CONNECTICUT DISTRIBUTED GENERATION TECHNICAL WORKING GROUP

MEETING MINUTES
Tuesday, April 20, 2021
9:00 AM – 11:15 PM

Attendees:

- Andy Mayshar, Con Ed Clean Energy Business
- Jean-Paul LaMarche, Clean Focus (Greenskies)
- Carl Nowiszewski, Eversource
- David A Ferrante, Eversource
- Joseph Debs, Eversource
- Mark Kirschbaum, UI
- Joseph Folz, UI
- Elder Romero, UI
- Joseph Marranca, UI
- Brad Marszalkowski, ISO NE
- JR Viglione, OCC
- Ion Balan, UI

Facilitators:

- Zak Alexander, PURA, Zachary.Alexander@ct.gov
- Lauren Bergman, PURA, Lauren.Bergman@ct.gov

Not in Attendance

- Amanda De Vito Trinsey, CIEC/Couch White, LLP

.Meeting Schedule and Minute Keeping

- Monday, May 24, 2021
  - *Jean-Paul LaMarche or designee to take minutes*
- Tuesday, June 22, 2021
  - *David Ferrante or designee to take minutes*
- Tuesday, July 20, 2021
  - *Joseph Folz or designee to take minutes*
- Tuesday, August 24, 2021
  - *Amanda De Vito Trinsey or designee to take minutes*

1. **Previous Meeting Minutes Reviewed & Approved**

2. Eversource Presentation on Hosting Capacity Maps

Presented by Joseph Debs

- Eversource's current & future Hosting Maps.
- Cautioned that hosting maps may not always reflect current queue and should only be used for preliminary guidance
- Provide ability to establish reasonable expectation of connection at a particular site, i.e. what interconnection will look like before you apply
- Quick, easy way to evaluate sites for interconnection
- Disclaimer spells out limitations of capacity maps
- Gather all information about all interconnections and run scenario of hosting capacity maps monthly
    - Estimate maximum hosting capacity without significant upgrades
- Hosting capacity maps updated once a month
- One-month lag between new generation added and what's shown on map
- For informational purposes, does not provide detailed explanation of upgrades
- Information provided:
    - Circuit, voltage, substation, hosting capacity
- Limitations
    - Does not secure queue position
    - Does not include all voltage and thermal scenarios
    - Does not include protection and control limitations
    - Do not all support reverse flow – can change if aware of issue
    - Does not consider temporary overvoltage of risk of islanding
    - Does not provide equipment upgrade information
- Impact study needed to provide information on equipment upgrade
- Hosting capacity is dependent on load in an area
- Even if within the capacity limits, may still need small upgrades
- Need to consider the availability of overhead lines – additional challenges when lines are underground
- Constraints can occur in circuit or substation, or both
- Working on user manual and log in to help users employ the maps and track usage
- Other upgrades include more granular data, information on queue, measuring tool

3. UI Presentation on Hosting Capacity Maps

Presented by Elder Romero

- UI has two hosting capacity maps – one for residential PV (secondary lines) and a beta version of a map for primary lines (covering only a single substation)
- Demonstrated the secondary map and the ability to search on a Residential Account to determine if an upgrade might be required
- Presented info on Avangrid hosting maps in New York
- Cautioned that hosting maps may not always reflect current que and should only be used for preliminary guidance

- Over 95% of interconnection applications are for residential rooftop PV
- Use ESRI mapping
- Testing ESRI, kevala, and EPRI for new mapping capabilities
- Public facing map has legend for whether interconnections are possible at a specific location
- Provides enough granularity to search by address
- Includes measurement tool, can draw on map
- Eligibility form to allow developer to input details of proposed system, obtain more detailed response on what is allowed
    - Provides basic information before proceeding with application
- Circuit models were updated once a year, DG updated more regularly
- DER data updated quarterly
- Primary hosting capacity maps are still a work in progress but UI is hoping to leverage work done by sister utilities in New York to increase the speed of deployment

4. ISO-NE Presentation on IEEE-1547

Presented by Brad Marszalkowski

- Currently inverter manufacturers products don't meet this standard – implementation timelines may change based on when manufacturers can meet these requirements
- Indicated that a common standard for all ISO New England territory was desired
- The developers agreed that a common standard was desirable
- IEEE-1547 includes guidelines on connecting DERs to distribution network
- Critical to the inclusion of DERs
- Behind the meter solar is one of largest sources in ISO-NE
- PV mostly in MA, good amount in RI and CT
- Important to study system-wide
- Most recent version is 2018
- Islanding not big issue if you have shale trip set up correctly
- MA TSRG working on implementation standards for NE

5. Discussion on IEEE-1547 Presentation

- Multiple developers support standardized guidelines for NE
- Connecticut could adopt the standards being developed by MA TSRG and ISO
- First item is the bulk system support implementation, ride through
    - Try to stick with MA's timeline for implementation
- Similar standards across states helps utilities who work across multiple states
- ISO NE wants NE-wide implementation of 1547

6. Open Discussion

- Developer feedback on hosting map presentations positive
    - Most important is keeping maps up to date

    - Including queue is a positive change
- Future discussions: Implementation of IEEE-1547
    - Highly detailed and technical
    - Difficult challenge, big effort
    - What system is needed to work through IEEE-1547 implementation
    - How to leverage best practices from MA
- Worth investigating MA's approach to IEEE-1547
- IEEE-1547 governs standards
- MA is working on process for implementing IEEE-1547
- Policy group needs to take into account shifting policies to best implement standards
- Large amount of PV interconnecting in low load areas leads to congestion
- Implementation/process/policy issues that will not be addressed by IEEE-1547