

## Unapproved Minutes from SPM 2001 Distributed Resources Integration WG

To: Working Group on Distributed Resources Integration

CC: Reigh Walling, Dan Sabin

From: Charles Perry

Date: July 18, 2001

Re: Minutes from the Working Group on Distributed Resources Integration from the Summer 2001 Power Meeting in Vancouver, BC.

The first meeting of the new working group was held on July 17, 2001 at the Summer Power Meeting in Vancouver, BC. The group is to be chaired by Reigh Walling ([reigh.walling@ps.ge.com](mailto:reigh.walling@ps.ge.com)). There were approximately 37 attendees.

Ray discussed the need to establish liaisons with the following DR-related working groups and task forces:

- P1547 Working Group of IEEE SCC21
- Distributed Resources: Modeling and Analysis WG under T&D General Systems Subcommittee
- Working Group K10 of Power Systems Relaying Committee
- Task Force on DG Analysis of the Power System Analysis, Computations, and Economics Committee.

It was agreed to change the name of the working group from “Distributed Generation Impacts on Distribution” to “Distributed Resources Integration”.

Charles Perry ([cperry@epri-peac.com](mailto:cperry@epri-peac.com)) volunteered to be Vice Chair and Recorder. Dan Sabin ([dsabin@electrotek.com](mailto:dsabin@electrotek.com)) volunteered to be the temporary web master. The web site address will be <http://grouper.ieee.org/groups/td/dist/dri> .

The group worked on creating a scope for the working group. The following is the scope developed by the group:

Scope:

(For the purpose of this scope document, distributed resources will be defined as generation or electrical power storage connected to a circuit (radial or network) serving other customers as well as the DR facility.)

- Define the impact of distributed resources on planning, design, operation, protection, reliability, power quality, and safety of power distribution systems, and other customers' equipment.

- Investigate the changes needed to current system planning, design, operation, maintenance, and protection practices needed to integrate and accommodate distributed resources into existing and future distribution systems. This may include desirable communication practices between the utility and the DR facility.
- Sponsor panel presentations, develop working group papers, and possibly develop an application guide or set of recommended practices in the future as the technology evolves.

The group discussed possible divisions of DR impacts. The following are the categories identified:

- Network vs. Radial (network to be tabled at this time)
- Voltage & Reactive Management
  - Volt regulator and cap control
  - Voltage balance
  - Post-fault
- Protection
  - Reclosing
  - Fuse coordination
  - Fault currents
- Safety and Overvoltage
  - Grounding
  - Surge protection
- Capacity and Planning
  - Market signals
  - Infrastructure capital recovery
- Misoperation
  - Inadvertant islanding
  - Equipment backup (DR breaker failure)
- Feeder Reconfiguration
  - SCADA Reconfiguration
  - Solid state transfer verses mechanical (open) transfer

The following members volunteered to prepare Working Group Presentations for Winter 2002 meeting:

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|------------------------------|-----------------|
| • Voltage Regulation         | Reigh Walling   |
| • Dynamic Performance        | Nick Miller     |
| • Microturbine Commissioning | Marek Waclawiak |

Our efforts between now and the next meeting will be to develop a laundry list of possible impacts to the distribution system caused by the installation and operation of DR. The goal is to turn this list into a Working Group Paper for the Summer 2002 Power Meeting in Chicago, IL. The group will attempt to organize a panel session for the

Summer Meeting with this paper and others on voltage regulation, var control, and reclosing, etc.

The next meeting will be held at the Winter Power Meeting in New York, NY in 2001. We will attempt to schedule a 2 hour meeting on Tuesday afternoon. A 2 to 4 PM time slot is preferred, but a 1 to 3 time slot will be accepted if 2 to 4 is not available.

The web site for this working group:

<http://grouper.ieee.org/groups/td/dist/dri>