Massachusetts TSRG Meeting Notes

Date:	September 22, 2022		Meeting held as part of the Massachusetts Technical Standards Review Group (TSRG) for discussion of industry topics and collaboration amongst utilities and the DG community. Meeting minutes are outlined below. If there are any corrections, additions, or omissions please notify the preparer.
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Discussion Topics

Sub- group updates:

IEEE 1547-2018 adoption

- Ruvini is leading the effort on use of grid support functions.
- Two presentations were arranged. One from NY utilities and one from Leidos.
- Communications effort: Task force will tackle both cyber security and communication protocols. Need to better determine the scope for this subgroup.

ESS ramp rates and schedules

- The study process will provide a preliminary analysis with a charge discharge schedule. Upgrades and high level cost estimates will be made available for both options.
- In case of group studies, the group will have to make a unanimous decision.
- Russ Aney: For BTM ESS that reduces demand on the feeder under time of use tariffs, it is unfair to treat them the same as FTM ESS.
- MP: This is applicable to FTM projects only at this time.
- Kavita: Will there be enough detail provided for projects in a group study to make decisions regarding acceptance of the schedules?
- MP: National Grid will provide enough details for the projects in a group study to make a decision. They will provide the limiting element and which projects that are contributing to the violation.

Dynamic Modeling Group

- Main objective was to provide the PSCAD checklist.
- PSCAD item and checklists are ready and being reviewed by stakeholders.
- Brad M: Are these checklists covering requirements for the ASO studies? ISO-NE requires Electranix V12. This subgroup should make that a minimum requirement. Requirements for transmission connected resources are different than ISO-NE srd.
- Amir: It would make sense to align

Expedited Process subgroup

- 6 industry representatives
- 3 EDC
- Others invited to join.
- Russ and Quincy to set up the first meeting for Oct.

Area Networks group

- EDCs had a meeting with ConEd from NY.
- ConEd has developed resources and analysis techniques to support intx
- ConEd established remote monitoring and control within their networks
- ConEd also has sophisticated protective and relaying schemes

- EDCs will review, develop time frame, direction and document any potential solutions by May 2023.
- Incorporate common solutions by Aug 2023
- Three paths: 1) Disable area networks in certain areas if not necessary, 2) Update network protectors to microprocessor based to allow backfeeding of generation with additional SCADA controls, 3) New and custom tailored study tools.

Old Business items open floor:

Expedited Process subgroup

- 6 industry representatives
- 3 EDC
- Others invited to join.
- Russ and Quincy to set up the first meeting for Oct.
- DPU has closed out 20-75. The common shared system modification fee concept was part of the docket. This needs a new home. The consensus language for the simplified projects from the 19-55 docket should also be included in the scope of this subgroup. This group should submit this to the DPU.

Grounding Bank sizing

- Basic grounding devices: Grounding banks, Neutral grounding reactors, Zig-zag transformers. The impedance specifications for zig-zag get lost in translation. The specifications for zig-zag transformers are difficult to understand
- Eversource: Grounding studies can be processed earlier in the study process. However, the dynamic analysis may change the impedance requirements at a later time.
- Unitil: It is not clear how conducting the analysis will be saving time.
- Bloom Energy: Can the utility establish a frame size? Can we tweak the impedance at a later time? The frame sizes are standardized. Providing a calculation method for frame size in KVA can help manufacturers align with utility requirements.
- MP: If you try to secure the equipment before the end of study, NGrid cannot tell you anything about the frame size. We specify the impedance. frame size is not specified by NGrid.
- Eversource: Not possible to provide impedance earlier than the final study results.
- Tony Morreale: The X0/R1 between 2 and 3 is not in line with the effective grounding standard. The NGRs are much larger and seem oversized.
- Eversource: We will review the standard. the X0/R1
- Jon Gay RLC: The X0/R1 between 2 and 3 is the best way to ensure fault current contribution from generators don't upset the utility's upstream protection settings. NGR is an inefficient way to control fault current contribution. Their impedance values tend to be abnormally high. Grounding transformers are a better option.

New Business –ESS schedules for interconnections- Gerhard Walker

- Eversource will be providing a dispatch limiting schedule. Each hour will have a charging and discharging capacity limit.
- During gray and black sky events, if the feeder was to be reconfigured, the utility will have the ability to either disconnect or have control over the battery storage systems. Control will not be exercised for managing load. It will be strictly for unplanned outages.
- Amit Banir: It is preferable to go with the full disconnect.

- Ryan Rainville: Is this being applied to SAS, DC coupled battery, AC coupled storage as well?
- Eversource: If you have a system that is battery storage coupled with generation, the schedules will apply at the POI. An RTU based solution for this is being considered.
- Are any utilities considering cloud based DERMS systems?
- Eversource is considering them. Demand response program already implements cloud based DERMS. The cloud hosted solution will not be able to incorporate real-time optimization.
- Has Eversource finalized the default limiting schedule?
- Eversource has not finalized this limiting schedule.

New Business - Was there a discussion on ramp rates?

- Amit is seeking industry consensus and intends to bring them to the ESIRG's next meeting.
- Two specific topics: Will the industry allow first on feeders to receive max benefit for ramping capacity?
- Switching feeders:
- Doug Pope: As DERMS becomes a solution, will there be a reduction in the study time?
- For National Grid, it is not a prime goal. However, it is a benefit. Integration tools that allow for reduction of study timelines are not reliable.
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Next meeting December 14th 1pm-4pm.