http://grouper.ieee.org/groups/sag/

IEEE P1564 Task Force on Voltage Sag Indices

IEEE/PES Summer 2002 Meeting
The Palmer House Hilton, Chicago
Tuesday, July 23, 2002
10:00 to Noon

IEEE P1564 Officers

- IEEE/PES Chair
  - Mike Sheehan, msheeh@puget.com
- IEEE/IAS Chair
  - Math Bollen, m.bollen@ieee.org
- Secretary and Webmaster
  - Russ Ehrlich, russ.ehrlich@conectiv.com

Agenda

- Welcome and Opening Remarks
- General Issues
- Status of CIGRE working group on Power Quality Indices
- Status of IAS voltage sag working group
  - Where to meet in the future in place of the winter meeting
- Status of P1564
- Pending Issues

Agenda

- Forming of Subgroups
- Event Characteristics
- Single-event indices
- Site indices
- System indices
- Russ Ehrlich
- Plenary presentation and discussion of Chapters 6
- through
- Meeting Summary, next meeting and adjourn

Minutes from Last Meeting

- New York City
- January 29, 2002

IEEE P1564 PAR

- Title
  - Recommended Practice for the Establishment of Voltage Sag Indices
- Project Scope
  - This recommended practice identifies useful voltage sag indices for customers, vendors and the electric utilities. The document will identify the method of calculating such indices. The indices are intended to be applied to distribution substations, circuits and defined regions.

IEEE P1564 PAR

- Project Purpose
  - Sag indices are needed to indicate the different performance levels experienced at the transmission, subtransmission, substation and distribution circuit levels. In addition, the characteristic exposure that a typical distribution system encounter needs to be quantified in order to guide manufacturers in the appropriate design of ride-through alternatives for user load equipment. The proposed standard should help utilities and manufactures to compute the advantages/disadvantages of various connections to the electrical system. Sag indices will be determined using the work of IEEE 1250-1995, Std 1159-1995, Std 1346-1998, Chapter 9 of IEEE Std 493, and recent surveys of power quality users and utility systems.

IEEE P1564 Chapters

1. Overview
2. References
3. Definitions
4. Summary of the Procedure
5. Voltage Sampling
6. Event Characteristics versus Time
   - IEC 61000-4-30
   - three-phase measurements
   - phase-angle jump
7. Single-Event Indices
   - IEC 61000-4-30
   - three-phase measurements
   - additional characteristics
   - single-index methods
8. Site Indices
   - aggregation
   - SARFI
   - voltage-sag coordination chart
   - voltage-sag tables
   - single-index methods
9. System Indices
   - site selection and weighting
10. Bibliography

Math Bollen's Report

- Chapter 6
  - We're more or less done
  - Depending on the progress of 1159.1, we may need to add some additional material
- Chapter 7
  - We're done as far as magnitude and duration is concerned
  - Single-index methods may require a decision about the amount of detail needed. Do we really want to add all these different methods?

Math Bollen's Report

- Chapter 8
  - The task force requires a discussion on SARFI or UNIPEDE table. IEC 61000-2-8 recommends a UNIPEDE-type table but with different bins.
- Chapter 9
  - An important issue is whether we will recommend to take the weighted average value over all sites or the 95% values (as recommended by IEC 61000-2-8)

Next Meeting

- The IEEE Transmission and Distribution Committee is meeting next in Las Vegas from January 27-30, 2003 (Monday-Thursday) at the Riviera Hotel.
- The T&D Committee plans that nearly all of its task force, working group, and subcommittee meetings will be from Monday to Wednesday. They expect to follow a meeting schedule similar to what we presently use at the winter and summer power meetings.
- The IEEE Substations Committee will be meeting in the same hotel at the same time.
- The Distribution Subcommittee asked me to poll this task force. Are you planning to go to this Las Vegas conference?