Date:	September 18, 2025	Meeting held as part of the Massachusetts Technical Standards Review Group (TSRG)
		for discussion of industry topics and collaboration amongst utilities and the DG
Prepared	Tony Morreale	community. Meeting minutes are outlined below. If there are any corrections,
by:	tmorreale@ligconsultants.com	additions, or omissions please notify the preparer.

Participants:

Shakir Iqbal (Member – Eversource)	Greg Hunt (Member – Zero-Point Development)
John Bonazoli (Member – Unitil)	Brian Lydic (Member – IREC)
Michael Porcaro (Member – National Grid)	Brett Jacobson (Alternate – Eversource)
Tony Morreale (Member – LIG Consultants)	Gerry Bingham (Alternate – DOER)
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Adam Houghton	Kelly Musto
Akash Patel	Kojo Asenso
Andrew Hickok	Manuel Saadallah
Anish Ganta	Marc Monbouquette
Beau Millett	Mark Bentson
Ben Underwood	Melusi Nyoni
Benjamin Grace	Michael N Taniwha
Bradley Marszalkowski	Mrinmayee Kale
Brandon T Carr	Muhammad A Khan
Carson Bullock	Nachum Sadan
Carter Wood	Naera Haghnazarian
Christopher M Kellogg	Nancy Israel
Cole Wheeler	Natacha Caner
Courtney FeeleyKarp	Nathan Charles
Daniel J Mungovan	Nathan Walsh
David LaPlante	Patrick M Fam
Dominic Gatti	Paul Krell
Doug Denny-Brown	Quinn Perry
Doug Pope	Rahul Pantagada
Emily Slack	Risa Karanxha
Emma Stevenson	Ruvini Kankanamalage
Farzam Nejabatkhah	Ryan Rainville
Jason Dwyer	Sara Hildebrand
Jazmin Padilla	Sarah Perkins
Jeremy Kites	Sharon Ballard
Jill C Duplessis	Syed F Ali
Jocelyn Ting	Thomas Ferguson
John Mosher	Tirzah Shakespeare
Jon Knauer	Tom Cheng
Jorge Jorge	Travis S Carless
Jorge Sousa	Wai Pong Wong
Julia Bucceri	William G Leblanc
Justin Woodard	Xin Li
Kate Tohme	Zachary Tedford
Kayla Burns	

Notes:

1. Interconnection Treatment by Bi-Directional EV Chargers – Carter Wood, Ford

- See slides for details.
- Reviewed Ford's electric vehicle offerings for backup power, Vehicle to Home, and Vehicle to Grid
- Received declaratory Filing from Michigan Public Service Commissions to simplify installation with utility.
- Ford would like to clarify interconnection tariff definitions to exclude unidirectional vehicle charging.
- Paul Krell, Unitil: How are the bi-directional capabilities enabled?
- Carter Wood, Ford: There is no way for a customer to make the switch themselves from unidirectional to bi-directional. Ford is the gatekeeper. Requires additional hardware and updates from Ford.
- PK: Fixed control is at the household, not the vehicle, which is what the utility wants.
- Mike Porcaro, NGRID: Did Michigan approve vehicle to home in parallel?
- CW: No, they did not. Any parallel operation with utility requires interconnection review.
- Shakir Iqbal, Eversource: Review at next meeting and determine if it needs to go to IIRG.
- Gerry Bingham, DOER: Fermata is already interconnecting bi-directional chargers and did not need to go to the IIRG.

2. Fermata Energy Bi-Directional Chargers Update

• In March 2024, Fermata was given a waiver to have inverters be SB certified. Waiver expired in July 2025.

3. Shared Transformer Screening by Resonant Energy

- Ben Underwood & Jocelyn Ting from Resonant Energy presented and led discussion.
- BU: Want to review single phase systems with shared transformer. What is the threshold for DG connected before it triggers transformer upgrade. Tariff language now allows up to 20 kW before replacing. Rather than a single limit, can we look at nameplate rating of transformer? Allow DG up to a certain ratio.
- BU: Are there technical concerns with using the nameplate to determine amount of DG?
- Jorge Jorge, National Grid: Allow up to nameplate for any interconnections. On the shared secondary, we do limit to 25 kW AC.
- John Bonazoli, Unitil: Two different screens: size of transformer and local over voltage concerns.
 No matter the size of the transformer, do not allow more than 120% of nameplate (up to 25 kVA) on shared secondaries due to local overvoltage.



