PC62.82.2

Submitter Email: iuda.morar@pacificorp.com
Type of Project: Revision to IEEE Standard 1313.2-1999
PAR Request Date: 08-Oct-2010
PAR Approval Date: 08-Dec-2010
PAR Expiration Date: 31-Dec-2014
Status: PAR for a Revision to an existing IEEE Standard
Root Project: 1313.2-1999

1.1 Project Number: PC62.82.2
1.2 Type of Document: Guide
1.3 Life Cycle: Full Use

2.1 Title: Guide for the Application of Insulation Coordination

Old Title: IEEE Guide for the Application of Insulation Coordination

3.1 Working Group: 3.4.18 Preferred Voltages & Insulation Coordination Std Maintenance WG (PE/SPDHV/HV3.4.18)
Contact Information for Working Group Chair
Name: Iuda Morar
Email Address: iuda.morar@pacificorp.com
Phone: 503-813-6937
Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE Power and Energy Society/Surge Protective Devices/High Voltage (PE/SPDHV)
Contact Information for Sponsor Chair
Name: Kenneth Brown
Email Address: kbrown@leviton.com
Phone: (619) 421-7485
Contact Information for Standards Representative
Name: James Wilson
Email Address: jwwilson@ieee.org
Phone: 314-822-5480

4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 09/2012
4.3 Projected Completion Date for Submittal to RevCom: 08/2014

5.1 Approximate number of people expected to be actively involved in the development of this project: 15

5.2 Scope: The insulation coordination standard and guide apply to three-phase ac systems above 15 kV and are divided into two parts. This guide, the second part, is an application guide with practical examples, intended to provide guidance in the determination of the withstand voltages and to suggest calculation methods and procedures. The insulation coordination examples for selected equipment are designed to explain the principles of Part 1, IEEE C62.82.1, Standard of Insulation Coordination-Definitions, Principles, and Rules. The guide is intended for air-insulated ac systems. Caution should be exercised in the case of gas-insulated systems (GIS).

Old Scope: The insulation coordination standard and guide apply to three-phase ac systems above 1 kV and are divided into two parts.
IEEE Std 1313.1-1996 (Part 1) specifies the procedure for selection of the withstand voltages [basic lightning impulse insulation level (BIL) and basic switching impulse insulation level (BSL)] for equipment phase-ground and phase-phase insulation systems. It also identifies a list of standard insulation levels. Although he principles of this standard also apply to transmission line insulation systems, the insulation levels may be different from those identified as standard insulation levels.
This guide (Part 2) is an application guide with practical examples, intended to provide guidance in the determination of the withstand voltages and to suggest calculation methods and procedures. The insulation coordination examples for selected equipment are designed to explain the principles of Part 1. The guide is intended for air-insulated ac systems; caution should be exercised in the case of gas-insulated systems (GIS).

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: It should be recognized that absolute protection of station equipment is theoretically impossible. Even if arresters are located at the terminals of all apparatuses, equipment failures can occur. The probabilistic method, that is, designing for a mean time between failures (MTBF) criterion, is proposed here not only to permit a realistic basis of design, but perhaps more importantly, to form a consistent measure of design based on reliability.

Old Purpose: It should be recognized that absolute protection of station equipment is theoretically impossible. Even if arresters are located at the terminals of all apparatuses, equipment failures can occur. The probabilistic method, that is, designing for a mean time between failures (MTBF) criterion, is proposed here not only to permit a realistic basis of design, but perhaps more importantly, to form a consistent measure of design based on reliability.

5.5 Need for the Project: This revision of the guide will address comments received during the recent document reaffirmation, will also address items contained in an IEC document on the same subject, and will address any new information that is found.

5.6 Stakeholders for the Standard: Utility engineers, consultants, operators, owners, students, and any other person concerned with insulation coordination.

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

---

7.1 Are there other standards or projects with a similar scope?: Yes

If Yes please explain: This document is a revision of the existing IEEE document and will address suggestions received during the reaffirmation process and also add any new information that is found.

and answer the following

Sponsor Organization: IEC

Project/Standard Number: 60071-2

Project/Standard Date: 09-Jun-2004

Project/Standard Title: Insulation co-ordination - Part 2: Application guide

7.2 Joint Development

Is it the intent to develop this document jointly with another organization?: No

7.3 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?: No

b. Harmonization

Are you aware of another organization that may be interested in portions of this document in their standardization development efforts?: No

---

8.1 Additional Explanatory Notes (Item Number and Explanation): This revision will address comments received during the reaffirmation and will address any new information found.