



STATE OF CONNECTICUT

PUBLIC UTILITIES REGULATORY AUTHORITY

CONNECTICUT DISTRIBUTED GENERATION TECHNICAL WORKING GROUP

REGULAR MEETING AGENDA

Wednesday, January 19, 2022

9:00 AM – 11:00 AM

Location: Microsoft Teams

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

- Education subcommittee is planning on meeting later this month

Eversource Demo of Upgraded Hosting Capacity Map

- Eversource presented a demo of its upgraded hosting capacity map (HCM) which is currently in development but is likely to be released in the next few weeks
- The new HCM has the following features:
 - Shows the changes in capacity on a given circuit as you move farther from the substation
 - Added a measurement tool, which can be used to create rough estimates of upgrade costs for existing single phase (assuming \$1M per mile)
 - Added overlays: satellite, navigation, etc.
 - The new map has 400-500x the information of the prior version
 - 3-phase service drops are now included
 - If applicable, distribution substation circuit names are now shown as well as bulk circuit names
 - The maps display the bulk substation rating, which is calculated by assuming that the largest transformer goes down and then taking 95% of the remaining value; value includes transformer cooling
 - Added bulk substation hosting capacity
 - Shows DERs online and DERs in queue for each circuit
 - HCM indicates whether a circuit is FERC jurisdictional
 - Shows whether ASO study is ongoing on circuit
- HCM is based on values from Synergy; the steady-state analysis determines the voltage and thermal ratings, displaying the lower of the two
- HCM does not show individual reclosers, fuses, etc. but Synergy will look at all devices on a circuit and update capacity accordingly
- Within next few months, substations will be easier to find – they will be surrounded by a box with the substation name visible
- If working within an urban area with network protectors, developers should contact Eversource because HCM doesn't show capacity for low voltage lines
- Prior version of HCM showed estimated/aggregate circuit capacity whereas new version is more granular
- If a substation is the limiting factor, the bulk substation capacity will show up as zero

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- If a particular feeder cannot accept a load due to engineering constraints, that feeder will not appear on the HCM
- A primary purpose of the HCM is to highlight areas where DER development is easiest; the EDC will, however, examine all feeders even those not shown on map if an application is submitted and study performed
- Reverse load constraint information is based on meter data; assumptions may be used if meter data is unavailable

UI Hosting Capacity Map Discussion

- UI's HCM is still in development
- Development was delayed when the HCM team had to develop EV hosting capacity maps but the work on the EV maps can be leveraged for the HCM
- The HCM will have show substations, circuits and segments as well as queue information
- The plan is to update the HCM on a quarterly basis
- The goal is to get the first version up and running and then compare the product to the recommendations provided by Solar CT
- Estimating a mid-late February go live date
- The HCM will be similar in layout and functionality to the HCMs in NY sister utility territory
- The map values will be based on the following four values: thermal loading; normal voltages; voltage variation; and reverse power flow

Existing Interconnection Guidelines

- Noel raised an issue occurring in Massachusetts where relatively small 200-700kW systems deployed in urban areas are needing impact studies and was concerned that this issue would arise in CT because DEEP is encouraging more urban deployments
- UI noted that certain urban areas, such as Bridgeport and New Haven may follow a different path for interconnections
- Joe Marranca of UI suggested the Working Group review the current guidelines and propose possible changes to the fast track process

Public Queue Discussion

- Solar developers would like a public queue
- Eversource believes that the HCM fills the same purpose and that the best approach is still to consult the map and file an application to hold a queue position
- Mike Trahan stated that a separate queue is a best practice and should be created
- Celia of Select Energy stated that in Massachusetts the queue has been helpful and that it is in everyone's best interest to limit the number of applications (rather than have many applications for the same project as a hedge because queue position is unknown)
- John stated that if the information was to be in two locations, data integrity is key. The MA queue and hosting capacity map don't always align. He stated that the

HCM adds the most value but that the queue also has value, especially in highly constrained areas

- The data recommended to be included in the IREC model queue differs somewhat from the queues in some states such as Massachusetts and California

Action Items

- All members to review current interconnection guidelines for discussion at next meeting:
 - [Guidelines for the Interconnection of Residential Single Phase Certified Inverter-Based Generating Facilities of 25 kW \(AC\) or Less](#)
 - [Guidelines for Generator Interconnection, Fast Track and Study Process](#)
 - [Exhibit B--Generator Interconnection Technical Requirements](#)
- Solar developers to provide which specific fields should be included in public interconnection queue