IEEE Standards Update

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Solar America Board for Codes and Standards

Active Photovoltaic Standards

- Recommended Practice for Installation and Maintenance of Lead-Acid Batteries for Photovoltaic Systems
- 1013^{IM} Recommended Practice for Sizing Lead-Acid Batteries for Stand-Alone Photovoltaic Systems
- **1361**TM Guide for Selection, Charging, Test and Evaluation of Lead-Acid Batteries Used in Stand-Alone Photovoltaic Systems
 - 26^{IM} Recommended Practice for **Testing the Performance** of Stand Alone Photovoltaic Systems



Active Photovoltaic Standards

- 1561TM Guide for Optimizing the Performance and Life of Lead-Acid Batteries in Remote Hybrid Power Systems
- <u>1562</u>TM Guide for **Array and Battery Sizing** in Stand-Alone Photovoltaic Systems
- 1661TM Guide for Test and Evaluation of Lead-Acid Batteries Used in Photovoltaic (PV) Hybrid Power Systems



Active Interconnection Standards

IEEE 1547 [™] Interconnecting DR IEEE 1547.1 [™] Conformance Tests IEEE 1547.2 [™] Application Guide -1547 IEEE 1547.3 [™] Monitoring, Information, Control



SCC21 Current Activities and Projects

IEEE P2030

Draft Guide for **Smart Grid Interoperability** of Energy Technology and Information Technology Operation with Electric Power System (EPS) and End-Use Applications and Loads

SCC21 Current Activities and Projects

IEEE P1547.4

Draft Guide for Design, Operation, and Integration of Distributed Resource **Island Systems** With Electric Power Systems

IEEE P1547.5

Draft Technical Guidelines for Interconnection of Electric Power Sources **Greater than 10MVA** to the Power Transmission Grid



SCC21 Current Activities and Projects

IEEE P1547.6

Draft Recommended Practice For Interconnecting Distributed Resources With Electric Power Systems Distribution **Secondary Networks**

<u>IEEE P1547.7</u>

Draft Guide to Conducting Distribution Impact Studies for Distributed Resource Interconnection



SCC21 Current Activities and Projects

IEEE P1547.8

Recommended Practice for Establishing Methods and Procedures that Provide Supplemental Support for Implementation Strategies for **Expanded Use of IEEE Standard 1547**



P1547.8 Writing Groups

Voltage Regulation

Monitoring

Response to Area EPS Abnormal Conditions

Power Quality

Coordination with NEC/UL1741



P1547.8 Writing Groups

Additional Data- Behavior of inverters, harmonic levels, etc.

DR facilities 10-20 MW connected to area EPS systems

Optimizing group behavior of multiple DRs; system optimization

DR required to see faults; clarification of best practices



Next Meeting: February 8-11, 2011 (Las Vegas)

Check IEEE Web Page (Google "SCC21 Home Page")

