P1668

Submitter Email: d.dorr@ieee.org
Type of Project: New IEEE Standard
PAR Request Date: 13-May-2009
PAR Approval Date: 11-Sep-2009
PAR Expiration Date: 31-Dec-2013
Status: PAR for a New IEEE Standard
Project Record: 1668

1.1 Project Number: P1668
1.2 Type of Document: Recommended Practice
1.3 Life Cycle: Trial Use

2.1 Title: Recommended Practice for Voltage Sag and Interruption Ride-Through Testing for End Use Electrical Equipment Less than 1,000 Volts

3.1 Working Group: Voltage Sag Ride-through Working Group (IAS/PSE/1668_WG)
Contact Information for Working Group Chair
Name: Chris Melhorn
Email Address: c.melhorn@ieee.org
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Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE Industry Applications Society/Power Systems Engineering (IAS/PSE)
Contact Information for Sponsor Chair
Name: Carey Cook
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Contact Information for Standards Representative
None

4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 08/2011
4.3 Projected Completion Date for Submittal to RevCom: 01/2012

5.1 Approximate number of people expected to be actively involved in the development of this project: 14
5.2 Scope: This document is a non-industry specific recommended practice for voltage sag ride-through performance and compliance testing for all electrical and electronic equipment connected to low voltage power systems that can experience malfunction or shutdown as a result of reductions in supply voltage lasting less than one minute. The recommended practice includes defining minimum voltage sag immunity requirements based on actual voltage sag data. A section dedicated to the detailed analysis of voltage sags experienced by end users provides insight into real-world voltage sags. Testing procedures and test equipment requirements are clearly defined within this document to reflect this electrical environment including single-phase, phase-to-phase, three-phase, and unbalanced voltage sags. The recommended practice also defines certification and test reporting requirements, including voltage sag ride-through equipment characterization.
5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: The purpose of this recommended practice is to clearly define test methods and ride-through performance for determining electrical and electronics equipment sensitivity to voltage sags. Analysis of real world sags provides the foundation for both the test methods and the criteria, aligning themselves as closely as possible to the end user s electrical environment. The recommended practice will define the characteristics of the voltage sags depths, durations, phase angle, and vectors required to relate to real world based voltage sag events. The recommended practice will show how different voltage sag testing methods can be used to simulate real world sags. End users will be able to use the recommended practice in their purchase specifications to ensure the required level of performance. In addition, end users can use the voltage sag criteria as a performance benchmark for existing equipment.
5.5 Need for the Project: There is a need for standardized methodology to test electronic equipment and understand is susceptibility to AC voltage variations. Manufacturers will have a well defined methodology for evaluating the immunity of their equipment designs and system integrators and end users will be able to evaluate equipment coming into facilities to better understand annual downtime

probability.
5.6 Stakeholders for the Standard: All categories of equipment manufacturers for voltage applications below 1000Vac. Electric service providers. Industrial facility managers.

Intellectual Property
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

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7.1 Are there other standards or projects with a similar scope?: No
7.2 International Activities
a. Adoption
Is there potential for this standard (in part or in whole) to be adopted by another national, regional or international organization?: Do Not Know
Organization:
Technical Committee Name:
Technical Committee Number:
Contact Name:
Phone:
Email:
b. Joint Development
Is it the intent to develop this document jointly with another organization?: No
c. Harmonization
Are you aware of another organization that may be interested in portions of this document in their standardization development efforts?: Do Not Know
Organization:
Technical Committee Name:
Technical Committee Number:
Contact Name:
Phone:
Email:

8.1 Additional Explanatory Notes (Item Number and Explanation):