

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

# IEEE P1564 Task Force on Distribution Voltage Sag Indices

2003 Winter Technical Committee Meetings  
Riviera Hotel and Casino  
Tuesday, January 28, 2003  
10:00 AM to 12:00 Noon



# New Committee Structure

- ◆ IEEE Transmission and Distribution Committee
  - IEEE Power Quality Subcommittee
    - Working Group on Harmonics
    - Working Group on Monitoring Electric Power Quality
    - Working Group on Recommended Practice for Evaluating Electric Power System Compatibility with Electronic Process Equipment
    - Working Group on Distribution Voltage Quality
      - ◆ Task Force on Distribution Custom Power (P1409)
      - ◆ Task Force on Voltage Flicker (P1453)
      - ◆ **Task Force on Distribution Voltage Sag Indices (P1564)**

# New Committee Structure

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    - Working Group on Monitoring Electric Power Quality
    - Working Group on Recommended Practice for Evaluating Electric Power System Compatibility with Electronic Process Equipment

# Working Group on Harmonics

- ◆ Completed Standard
  - IEEE Std 519-1992: *IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems*
- ◆ Task Forces and Draft Standards
  - Task Force on Guide for Applying Harmonic Limits on Power Systems (P519A)
  - Task Force on Harmonics Modeling and Simulation
  - Task Force on Probabilistic Aspects of Harmonics
  - Task Force on Interharmonics
  - Task Force on Single Phase Harmonic Limits (P1495)
  - Task Force on Low Voltage Active Harmonic Filters

# Working Group on Distribution Voltage Quality

- ◆ Completed Standard
  - IEEE Std 1250-1995: *IEEE Guide for Service to Equipment Sensitive to Momentary Voltage Disturbances*
- ◆ Task Forces and Draft Standards
  - Task Force on Distribution Custom Power (P1409)
  - Task Force on Voltage Flicker (P1453)
  - Task Force on Distribution Voltage Sag Indices (P1564)

# Working Group on Monitoring Electric Power Quality

- ◆ Competed Standard
  - IEEE Std 1159-1995: *IEEE Recommended Practice for Monitoring Electric Power Quality*
- ◆ Task Forces and Draft Standards
  - Task Force on Recommended Practice for Power Quality Measurements in AC Power Supply Systems (P1159.1)
  - Task Force on Recommended Practice for Transfer of Power Quality Data (P1159.3)

# WG on Recommended Practice for Evaluating Electric Power System Compatibility with Electronic Process Equipment

## ◆ Competed Standard

- IEEE Std 1346-1998: *IEEE Recommended Practice for Evaluating Electric Power System Compatibility with Electronic Process Equipment*

# 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 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

# IEEE P1564 Officers

- ◆ IEEE/PES Chair
  - Mike Sheehan, [msheeh@puget.com](mailto:msheeh@puget.com)
- ◆ IEEE/IAS Chair
  - Math Bollen, [m.bollen@ieee.org](mailto:m.bollen@ieee.org)
- ◆ Secretary and Webmaster
  - Russ Ehrlich, [russ.ehrlich@conectiv.com](mailto:russ.ehrlich@conectiv.com)
- ◆ Web Site
  - <http://grouper.ieee.org/groups/sag/>

# Proposed Agenda

- ◆ Welcome and Opening Remarks
- ◆ Chair Discussion
- ◆ Presentation: SRP Methodology Revisited
- ◆ Discussion of Math Bollen's Documents
- ◆ Break into Chapter Groups for Individual Discussion
  - Chapter 6, Chapter 7, Chapters 8 & 9
- ◆ Review Chapter Group
- ◆ Action Items



# Minutes from Last Meeting



- ◆ IEEE/PES Summer 2002 Meeting in Chicago



# Chair Discussion



# SRP Methodology Revisited



# Discussion of Math Bollen's Documents





# Break into Chapter Groups for Individual Discussion







# Review Chapter Group





# Action Items

# Next Meeting

- ◆ IEEE/PES 2003 General Meeting
- ◆ 2003 July 15
- ◆ Toronto, Ontario Canada



- ◆ <http://ewh.ieee.org/r7/toronto/pesgmt2003/>