

STATE OF CONNECTICUT

PUBLIC UTILITIES REGULATORY AUTHORITY

CONNECTICUT DISTRIBUTED GENERATION JOINT TECHNICAL AND POLICY WORKING GROUP MEETING

MEETING MINUTES Tuesday, February 22, 2022 9:00 AM – 12:00 PM

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

Long-Term System Planning and Cost Sharing – Eversource Presentation

- In Massachusetts most interconnection issues arise from PV interconnecting in light load/rural areas
- In CT, there are 6 substations with little/no capacity that would require significant upgrades, which are cost-prohibitive for a single developer
- A solution to this problem is the use of group studies, which would anticipate current and future needs, beyond just what is presently in the queue
- Group study process would determine whether upgrades would also benefit the ratepayer
- Substation level upgrades are cost-prohibitive for single developers
- When evaluating distribution and bulk substation capacity, Eversource uses n-1 contingency to make sure customers have a backup if the largest transformer goes down
- Most single substations are backed up via loop to other substations
- Under the proposal, the group study and future developers will all pay the same per kW cost
- Eversource uses a standard 62.5MVA transformer for new construction and replacements but some smaller transformers are still in service
- Three types of substation upgrades to increase capacity (from simplest to most complicated/costly)
 - Replace existing transformer; may require ancillary upgrades
 - Adding a new transformer
 - Station expansion may require transmission upgrades
- Three types of distribution system upgrades
 - Service upgrade
 - Feeder upgrade
 - Backbone upgrade
- The allocation of transmission upgrade costs still needs to be determined
- Many upgrades can increase reliability for all distribution customers, which should be accounted for in cost allocation

- The goal is for the EDCs to do studies on a yearly basis
- The group study would also require a transmission study
- The Massachusetts 10-year DSP is still under review in 20-75-C
- A proactive system planning process is necessary
- Noel mentioned that even if substation upgrade costs were subject to cost sharing, the distribution system upgrades, e.g. single- to three-phase, could still be cost prohibitive
- Eversource stated that the CIP fee in MA includes certain distribution upgrades to prevent free riders
- However, it is difficult to know where new feeders will be added in the future as they cannot be built without projects to utilize them
- The long-term planning process for DERs has synergies with the capital planning
- Jon asked whether phase comparison schemes or ROCOF would be feasible alternatives to a direct transfer trip
 - Eversource stated that transfer trips are required for very few projects and phase loss wasn't a reliable enough alternative
 - UI stated it was open to investigating the use of ROCOF

Other Matters

- A participant asked whether a residential system consisting of a 15kW solar system and a 15kW battery storage system would fall under level 1 or level 2 screens
 - If both systems are set up in an export configuration, would be over the 25kW threshold for level 1 screen
- CT Developers are still looking for a public queue with the fields identified in the IREC model procedures
- Residential Developers stated they were having issues getting their interconnection applications approved
 - Many installers facing long delays from submission of application to approval
 - Some issues are the significant differences between the UI and Eversource interconnection forms and processing
 - Difficulty obtaining energy audits, gas meter numbers and job numbers
 - o Plan is to discuss at the education seminar scheduled for the end of March