2000 Summer Meeting - IEEE Distribution System Analysis Subcommittee
July 18, 2000
Seattle, Washington

Attendance

17 members and visitors attended: Robert Broadwater, Sandoval Carneiro, Jr., Roger Dugan, Jian Fu, Mingguo Hong, Bill Kersting, Ljubomir Kojovic, Jean Mahseredjian, Juan Martinez, Tom McDermott, Hiroyuki Mori, Ilya Roytelman, Noel Schulz, Xiaofeng Wang, Dennis Woodford (visitor), Mohammad Vaziri Yazdi, Jun Zhu

Old Business

All those present introduced themselves and updated the address list. Tom McDermott chaired the meeting because Mesut Baran and Anil Pahwa could not attend. Minutes from the 1999 Summer Power Meeting in Edmonton were approved. There was no subcommittee meeting at the 2000 Winter Power Meeting in Singapore.

Panel Session for 2001 WPM

Five panel session topics were considered for Columbus:

1. Load flow analysis and models (repeat of the 1999 T&D panel)
2. Common information model
3. Reliability and planning
4. Economic tools and market analysis
5. Design and optimization

The subcommittee decided to combine the first two into a panel on "Load Flow and Data Models". Sandoval Carneiro and Noel Schulz will co-chair the panel. The tentative topic list for this panel is:

1. Distribution common information model
2. Model selection
3. Three-phase methods
4. Radial test feeders

There was a discussion on the relative merits and sophistication of line models used for transmission vs. distribution analysis. It was pointed out that accurate line models are available
in both fields. However, confusion might arise when simpler models are used in cases where they should not be. Topic 2 of the panel should focus on this issue for distribution systems.

**Radial Test Feeders**

Bill Kersting had updated the feeder data and distributed it to some subcommittee members before the meeting. Since then, Bill has added a simple four-bus system for testing transformer connections. Ilya Roytelman, Noel Schulz, and Tom McDermott have all begun solving the feeders in different programs. The data will be finalized in time for presentation at the 2001 Winter Power Meeting. A transactions paper will also be prepared. The feeder data and benchmark solutions from NMSU will be posted on this Web site.

During the discussion, several suggestions were made to provide more of the input data:

1. cable geometry and permittivity
2. soil resistivity
3. line and cable impedance matrices included in the results

The input feeder data includes physical details of the cables and overhead lines, rather than impedances, because line modeling choices are to be highlighted. Impedance matrices will be provided in the results, however, as an aid for investigators tracking down discrepancies with the benchmark solutions.

**Data Dictionary**

Roger Dugan provided an update on the Distribution System Analysis Data Dictionary. A straw man draft was circulated for the 1999 Summer Power Meeting. He has collected roughly a half-dozen vendor data formats. Roger asked if anyone knew about a complementary or competing effort called "Multispeak" (no one did).

Xiaofeng Wang and Noel Schulz are going to help Roger coalesce the straw man draft and the vendor responses.

**New Business**

The planned panel sessions on DG and PQ analysis did not occur at this meeting, due to lack of timely author response. However, some of our panelists took part in a combined DG session on Monday afternoon, which over 100 people attended. At the Distribution Planning/Power Quality paper session on Wednesday morning, there were almost 50 people attending through the whole session.

Minutes prepared by
Tom McDermott
August 9, 2000