Update on IEEE Standards Activities

Michael Coddington

NREL
Overview of the Standard

• Methodology for when distribution system impact studies are appropriate, what data is required, how the studies are performed, and how the study results are evaluated
• In the absence of such guidelines, the necessity and extent of DR interconnection impact studies has been widely and inconsistently defined and applied
• Ballot was approved earlier this year, with comments being addressed.
• Mar ‘13 ballot approval (94% affirmation, 200 balloters)
**IEEE P1547.8**

*Recommended Practice to Expand The Usefulness and Utilization of IEEE Std 1547*

**Overview of the Standard**

- Guide will reflect current IEEE 1547 clauses
- Focus on feeders with high saturation of DG
- Intent is to make DG systems “Utility-Friendly”
- Solutions should incorporate advanced inverter functionality
- Full draft for working group review (Aug 2013)
- Likely roadmap for next revision of IEEE 1547
IEEE P1547a

Amendment 1 to IEEE 1547 - Limited to establishing updates to voltage regulation and response to area electric power systems abnormal conditions of voltage and frequency

• Voltage Regulation (Volt/VAR)
  Coordination with and approval of, the area EPS and DR operators, shall be required for the DR to actively participate to regulate the voltage by changes of real and reactive power

• Response to abnormal frequency (FRT)
  Time trip settings to be adjustable and coordinated between utilities and system integrators

• Response to abnormal voltage (VRT)
  Time trip settings to be adjustable and coordinated between utilities and system integrators

• To be balloted summer 2013
IEEE P1547.1a
Amendment 1 to IEEE 1547.1

Overview

• PAR should be submitted Summer of 2013
• Goal is to update IEEE 1547.1 to accommodate new Standard IEEE 1547a
• UL 1741 will be harmonized with this Standard
• More information will be available at IEEE SCC21 web page with discussion at next meeting in San Francisco (August 13-16, 2013)
Thank You

Please visit the IEEE SCC21 website for more information

michael.coddington@nrel.gov