Massachusetts TSRG Meeting Notes

Date:	March 24, 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.	
Prepared	Mrinmayee Kale	Meeting minutes are outlined below. If there are any corrections, additions, or omissions	
by:	mkale@borregosolar.com	please notify the preparer.	

Participants:

Paul Krell	Brett Jacobson
Jason Ulrich	Shakir Iqbal
Matt Parlon	Daniel Dabkowski
Kavita Ravi	David Ferrante
Claire Loe	Richard Labrecque
Glenn MCGillicuddy	Mina Moawad
Jonathan Salsman	Amir Mosaddegh
Brian Lydic	Fritz Octave
Tony Morreale	Tyler Thibault
Michael Wall	Sean diamond
Doug Pope	Nancy Israel
Maria French	Mike Porcaro
Greg Hunt	Nathan Walsh
Doug Denny-Brown	Dan Mungovan
Brad Marszalkowski	Ruvini Kankanamalage
Daniel Ghebre	Anas Alrifai
Eric Steltzer	Justin Woodard
John Tortorella	John Bonazoli
Amit Barnir	Jeremy Kites
Mamadou Bah	Janice Aduhene
Jason Correia	Jonathan Demay
Jorge Jorge	Rahul Pantagada
Kyle Bessette	David Lovelady
Cheng-Hao Shih	Nigam Trivedi
Jason Bobruk	

Discussion Topics

Sub-group updates:

- o IEEE 1547-2018 adoption
 - Group is consulting with utility folks from other states, inverter manufacturers and solar industry on the topic of grid-support functions and their adoption in MA.
 - Presentation on communications requirement expected in Q3 of 2022.
 - Updated ISO-NE srd along with UL1741sb requirements old adoption date April 1st 2022.
 - Publication of UL1741sb was delayed and therefore testing is also delayed.
 - CA has delayed adoption until March 2023.
 - 40% of DER in NE is residential.
 - Current proposed dates are June 1st 2022 for projects >100kW. Oct 1st 2022 for projects <100kW. These dates may change in the future.
 - Proposal for changing the threshold from 100kW to 250kW. In NH there is a process track change at 100kW. Since this will apply to all of NE, the 100kW threshold will stay the same.
 - All utilities will conduct studies assuming that the certification will be available by time of PTO.
 - What would be the threshold of inverter certifications for changing the adoption dates? Currently there is no such threshold.
 - Industry is concerned that inverter manufacturers will not have certified products by Oct 1st 2022 for standard and expedited project applications. This will stall the small scale and residential solar markets.
 - Inverter manufacturers have submitted a letter to the subgroup explaining the challenges of bringing a certified product to the market to meet the Oct 1st 2022 deadline.
 - IREC will be trying to track the number of certifications. However, this will not be an easy task. CA CEC maintains a qualified equipment list. It will come online in June. It will help determine the percentage of inverters that have received certification. Only requisite for solar inverters will be UL1741sb certification. ESS inverters in CA will require a normal ramp rate input which is separate from enter service ramp rate. This requirement may not be covered by UL1741sb.
- ESS ramp rates and schedules
 - Established a mission statement and expectation on output.
 - Mission statement is to establish clear criteria surrounding ESS schedules and ramp rates. Consider input from all stakeholders.
 - Any consensus will be included in the common guidelines
 - Current status: Developer request for data on 4 separate scenarios. Discussions on effects on control operations and future system planning.
 - Industry comments: How is hosting capacity affected by scheduling of charging and discharging limitations on ESS? Without ESS schedules, utilities must reserve capacity on circuits for the ESS. This leaves no capacity for load or generation to add to the feeders. If consensus is reached, hosting capacity maps could use similar methodology. It will be a larger and longer effort.
- Dynamic Modeling Group
 - Established the subgroup mission statement, meeting schedule and milestones.
 - Mission statement: Work with inverter manufacturers & commercially available modeling software companies to develop inverter models

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- No steady state modeling discussions
- Best practices will be included in common guidelines.
- Current status: Established customer process for obtaining models. A checklist for PSCAD models will be established and shared with TSRG once finalized.
- EDC elaborated on the studies and identified issues seen wit models.
- TOV and ROI screenings were also discussed.
- Next tasks: Standardize documentation requirements like derating letters and make documents project agnostics.
- Explore avenues to standardize EDC and ISO requirements for models.
- When are screenings being conducted? For standard process, during impact study.
- Do you have a ROI and TOV screenings documented? Eversource does have the standard screening documented and they can share this information.
- Area Networks group
 - Identified group mission statement: Identify challenges to intx of DER to area networks which is different from radial systems. Outcome will be documented as part of the common guidelines.
 - Currently trying to assemble subject matter experts. Reaching out to ConEd from NY.
 - Industry members are encouraged to share their experiences regarding challenges with connecting DERs to area networks in MA.

Asset (conductor & equipment) rating:

- Topic being discussed in detail in the ESS schedules and ramp rates subgroup.
- Open for questions from stakeholders at this meeting.

Old Business items open floor:

• Will the TSRG consider submitting the improved simplified screening process as consensus language to the DPU as part of 19-55? Russ Aney and Sean Diamond will be leading an effort to get something filed under 19-55.

Volume Expectations:

- MA in top 3 in kW of solar installed per sqft in the country.
- Very high volume of applications. NGrid already has 1.3GW. 330MW of DER in group studies.
- Industry members encouraged to provide input on topic of forecasting for CIPs being included in 20-75. EDCs looking for input on areas that have development

Membership list confirmation:

• Reach out to Mike Porcaro or Mrinmayee Kale if you would like to be included to the mailing list.

Significant vs Moderate change definition; inclusion to common guidelines:

- National Grid has drafted a document regarding treatment of project design changes.
- \circ $\;$ Significant change is that which affects other projects in the queue.
- For moderate changes: Customer timeline and upgrades will be re-evaluated. This will be acceptable if customer accepts the changes to study timeline and upgrades.
- If a modification is deemed significant and an ISA is cancelled, the project will lose net metering capacity allocation. This is fatal for projects. Industry request is to revise the ISA instead of cancelling it.
- Industry example: SREC I projects might want to increase DC capacity and replace the inverters, when repowering sites like this, net metering allocations can be lost due to cancellation of the old ISA.

- This presentation applies to projects in intx study process and seeking modification to system design. It does not apply to projects as described in above example. In above example, it is likely that the project will be considered a new project altogether.
- Can the impact be defined by a certain threshold instead of vague language such as "may have an adverse effects to others in the queue".
- The intention is to protect all projects from being affected by significant changes being proposed by the other projects.
- Next step Co-ordinate into TSRG common guidelines. Industry members to review and provide comments.
 Provide comments directly to Mike Porcaro at National Grid.
- What is the difference between new and amended ISA? DPU 15-32-A, Appendix A November 25th 2020.

Joint Utility Working group:

- o David Lovelady Director of distributed system operations
- Vision: Strategic collaboration between NGrid, Eversource and Unitil. Consistent approach to DER interconnection. More proactive positions with DPU and ISO-NE. Ensuring efficiency, consistency and affordability from joint decisions for all stakeholder. Prioritize topics. Ensure consistent planning and operational practices when practical and possible.
- Structure: Rotating lead, Directors from each EDC and SMEs will be pulled in as required.
- Topics: Future Planning, Markets, DER Integration, Technology

Industry question: ASO study requirements: Is the 1MW a cumulative threshold? Or does it apply to individual projects? ISO-NE has not subjected individual projects smaller than 1MW to ASO study. In an area where there is a saturation and transmission asset needs to be upgraded, projects smaller than 1MW may be required to undergo ASO study.