

## **IEEE C37.20.7.X PAR Study Group Meeting Minutes**

### **Application, Installation, and Use of Switchgear Rated Up to 52kV for Internal Arcing Faults**

Meeting Date: October 10, 2023

Meeting Time: 10:15 am – 12:00 pm

Location: Catamaran Resort Hotel – San Diego, CA

#### **Attendance**

Members:29, quorum met. First time meeting so all participants are considered as members of the study group.  
Attendance is recorded at the end of the meeting minutes.

#### **A. Call to Order**

Meeting was called to order at 10:15am on October 10, 2023

#### **B. Introductions**

Participants introduced as included below

#### **C. Approval of Agenda**

Motion to approve agenda by R. Hartzel, 2<sup>nd</sup> by D. Hrncir. Approved by unanimous consent.

#### **D. Rules and Guidelines for conducting Working Group Meetings**

Slides and links to documents shared with Working Group  
Verbal call for Essential Patents – None Identified

#### **E. IEEE SA Copyright Policy**

Link and Slides for SA Copyright Policy shared

#### **F. Working Group P&P's**

Link for Working Group P&P's shared

#### **G. Review Draft PAR**

Draft PAR shared with Study Group for discussion.

Open discussion and adjustments to draft PAR concluded.

Motion to approve the draft PAR as edited by the Study Group to submit to SA S/C to request permission to move forward with forming a WG by M. Wactor, 2<sup>nd</sup>: H. Milnikel. Approved by unanimous consent.

A copy of the study group approved draft PAR attached to the meeting minutes.

WG agreed that extending an invite to IAS/ESW interested members to be welcomed to join the upcoming WG activities. M. Valdes to convey this activity while at next IAS/ESW meetings.

#### **H. Adjourn**

Meeting adjourned at 11:21am.

Recorded by:

Michael P. Lafond

Secretary

October 10, 2023

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Attendance:

Role	First Name	Last Name	Company
Chair	Marcelo	Valdes	ABB
Secretary	Michael	Lafond	UL Solutions
Member	Ashok	Ayyaswamy	Volta
Member	Paul	Barnhart	UL Solutions
Member	Andy	Beckel	Excel Energy
Member	Russel	Boyce	Eaton Corp.
Member	Chris	Bridges	Eaton Corp.
Member	Robert	Burns	Eaton Corp.
Member	Fiori	Cozivo	S&C Electric
Member	Arkadiusz	Doroz	Eaton Corp.
Member	Ilya	Glinksky	SCE
Member	Ron	Hartzel	Eaton Corp.
Member	Tom	Hawkins	Siemens
Member	Dan	Hrcir	Eaton Corp.
Member	Dakota	Leopard	Eaton Corp.
Member	Jialin	Li	Hydro One
Member	Albert	Livshitz	Qualus Services
Member	Kevin	McGlown	JST Power
Member	Ken	McKinney	UL Solutions
Member	Ann	Miller	TCI
Member	Henning	Milnikel	Siemens AG
Member	Mark	Peterson	Excel Energy
Member	Artgom	Runov	S&C Electric
Member	Todd	Sauve	Rockwell Automation
Member	Carl	Schneider	Schneider Electric
Member	Garrett	Sims	Eaton Corp.
Member	Michael	Wactor	Powell Industries
Member	Jacob	Walgenbach	Siemens
Member	TJ	Zec	Eaton Corp.

# PAR for a New IEEE Standard

## New C37.20.7.X Guide for Application, Installation, and Use of Switchgear Rated Up to 52 kV Tested for Internal Arc Faults

### Section 1

#### 1.1 Assigned Project Number: Suggested number is C37.20.7.1

If left blank, a project number will be assigned by the NesCom Administrator when your PAR is received. Please contact the NesCom Administrator for any questions about a specific project number.

#### 1.2 Type of Document: **Standard, Recommended Practice, or Guide** Guide

Standards, Guides and Recommended Practices are generically referred to as IEEE Standards.

**Standards** are documents with mandatory requirements. Standards are generally characterized by the use of the verb "shall."

**Recommended Practices** are documents in which procedures and positions preferred by the IEEE are presented. Recommended practices are generally characterized by the use of the very "should."

**Guides** are documents in which alternative approaches to good practice are suggested, but no clear-cut recommendations are made. Guides are generally categorized by the use of the verb "may."

#### 1.3 Life Cycle: Full use

##### **Full Use or Trial Use**

A standard can be designated full-use or trial-use.

