MA TSRG Meeting – February 24, 2017 National Grid, Worcester

In attendance:

First Name	Last Name	Company/Affiliation
Doug	Alderton	NEC Energy Solutions
Gerry	Bingham	DOER
Jon	Bonazoli	Unitil
Mike	Brigandi	Eversource
Paul	Krell	Unitil
Michael	Coddington	NREL
Mike	Conway	Borrego Solar
Babak	Enayati	National Grid
Richard	Gross	Governmental Rep
Wolf	Koste	Eversource
Will	Lauwers	DOER
Liana	Moore	National Grid
Jeannie	Piekarz	National Grid
Mike	Porcaro	National Grid
Brian	Ritzinger	DPU
Jason	Small	National Grid
Reid	Sprite	SourceOne/Veolia North America
Nancy	Stevens	DPU
Vincent	O'Connell	Eversource

Meeting commenced at 8:05 AM.

Introductions by Mike Brigandi.

Discussion of common technical standard:

- Nancy Stevens would like to see more common standards to simplify for developers
- Reid Sprite offered to spearhead the redesign of the common technical manual, combining all utilities' practices and issuing a draft.
- What topics should be included?
 - Things have evolved over the past four years, and all topics should be revisited.
 - High-cost impact topics are not the only topics that should be considered. Small ticket topics should also be reviewed.

- Mike Coddington added the point that common standards allow for uniform training of employees.
- What new tech topics need to be discussed?
 - o Microgrids?
 - Energy storage?
 - Solar + Storage used as mitigation for system upgrades
 - Hosting capacity
 - The utilities are interested in this from a technical perspective
 - EPRI has developed a tool (Drive) to evaluate hosting capacity
 - Babak offered to present Drive at a future time to demonstrate its capabilities.
- Topics that have not been discussed, but should be:
 - IEEE and ISO-NE compliance
 - o Items that are to be studied during impact study
 - o Flicker

Break at 9:10. Reconvened at 9:25.

Wolf Koste presented Eversource Standardization Effort (slides attached).

John Bonazoli inquired about the monthly utility reporting of timelines to DOER. Are these dates being used? Gerry Bingham stated that this information is useful, particularly in the aggregate.

Unitil presented internal company technical requirements. The standards are expected to be publish in Q1 of 2017.

- New standard is consistent for MA and NH
- Covers general process and study process
- General requirements:
 - o Single phase protection
 - o Live line blocking
 - o Anti-islanding
 - o Synchronizing
 - o Metering
- Protection systems:
 - Relays required: 27, 59, 81, 50
- Requirements for sites >= 500 kW:
 - o Redundant relaying
 - Motorized gang operated disconnect
 - Remote monitoring and control
- DTT on case-by-case basis
- Disconnect switch:
 - Required for systems > 10 kW

o Must have 24-hour access

Break at 11 AM. Reconvened at 11:15 AM.

Babak Enayati presented an update on National Grid's Solar Phase II project (slides attached).

- Five new sites energized since last update
- Total capacity of Solar Phase II program is 16 MW.

Babak presented updates on IEEE 1547 standards.

- New standard anticipated to be published by fall or early winter
- Key updates:
 - o Voltage and frequency ride-through will be required
 - Voltage regulation capability will be mandatory for most DER

Next meeting will be May 16, 2017 in Worcester.

Meeting adjourned at 12:00 PM.