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DER Certification Laboratory Pilot, Accreditation Plan, and Interconnection Agreement Handbook

Purpose

- To help **ensure compatibility** of DER interconnected to electric power systems
- To **simplify interconnection agreements** between system operators, distribution (wires) companies, and independent power producers
- To develop a **common benchmark** for comparing the many diverse sources of technical information on both DER products and services sold in the marketplace
- To help **promote the U.S. as a world leader** in distributed power interests

Significance/Relevance of Accomplishments

- The project focuses efforts on a path to DER certification, thus helping to sustainer many independent and necessary activities.
- The project promotes the use of latest research results in writing criteria, best practices, and standards, which can significantly reduce development time as in other new technology areas..... PV, FC and Utility Communication Architecture.
- The project links hands-on testing with criteria development and rule-making to enhance technical results and credibility
- From DOE's "Making Connections" study to utility industry sponsored testing, emerging national standards, and related public and private interconnection research, this project helps to define the path for "Certified Grid-Compatible DER."

Details of Accomplishments for the Past Year

Road Map and Plan for DR Certification and Accreditation

- Being developed via industry participation, consensus, and the creation of an informal "oversight board."
- Defines criteria for certification and accreditation as well as vehicles for soliciting stakeholder participation.
- Identifies support materials to be developed
  - Interconnection Agreement Handbook
  - Protocols for Testing DER Equipment
  - Training Tools and Resources
- Sets activities and milestones for conducting pilot certification testing and creating lab accreditation criteria.

Create Beta Web Site for DR Certification

- Information transfer Web site for stakeholders participating in certification and accreditation efforts
- Contains information on issues related to certification and grid connection of DER equipment
  - Project milestone chart, plans, deliverables
  - Library for interconnection
  - Tools for interconnection
  - Information/links to other interconnection activities
  - Communication links to interconnection information

Draft Certification and Labeling Criteria for Interconnection

- Define baseline for electrical environment
- Develop consensus performance criteria and test methods
- Test DER equipment with utility and equipment manufacturer participating
- Develop certification protocols for DER

Organize Stakeholders

Key DER stakeholders were identified and solicited to help evolve a proposed roadmap to a certification and accreditation plan, and to assist with the future development of the final interim plan for certification and accreditation activities.

- Members from IEEE SCC21 P1547, the Electric Power Systems Interconnection Working Group
- 10, Members of the Standards Technical Panel for Inverters, Converters, and Controllers for use in Independent Power Systems (STP 1741),
- Numerous interconnection hardware manufacturers for DER systems and components

Outline and Plan for DR Interconnection Handbook

The ***DR Interconnection Handbook*** will provide procedures and guidance, pertinent information, and resources aimed at standardizing and simplifying interconnection requirements for DER, including the requirements of specific states.

Summary of Planned Accomplishments for the Next Year

Report of Certification and Lab Accreditation Pilot Testing Effort, Applying Lessons Learned, and Demonstrating Feasibility

Final Draft Plan for Certification and Lab Accreditation

Final Draft Interconnection Agreement Handbook and Support Tools

- **Future Web-Based Tool**
- **Library**
- **Training**
- **Hotline**