Massachusetts Technical Standards Review Group (MTSRG)

Chair: Babak Enayati, National Grid Vice-Chair: <u>Michael Conway, Borrego Solar Systems</u> MTSRG Meeting #1 <u>Date: March 6, 2013</u>

<u>Time:</u> 9AM-4PM <u>Location: E3.961 MOHAWK</u> <u>Feb 25, 2013</u> National Grid Office: 939 Southbridge Street, Worcester, MA40 Sylvan Rd. Waltham, <u>MA 02451</u>

Draft-Agenda

1) The meeting kick off by Babak, review and approval of the MTSRG Guidelines 10 mins

2) Status of the company specific interconnection standards 5 mins

3) DTT and anti-islanding,

9:15 AM-10:15 AM

- 1. Utility Practices:
 - Why/when is the DTT required? How do utilities identify the islanding scenarios for the below-mentioned types of generators? PV and discussion on the state-wide adoption of Sandia 2012-1365, revised Nov 2012, Wind, Synchronous Generators, other DG types.
 - What types of DTT are permitted? Radial? Phone Line, etc?
 - Other Alternatives for DTT? Active and Passive anti-islanding?

2. Discussion

4) Limit of 3MVA PV on 13-15 kV feeders and related capacity limits 10:15AM-11AM

- 1. Utility Practices:
 - Discussion on the flicker impact and excessive feeder voltage regulator operation due to PV>3MVA.
 - <u>Discuss which utilities are utilizing Long-Term Dynamics modeling</u> (12-hr irradiance model) in place of steady-state, binary analysis?
 - Total DG limit on distribution feeders (All voltage classes). What are the limiting factors?
 - VAR control might be able to eliminate the 3MW PV requirement.
- 2. Discussion

5) 15 mins break

6) RTUs 11:15AM-12:15PM

1. Utility Practices

- Why/when is the RTU required?
- Which I/O points are required?
- Types of communication to the dispatch/control center?
- Other alternatives for RTU?
- •___DNP3 protocol? Modbus?
- 2. Discussion

6) Lunch 12:15 PM-12:45PM

7) External disconnect switches for small generators 12:45 PM- 1:45 PM

1. Utility Practices:

- Why/when are the disconnect switches required?
- Location of the Disconnect Switches?
- National Electrical Code (NEC)
- What are the alternatives, if any?
- 2. Discussion

7) Witness testing protocols 1:45PM-2:45PM

- 1. Utility Practices:
 - Witness test processes and the actions if the test fails.
 - What shall be tested?
 - Who is qualified to do the test?
 - <u>Required documentation (i.e. test procedure, three lines, test reports)</u>
 - Possible exemptions for generators below a designated size
- 2. Discussion

8) 15 mins break

9) Interconnection practices in other states 3PM-4PM

- California Rule 21
- FERC SGIP
- IEEE 1547
- Other company specific standards in other states?

10) Prioritization of issues and scheduling the next meeting

IEEE 1547.a updates

Interface transformer configuration Threshold sizes for PCC recloser requirement (vs fused cutouts) Customer relaying redundancy (independent of inverter) Reverse power flow provisions/requirements (3V0 and N-1 screening) Power factor requirements (utilizing inverter pf for EPS VAR control) Cluster study procedure (defining 'electrically interdependent') Other utility requirements triggered by DG interconnections Any other thoughts? Formatted: Font color: Olive Green

Adjourn 4PM