

**Working Group on Switching & Overcurrent Protection**  
**2007 IEEE/PES General Meeting**  
**June 26<sup>th</sup>, 2007**  
**Minutes**  
**Tampa, Florida**

Charlie Williams, *Chair*, ([cwilliams@sandc.com](mailto:cwilliams@sandc.com)) called the meeting to order at 8:00 AM with 17 members and guests present.

1. The IEEE required slides for Working Groups were presented.
2. The minutes of the January 8, 2007 WG meeting were reviewed.
3. The Network Tutorial is planned for the IEEE PES T&D Meeting in Chicago in April 2008.
4. Charlie Williams will draft the Scope and Purpose for the PAR for the Distribution Overcurrent Protection Guide for discussion at our next meeting.

Potential conflicts were identified with IEEE PC37.230/D6.0, "Draft Guide for Protective Relay Applications to Distribution Lines", being developed by the Power Systems Relay Committee. "The scope of this Guide is to discuss the application and coordination of protection for radial power-system distribution lines. It will include the descriptions of the fundamentals, line configurations and schemes. In addition to these, the scope will include identification of problems with the methods used in distribution line protection and the solutions for those problems." A copy of the latest Draft can be downloaded from the Working Group web page, <http://www.pes-psrc.org/d/>.

Charlie Williams will contact Phil Waudby (Chair) of this PSRC WG to establish a liaison and resolve any overlap issues with our intended scope.

5. A draft outline of the Distribution Overcurrent Protection Guide was sent to all of the members prior to the meeting for review. During the meeting, the Guide outline was revised and volunteers agreed to develop a draft of the text for the following sections by the end of November 2007.
  1. Fault Causes and Mechanisms – Charlie Williams / Lee Taylor
    - 1.1. Lightning
    - 1.2. Trees
    - 1.3. Animals
    - 1.4. Other
  2. Fault Analysis and Short Circuit Calculations - Mike Pehosh
    - 2.1. Grounded Systems
    - 2.2. Ungrounded Systems
    - 2.3. Fault Impedances
  3. Overcurrent Protection Equipment – John Banting
    - 3.1. Breakers
    - 3.2. Fuses
      - 3.2.1. Expulsion
      - 3.2.2. Current Limiting
      - 3.2.3. Electronic
    - 3.3. Reclosers
    - 3.4. Sectionalizers
    - 3.5. Faulted Circuit Indicators

- 3.6. Relays
  - 3.6.1. Electromechanical
  - 3.6.2. Electronic
  - 3.6.3. Instantaneous and Time Delay
  - 3.6.4. Reclosing
    - 3.6.4.1. Overhead
    - 3.6.4.2. Underground
  
- 4. Overcurrent Protection Schemes – Jim Burke
  - 4.1. Fuse Save
  - 4.2. Fuse Blow
  - 4.3. Trip Saving
  - 4.4. Adaptive
  - 4.5. Primary Network
  - 4.6. Equipment
    - 4.6.1. Transformers
    - 4.6.2. Capacitors
  
- 5. Feeder Designs – Betty Tobin
  - 5.1. Radial
  - 5.2. Loop
  - 5.3. Segmentation
  
- 6. Reliability / Economics – Rodney Robinson, Val Werner, & Lee Taylor
  - 6.1. Fuse vs. Recloser
  - 6.2. Reliability Value
  
- 7. Industry Standards and Guides
  
- 8. Automation – George Simard
  
- 9. DG Interconnection – Bob Saint

Draft text should be sent to [CWilliamsJr@sandc.com](mailto:CWilliamsJr@sandc.com) and [frank.lambert@neetrac.gatech.edu](mailto:frank.lambert@neetrac.gatech.edu) by Friday, November 30, 2007. The material will be assembled into a draft document for discussion at our next meeting in January.

The meeting was adjourned at 9:30 AM.

Submitted by:  
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