- Haghnazarian, Naera & Brandon Carr confirmed it is 20 kVA on shared secondary for Eversource.
- Brian Lydic, IREC: Some states have adopted 65% of nameplate rating for voltage rise.
 Recommend having it scale with transformer nameplate rating.
- Brett Jacobson, Eversource: Trying to determine how to cover costs for small projects via administrative fee. May be less concern for technical limit if less customers are impacted.
- JT: Presented examples of technical issues and results including a scenario where 17.6 kW of solar was connecting to a shared transformer that would exceed the 20 MW limit. The result was needing a new 50 kW transformer or downsizing the project.
- JB: When adding a new transformer we separate the DG to keep it below the 25kW limit.

4. Subgroup Updates

• Meter Socket Adapters – Mike Porcaro, National Grid

Summary of Major Accomplishments & Upcoming Activities					
Completed Activities:					
DATE	DESCRIPTION OF ACTIVITY				
8/11/25	Kick off – Group expectation setting, mission statement and outcome development				
9/11/25	Manufacturer presentation on product details including installation, equipment accuracy, included protections, etc				
Upcoming Activities:					
	Review of draft list of use restrictions				
	Discussion on next steps toward 3 main goals established in first group meeting:				
10/13/25	 Process for evaluating devices 				
	Updates to utility field procedures				
	3. Installation practices and agreements				

- Kick off in August. Setting expectations and mission statement.
- Marc Monbouquette, Enphase Energy: Can utility share what will be included in 60-day review process?
- MP: Next meeting we will start off with items that will indicate EDC screening evaluation preferences.
- Flexible Connections Mark Bentson, Eversource

	Establish deliverable document with scope list, decisions/outcomes, and highlighted differences of any EDCs / group
pcoming A	ctivities:
8/27/25	When to offer flex connection in the process, which feeders/stations are most suitable for flex connect Thermal and voltage limits Use cases; PV only, PV + ESS, ESS Only
7/31/25	8760 models in connection with studies Software packages; excel, Cyme, Synergi, Windmill, PSSE Data cleaning; net load vs gross load
6/18/25	How we study, what it means for customers 8760 models in connection with studies Different types of DE profiles, flex connect schedules and implementation

In-Service DER Equipment Change Procedure – John Bonazoli, Unitil

Completed Activities:				
DATE	DESCRIPTION OF ACTIVITY			
6/10/2025	Kick-off meeting with full subgroup with industry and government reps.			
8/12/2025	Created Matrix of equipment replacement categories and requirements			
8/26/2025	Decision: separate requirements for systems under Simplified process			
Upcoming Activities/ Topics:				
	Bi-weekly meetings of subgroup and EDC only meetings every other week.			
Oct. 24, 2025	Goal: Present recommended procedure to IIRG			

 Andrew Hickok, Solect Energy: To clarify, in August meeting, we talked about presenting recommendations after 10/24, rather than on 10/24. DPU docket filing comments are due around then. Want to review beforehand.

5. Tariff Revision Process Update

- IIRG Group Update Brett Jacobson, Eversource & Kate Tohme, New Leaf Energy
 - The IIRG Sub-Groups for Common System Modification and Flexible Interconnection have had their kick-off meetings. These meetings are to start defining goals, scope, schedule and deliverables. The next IIRG meeting will be rescheduled due to a conflict with the DPU Tech Session regarding Common System Modification on the same day. Updates to the schedule will likely come out next week as we are actively polling. If you have any questions you can reach out to me @ brett.jacobson@eversource.com or Kate Tohme ktohme@newleafenergy.com
 - KT: We have exciting opportunity to have a 3rd party facilitator to assist IIRG for the next 3 months. Sep-November meetings. Admin support and meeting assistance. Assist with finding funding and/or recruiting another facilitator going forward.
 - o GB: Posted save the date on IIRG website. Subject to change. We will update.