A standard can be designated as **trial-use** when a draft satisfies the criteria of the standards-developing group (i.e., subcommittee or working group), but needs input from a very broad constituency. This is a preferred alternative to the widespread distribution of unapproved drafts. Such a draft requires a letter ballot of the sponsor and approval by the IEEE-SA Standards Board as a trial-use standard. Trial-use standards are effective for no more than two years from the date of publication. If no comments are received during the trial period, the standard is subject to adoption as a full-use standard upon receipt of written recommendation from the sponsor and approval by the IEEE-SA Standards Board.

### Section 2

#### 2.1 Project Title: Guide for Application, Installation, and Use of Switchgear Rated Up to 52kV Tested for Internal Arcing Faults

The title shall not contain the acronym "IEEE." This is added to the title when the standard publishes. All other acronyms shall be spelled out in the title. Typically titles begin with "Standard for....", "Guide for...." or "Recommended Practice for...."

If a general term is used to represent ranges (e.g. high, medium, low) within the title, scope or purpose, numerically define such ranges where they first appear (title, scope or purpose as applicable).

## Section 3

**3.1 Working Group:** (auto-filled)

**3.2 Sponsoring Society and Committee:** (auto-filled)

[A listing of Sponsor P&Ps and Sponsor Scopes is available at <https://development.standards.ieee.org/pub/view-sponsor-pnps>]

PES Switchgear Committee

**3.3 Joint Sponsor:** (chosen from drop down menu)

If you are not adding a joint sponsor to this project, you may leave this field blank.

## Section 4

**4.1 Sponsor Balloting Information: *Individual or Entity***

Is the balloting group for this standard expected to be composed of **individuals** or **Entities** (persons representing corporations/government bodies, institutions or SDO's)? See Section 5.4.1 in the IEEE Standards Board Operations Manual for further explanation.

Individual

**4.2 Expected Date of Submission of Draft to the IEEE-SA for Initial Sponsor Ballot**

**Month:** 11 **Year:** 2027

Additional communication and input from other organizations or other IEEE Standards Sponsors should be encouraged through participation in the working group or the invitation pool prior to Sponsor Ballot.

**4.3 Projected Completion Date for Submittal to RevCom**

**Month:** 11 **Year:** 2028

Enter the date the draft standard is planned to be submitted to RevCom for processing (not to exceed four years from the date of PAR submission). **It is suggested to allow at least six months after Initial Sponsor Ballot for the ballot process.** Cutoff dates for submitting draft standards to RevCom are generally in February, May, August, and October. Check the appropriate calendars for the specific dates as the draft matures. Use a best guess estimate for the PAR.

## Section 5

### 5.1 Approximate number of people expected to be actively involved in the development of this project: **20**

This includes Working Group members, additional non-voting participants, etc.

### 5.2 Scope of the proposed standard: This application guide is intended to address typical considerations for the application, installation, and use of switchgear that is arc resistant in accordance with the requirements of IEEE C37.20.7, Recommended Practice for Testing Switchgear Rated Up to 52 kV for Internal Arcing Faults.

The Scope should appear as it will in the draft standard. The Scope stated on the PAR shall be written in present tense, in complete sentences, and with proper grammar as it is intended to appear in the published standard. All acronyms shall be spelled out at first use. The title and (if appropriate) date of any document referenced in the Scope shall be listed in the Additional Explanatory Notes field at the end of this PAR form.

### 5.3 Is the completion of this standard contingent upon the completion of another standard? **No**

#### If yes, explain:

Your explanation should include how the standard is dependent upon the completion of another standard. Also, if applicable, explain why a PAR request is being submitted if the standard currently under development is not yet complete. The title and number of the standard which this project is contingent upon shall be included in the explanation.

### 5.4 Will this document contain a Purpose clause? **Yes**

#### If yes, enter the purpose of the proposed standard:

The purpose of this guide is to assist the user in determining the appropriate installation conditions and use of the equipment. Included in this evaluation are:

- a) Physical constraints of the site
- b) Coordination of the electrical protective scheme
- c) Base level of structural consistency for the building
- d) The effect of the installation site requirements on equipment ratings
- e) Locations where internal arcing faults are more likely to occur
- f) Risk mitigation methods.
- g) Application and considerations for electrical safety such as NFPA 70E, NFPA 70B, CSA Z462, OSHA and similar.

A purpose statement is encourage but not mandatory. If the document will not include a purpose statement choose "No" and leave the purpose field blank.

The purpose stated on the PAR shall be written in present tense, in complete sentences, and with proper grammar as it is intended to appear in the published standard. The title and (if appropriate) date of any document referenced in the Purpose shall be listed in the Additional Explanatory Notes field at the end of the PAR form.

### **5.5 Need for the project:**

Annex B addressing this subject exists in the current C37.20.7 however this annex does not fully cover the subject, nor does it address the issue from a risk control perspective consistent with NFPA 70E. Furthermore C37.20.7 is a document mostly targeted at equipment designers and test laboratories. This document is intended to replace the application annex B in C37.20.7 in the future. This new document will be targeted at users which should broaden readership.

