Panel Session on Standards Development and Applications of Voltage Sag Indices

2015 IEEE PES General Meeting
2015 July 28, 1:00 to 3:00 PM

Sheraton Hotel
1550 Court Place, Denver, Colorado, USA
IEEE Std 1564-2014

Scope

• This guide identifies appropriate voltage sag indices and characteristics as well as the methods for calculating them.

• Methods are provided for quantifying the severity of individual events (single-event characteristics), for quantifying the performance at a specific location (single-site indices), and for quantifying the performance of the whole system (system indices).

• Multiple methods are presented for each. The methods are appropriate for use in transmission, distribution, and utilization electric power systems.

• Published 2014 June 18
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- Sponsored by the Transmission & Distribution Committee of the IEEE Power & Energy Society
  - [http://grouper.ieee.org/groups/td/](http://grouper.ieee.org/groups/td/)
- Organized by the IEEE P1564 Voltage Sag Indices Task Force
  - [http://grouper.ieee.org/groups/sag/](http://grouper.ieee.org/groups/sag/)
- Chaired by Daniel Sabin of Electrotek Concepts
- Total Panel Session Length: 2 Hours
- Will Consist of Six 20-Minute Presentations
  - 1 minute for introduction
  - 17 minutes for presentation
  - 2 minutes for questions
IEEE Std 1564-2014, *Guide for Voltage Sag Indices*, is a new standard that identifies voltage sag indices and characteristics of electrical power and supply systems as well as the methods for their calculation.

The panel session will include examples of characterizing single events, computing indices for a single monitoring location, and computing indices for a system of monitors. Examples will be presented using data collected from power quality monitors, digital relays, digital fault recorders, and revenue meters.

This panel session will first present an overview of IEEE 1564. It will then describe applications of voltage sag indices in transmission, distribution, and industrial electric power systems. It will include presentations on use of voltage sag indices in T&D research projects, and perspectives on voltage sag indices from CIGRÉ, CIRED, and IEC.
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Planned Presentations
1. Overview of IEEE Std. 1564-2014 Guide on Voltage Sag Indices
2. Voltage Sag Indices in Transmission Systems
   – Theo Laughner of Tennessee Valley Authority
3. Voltage Sag Indices in Distribution Systems
   – Kevin Kittredge of Salt River Project
4. Voltage Sag Indices in Industrial Power Systems
   – Urenna Onyewuchi of Corning Incorporated
5. Voltage Sag Indices in the 2012-2013 EPRI DPQ/TPQ Project
   – Thomas Cooke and Bill Howe of EPRI
6. Voltage Sag Methods in IEC and CIGRÉ/CIRED
   – Math Bollen of Luleå University of Technology
Deadlines

• Deadline for Submitting Panel Session Abstract to IEEE PES Transmission & Distribution Committee
  – 2014 October 15
• Paper Deadline: None
  – An optional conference-grade paper up to five pages in length can be written and published in the conference proceedings of the 2015 IEEE PES General Meeting. This paper would need to be finished around February 2015 (exact due date TBD).
  – Use www.ieee.org/conferences_events/conferences/publishing/templates.html
• Presentation Deadline: 2015 June 1
  – The presentation would be prepared in PowerPoint and would use a template similar to this presentation. If the presentation is uploaded in June 2015, it would be included on the USB distributed to meeting attendees.
  – However, the presentation could be revised until the Friday, 2015 July 24.