• IIRG Energy Storage Sub-Group – Mike Porcaro

Summary of Major Accomplishments & Upcoming Activities				
Completed Activities:				
DATE	DESCRIPTION OF ACTIVITY			
	Substantive Topic summaries			
	Topic 01: ESS Metering - Delineation of charging load vs station service			
6/16/25	load and associated PCC meter arrangement implications			
	Topic 02: Open Loop Response Time – Requirements on OLRT performance			
	and testing			
	Due to ongoing efforts related to ESS in other forums, and group member			
	availability challenges in the summer, the group decided to pause for July and			
	August, picking up again in September			
Upcoming Activities:				
9/23/25	Review efforts progressing in other forums related to ESS.			
9/23/23	Prioritize a list of substantive topics for the sub-group to address.			

- o Paused in July and August due to other ESS-related dockets and scheduling issues.
- IIRG Flexible Connections Mike Porcaro

Summary of Major Accomplishments & Upcoming Activities				
Completed Activities:				
DATE	DESCRIPTION OF ACTIVITY			
9/17/25	Kick off – Group expectation setting, mission statement and outcome development. Seeking to define: • Flexible Interconnection program offerings • Clear definitions of terms and program constructs • Resulting advisory and/or filing to DPU as required by outcomes			
Upcoming Activities:				
	Bi-weekly meetings with in-person workshops as needed - Timelines are being developed currently.			

6. **Group Study Status**

- Eversource Updates: https://www.eversource.com/residential/about/doing-business-with-us/interconnections/massachusetts/distribution-group-studies
 - o Filed the following Group Study CIPs in June 2025:
 - Southwick-Granville Group Study CIP
 - New Bedford Group Study CIP
 - Dalton-Hinsdale Group Study CIP
 - Gill-Montague Group Study CIP
- National Grid Updates: https://gridforce.my.site.com/s/article/MA-Distribution-Group-Study-Documents
- Unitil:



- O JB: Just started first group study for three (3) battery developers. Just started impact study so unclear if CIP will be required.
- GB: Please review what is presented by other EDCs to determine how Unitil will present monthly.

7. OPESS Tariff Update

- Operational Parameters for Energy Storage Systems.
- Will provide more updates in December meeting.

8. National Grid Dispatch Limiting Schedule (DLS) Update – Emily Slack, National Grid

• See separate notes taken and distributed by NGRID.

9. Technical Standards Update from EDCs

- No updates from National Grid or Unitil.
- Shakir Iqbal presented and reviewed the proposed updates to Eversource's Interconnection Technical Standard, to be renamed: 'Technical Interconnection and Interoperability Requirements for DERS (TIIR)'. See slides for details.
- GB: This is a chance for developers to review, comment, ask questions before finalizing?
- SI: Correct. Please send any comments or questions to industry reps.

10. Common Technical Standards Document Update

- Shakir Iqbal presented and reviewed the proposed updates to the TSRG Common Technical Standards Manual. See slides for details.
- Mrinmayee Kale, New Leaf: Is there a difference between Eversource and National Grid SANDIA screens?
- SI: No, I believe they are the same.
- MK: Is Eversource going to incorporate SANIDA 2018 research white paper for group type antiislanding detection? Or sticking to 2012?
- Farzam Nejabatkhah, Eversource: 2012 for now.
- EDCs to submit redlines to TSRG members for their comments by 10/24/2025. TSRG members to provide feedback by 11/21/2025. Final Comments to be discussed at 12/11/2025 TSRG meeting and seek voting on the edits.
- EDCs are requesting to remove the 'Common Technical Guideline Matrix' file from the Website as the content of the topics from each Company is captured within the Common Technical Standards Manual along with a Revision History to document any changes or updates.
- GB: Why remove just that one? Maybe we can archive them in a way.

The Massachusetts Technical Standards Review Group

Close Out & Final Discussion

- Next scheduled quarterly meeting date:
 - o Thursday December 11, 2025, 1PM-4PM
- Send topics for future meetings to:
 - o Shakir Iqbal (shakir Iqbal (shakir.iqbal (shakir.iqbal (shakir.iqbal.com)
 - o Tony Morreale (tmorreale@ligconsultants.com)
- Doug Pope, Pope Energy: Next meeting topic suggestion: Topic on how EDCs are handling transitional cluster studies.