The need for the project details the specific problem that the standard will resolve and the benefit that users will gain by the publication of the standard. The need statement should be brief, no longer than a few sentences.

### **5.6 Stakeholders for the standard:**

All users, electrical design consultants, and architects serving the industrial and commercial facility construction market as well as equipment providers.

The stakeholders (e.g., telecom, medical, environmental) for the standard consist of any parties that have an interest in or may be impacted by the development of the standard.

## **Section 6**

### **6.1 Intellectual Property:**

**A. Is the Sponsor aware of any copyright permissions needed for this project?** No

**If yes, please explain below:**

If the proposed standard uses copyrighted material, copyright releases must be obtained by the working group and shall be included in the final package submitted to the IEEE-SA Standards Board. Additionally, remember that during development of your approved project, the proper IEEE copyright notices must be maintained on all drafts.

**B. Is the Sponsor aware of possible registration activity related to this project?** No

**If YES, please explain below:**

The IEEE Registration Authority Committee (RAC) is a mandatory coordination body. A YES answer to this question provides early

notification that RAC mandatory coordination will occur during Sponsor ballot. Working groups are welcome to engage the RAC if appropriate earlier in the project.

If the proposed standard requires (or is expected to require) the unique identification of objects or numbers for use in industry, the project has registration activity. This does not cover things like code points defined within the standard.

A YES answer with brief explanation is appropriate if:

1. The proposed standard creates a new registry.
2. The proposed standard includes new use of an existing registry (whether IEEE RA or other registry authority). An existing IEEE registry example would be use of an Organizationally Unique Identifier (OUI). An explanation of a new registration activity should be supplied on the PAR. Please visit the IEEE Registration Authority website (<http://standards.ieee.org/develop/regauth/>) for additional information regarding existing registries.
3. When RAC review of previously reviewed text is appropriate to assure terminology and descriptions of usage are current.

A NO answer is appropriate:

1. When the project has no registration activity.
2. When a project modifying an existing standard with registration activity will not be adding new text nor modifying existing registration activity text previously reviewed by the IEEE Registration Authority (e.g., corrigendum on non-registry content). Please briefly explain why RAC review is not required.

**Please note that the RAC may request mandatory coordination on any project, independent of the answer to this question.**

## Section 7

### 7.1 Are there other standards or projects with a similar scope? **No**

Identify any standard(s) or project(s) of similar scope(s), both within or outside of the IEEE, and explain the need for an additional standard in this area.

**Sponsor Organization:**

### 7.2 Joint Development - Is it the intent to develop this document jointly with another organization? **No**

If this document will be developed jointly with another organization, your IEEE-SA Staff Liaison must be made aware of this prior to final approval of the document by the IEEE-SA Standards Board [RevCom].

**If yes, please indicate the organization, technical committee name/number and contact person within external organization**

**Organization:**

**Technical Committee Name:**

**Technical Committee Number:**

**Contact Name:**

**Phone:**

**Email:**

### **7.3 International Standards Activities**

**A. Adoptions - Is there potential for this standard to be adopted by another organization?: No**

If this document is to be adopted by another organization, the document must be adopted intact (whole and unmodified) and the requested contact persons entered on the submittal form. For information about adoptions, contact your IEEE-SA Staff Liaison.

**If yes, please indicate the organization, technical committee name/number and contact person within external organization**

**Organization:**

**Technical Committee Name:**

**Technical Committee Number:**

**Contact Name:**

**Phone:**

**Email:**

**B. Harmonization - Are you aware of another organization that may be interested in portions of this document in their standardization development efforts? No**

**If yes, please indicate the organization, technical committee name/number and contact person within external organization**

**Organization:**

**Technical Committee Name:**

**Technical Committee Number:**

**Contact Name:**

**Phone:**

**Email:**

### **7.4 Does the sponsor foresee a longer term need for testing and/or certification services to assure conformity to the standard? No**



**Additionally, is it anticipated that testing methodologies will be specified in the standard to assure consistency in evaluating conformance to the criteria specified in the standard? No**

## **Section 8**

### **8.1 Additional Explanatory Notes:**

Include the Item # in front of each explanation to distinguish which PAR field it is referring to.

If there is any further information that may assist NesCom in recommending approval for this project, include this information here. The title of any documents referenced in the PAR should be listed here.

### **8.2 IEEE Code of Ethics**

The PAR will not be accepted if the box below is not checked.

**I acknowledge that I have read and I understand the IEEE Code of Ethics**

**I agree to conduct myself in a manner that adheres to the IEEE Code of Ethics when engaged in official IEEE business.**