

CONNECTICUT DISTRIBUTED GENERATION TECHNICAL WORKING GROUP

MEETING MINUTES

Monday May 24, 2021

9:00 AM – 11:15 PM

Introduction and Adoption of Meeting Minutes

Follow Up on Hosting Capacity Maps presentations

Follow Up on IEEE-1547 presentation

Learning from MA's Adoption of IEEE-1547

New Matters/Open Discussion

Attendees:

- Andy Mayshar, Con Ed Clean Energy Business
- Carl Nowiszewski, Eversource
- David A Ferrante, Eversource
- Mark Kirschbaum, UI
- Joseph Folz, UI
- Joseph Marranca, UI
- Brad Marszalkowski, ISO NE
- Russell King, CIEC
- Joseph Debs, Eversource
- Elder Romero, UI

Facilitators:

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

Not in Attendance:

- Jean-Paul LaMarche, Clean Focus (Greenskies)

Meeting Schedule and Minute Keeping

- 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. Follow Up on Hosting Capacity Maps presentations

- Discussed concerns about publishing substations on the hosting capacity maps. Eversource did not identify any concerns and UI will check to make sure it is not an issue with publishing substation approximate location on the hosting capacity maps.
- UI will be working on a process on how to calculate the substation HC value and how much information can be published.

- UI will check with their colleagues in NY but believes the maximum amount of generation supported at a substation is approximately 75% of transformer name plate rating.
- Discussed using the HC maps to conduct the interconnection screen instead of the current screens.
- If Eversource / UI use the hosting capacity maps this will impact the screen and they will have to be changed.
- Replacing the screen simplify screens for behind the meter but may be difficult to use screen for projects with no services
- UI approach to screen automation screen, did not expect the HC will be a substitute for analysis but had some discussion on screen automation to gain efficiency. At this time, it is not clear on how much of the interconnection process can be automated.
- UI: Some of the automation can include some of the work performed during Impact Study
- Consider looking at the current track and put a cutoff point to simplify automation of small projects.
- Large projects that only push power out are the most likely to create a negative impact on the distribution system.
- PURA Staff: Screen may be changed perhaps without a full-blown process if the changes are considered beneficial and maybe appropriate if handles by working groups.
- PURA: Maybe this group can come up with list or issue that needs consideration in terms of changes to screen and pass on to process group and review by technical group than submit to PURA for final approval. UI and Eversource are OK with this approach
- Team to follow up with idea for next steps

3. Follow Up on IEEE-1547 presentation

- Discussion of any concerns or TSRG point including ISO-NE presentation: None identified.
- What is our role and what we want to take on when it comes to IEEE1547?
 - Leverage work accomplished by MA TSRG
 - Do we Defer to MA for any issues?
 - May need third party to have a voice in IEEE discussion such as NREIL or EI etc... do we want to drill down ourselves or do we want or rely on MA TSRG?
 - PURA: Do we understand what MA is doing? Or do we want to do a full investigation, or something in between will suffice?
 - David Ferrante: Currently Eversource and UI are following the latest version of IEEE 1547 and already implemented interim tech standards including SA certification to support to bulk system.
 - Having common inverter settings in New England will minimize variability of default settings and ensure inverter manufacturers are confused about what inverter settings to use in each state.
 - ISO-NE work in TSRG has included inverter manufacturers and solar developers. A document is available that is going for approval and has been reviewed by EPRI.
 - Utilities outside MA are also on-board including Vermont, and Maine. The TSRG includes collaboration from New England as a whole.
 - ISO-NE: TSRG Document is not public yet but is available to members.
 - PURA: The adoption of a regional standard is not a bad thing and maybe should be adopted since it did go through a technical review.

- PURA Question: Since MA is ahead of us and there is no reason to revisit what would make sense for this group to do. Should the CT team review MA work? ISO-NE is concerned about the whole system but there are other aspects to consider including power quality etc.... refer to road map in the presentation.
- ISO recommend following the MA TSRG lead since they're fully committed with the two largest utilities (NGRID and Eversource) on the work force collaborating
- ISO-NE states the current standard effectivity date will be April 1st, 2022 and for smaller invert < 100 June 1st, 2022. There is no plan to apply retroactively.
- Compliance with IEEE1547 SB to ensure all inverters are certified and in compliance.
- UI: TSRG concerns about anti islanding allows utilities to adjust settings to 2-3 seconds. More work needs to be done on this as this is a big concern for UI.
- ISO-NE stated that islanding is the biggest concerns at the meeting but Sandia and EPRI has done a lot of research and stated that if you rely on other functions than this is not a concern.
- UI may need to do time domain analysis.
 - Time domain discussion to address TOV and Islanding issue
 - Time domain study performed in PSCAD are complex and time consuming. They can easily double the time it takes to conduct an impact study.
- Existing Fast Track Screens were never expected to handle TOV or islanding in heavy DG penetration.
- If developer can make sure they have a working model submitted on a timely basis the process would move along quicker.
- TECO rule 14 compliant inverters are known to respond well.
- If a project failed the fast track screen it may require a time domain analysis study.
- Eversource developed criteria on when to conduct a time domain analysis.
- The more we want to have Photovoltaic Systems in low load areas, the more issues we will have with TOV. This issue will increase as the number of projects increases.
- Policy needs to discuss how to incentivize large DER based-on location.
- MA created an incentive to steer market to go into specific areas.
- PURA follow up question for developer's? What type of information or process change that would make it easier to deploy into more urban area. CT missing on a viable community solar program.
- Most Shared Clean Energy Projects are 4 MW solar in rural areas.
- VNM: Program that allow generator anywhere but benefits subscriber anywhere. It allows generation to be built away from the load.
 - In NY subscriber is proximity to generator
 - Community solar closer to load and its community
 - Virtual net Metering in CT is limited to Agricultural and Cities in NY VNM is for all customers MA did go through the 100 % VNM and was concerned and started using 60 % for retail value. MA policy is changing.
- Is there anything this group can do to encourage deployment in specific areas worth higher load center?
- A policy change will need to change to move DG closer to load center
 - Do all the problems go away if we move to higher load center: Does this eliminate issues
 - Pushing replacement of substation transformer and non-wire alternatives.

- Assuming the policy changes has incentives to be close to load, do we anticipate revised screen or changes to current process will change or the current process will still work? Eversource: The current process will still work well for smaller behind the meter PV's, but a PV on a farm field will a three-phase extension will take longer and require upgrades to the distribution
- UI agree with incentive to close to load. But ultimately the load will be reduced, and a load center may be eliminated.
- Need a long-term approach to the process and it needs to be fluid
- Joint Meetings between Tech and Policy may assist.
- Has NY seen a shift from areas to urban areas? Andy Mayshar Westchester County so not rural area. Customer are driving the location of PV in the case of Andy because they are installing DG behind customer rather than stand alone.

4. New Matters/Open Discussion

- DER interconnections need to be quicker and easier to implement.
- Combined Technical and Process group meeting in July.
- DER project location and update to screens to be discussed at the next June meeting.
- A bit more discussions is needed about what MA TSRG is doing when it comes to implementation of IEEE 1547-2018
- EPRI is on board with longer inverter settings. Is there any resource available?
 - Eversource has asked to add the exception at the discretion of the utility
 - Brad will provide writeup from MA TSRG