-all configuration
 - Eversource noted that although technically feasible, the way the transaction is structured under the tariff, it is a practical impossibility
 - Mike Farrell states that he would use the netting tariff if a new customer wanted a solar plus storage configuration
- Green Bank mentioned that a storage without solar system could participate in the new battery incentive program
- David Ferrante mentioned that most storage without solar is installed in lieu of a generator and that those customers may not want to participate in the program
- Paul Tangredi also raised the complicating factor that a battery without on-site generation is not considered a QF and therefore would require the customer to pay for bidirectional metering and sales would occur under a different tariff. Paul suggested that the economics of battery-only export should be reexamined because he doesn't think that it will make up a significant portion of the program as it may not make economic sense for these customers to participate.
- David Ferrante noted that a battery could expect an 18% loss in efficiency if it charged and discharged from the grid
- The Green Bank noted that all batteries installed under the new program are assumed to participate in the battery incentive program and are not able to arbitrage on time-of-use rates like they do in Massachusetts or California
- Arbitrage was not built into the program design; the focus was on resiliency and the distribution system
- It was assumed that a customer without solar would charge outside of TOU high rates
- Sam asked whether demand charge management would be considered arbitrage
- Per Green Bank if a C&I customer's discharge time coincides with their peak, it could have a positive effect but all program participants will be required to allow the utility to control its discharge settings
- Discussion on Transmission studies
 - John Demay asked questions on when transmission studies were needed for projects connecting to substations that have greater than 20MW of DERs already interconnected

- Brad Marszalkowski stated that it's up to the transmission owner to decide whether to do a comprehensive analysis for each such project or to wait and do a cluster study; each project, however, would need a study
- The EDCs stated that they loop in the transmission planning organization when they receive applications that require transmission studies and try to notify the applicants as soon as possible.
- The EDCs try to do the transmission and distribution studies at the same time
- The EDCs don't have an official process for cluster studies, but Eversource has recently done one, UI has not done a cluster study to-date