RODE C37.75 Switchgear Enclosure Integrity Working Group Meeting Minutes – Rev 0

December 12, 2022 – Virtual

Chair: Anil Dhawan **Secretary**: Karla Trost

Meeting Agenda

1) Call to Order **Anil Dhawan**

The meeting was called to order at 1:02 PM Central Standard Time.

2) Patent and Copyright Slides **Anil Dhawan**

The patent and copyright slides were shown. No items were brought to the attention of the chair.

3) Introduction of Members and Guests

Self-introductions were made in the chat.

4) Attendance and Quorum Check **Karla Trost**

18 Members – 9 Required for Quorum.

13 members were present, quorum was achieved.

5) Approval of Agenda **Anil Dhawan**

M. Feltis made a motion to approve the agenda and C. Riley seconded.

The agenda was approved by consensus.

6) Approval of Previous meeting minutes **Anil Dhawan**

C. Riley made a motion to approve the November minutes and M. Feltis seconded.

The minutes were approved by consensus.

7) Action Items from previous meetings

a) Review of ASTM standards for year references. **Caryn Riley**

So if you have copyright permission, we should put in the wording from the IEEE C57.12.32-2002 for Section 4.5.6 Thermal cycle test and Figure A.1. As they have replaced that section in C57.12.32-2019 with 5.4.8 Abrasion resistance and it reads very differently for execution than the Thermal cycle test referenced above.

I have found that the B117 reference has not been changed in substance – additions have been made to be more precise with descriptive information and standardization of measurement units. We can drop the year reference for B117.

Lastly, I have D1654. I'm not sure what I needed to check for this standard. I feel that the current version D1654-08 (Reapproved 2016)^{e1} should be the one referenced as it is more complete with scribe treatment of the test specimens procedure.

C. Riley reviewed her findings for the group. The working group agreed to change to undated references.

b) QUV Reference without dating C57.12.28? **Karla Trost**
Working Group to review proposal in drafted document.
One comment received prior to the meeting:

The first sentence in "5.6.6 Ultraviolet accelerated weathering test (QUV)" (top of page 9) starts as follows:

The QUV testing of C57.12.28 applied with the following modification:

Notice that this listing is formatted differently than the subclauses preceding and following it (which reference the same IEEE Std C57.12.28-2014, on a subclause number basis). To match the format of these surrounding subclauses, I propose that this first sentence in "5.6.6 Ultraviolet accelerated weathering test (QUV)" start instead as:

Subclause 5.5.5 of IEEE Std C57.12.28-2014 is applicable with the following modification:

The working group reviewed the current language as well as the discussion from the November meeting which requested an undated reference. The final agreement was to leave an undated reference but to correct the language to "is applicable."

c) UL References **Karla Trost**
Working Group to review proposal in drafted document.

No questions/concerns received to the action item email nor during this meeting.

d) Review of drafted document **Karla Trost**

i) In the definition of "control enclosure" under "3. Definitions" (top of page 3), it reads in part:

The enclosure includes the housing, mounting, and permanent outside surfaces.
NOTE-Where applicable, cabinet venting, gasketing, or manufacturer supplied enclosure mounting components are included.

The first listed sentence infers that mounting means are standard.
The "NOTE" that follows infers that mounting means are optional ("Where applicable…").
I believe that one of these two references to enclosure mounting means should be removed.

The working group reviewed the comment. After discussion, the sentence starting on line 344 was modified to read, "Where applicable, cabinet venting, gasketing, or manufacturer supplied enclosure mounting components, <u>which are required for meeting this standard,</u> are included."

ii) The last paragraph in "4.1.1 Normal service conditions" (middle of page 3) reads as follows:

When a control enclosure is designed to be mounted separately from the apparatus, the manufacturer shall define the appropriate service conditions and the control shall pass all applicable design tests from Clause 6 of this standard.

Presumably: apparatus = switchgear.

A “control enclosure … mounted separately from the apparatus” seems like it would be the most normal, common field installation. Why then is it treated in this last paragraph of subclause 4.1.1 as if it is a unique case that requires special consideration?

I believe that this entire last paragraph of subclause 4.1.1 should be removed.

Discussion on if the statement is necessary and if the placement (following the list) is correct. Moved after line 355 and modified the language to read:
When a control enclosure is designed to be mounted separately from the switchgear, the manufacturer and user shall agree to the appropriate service conditions and the control enclosure shall pass all applicable design tests from Clause 6 of this standard.

iii) 5.6.14 Test repetition” (bottom of page 10) reads as follows:

These coating/substrate tests shall be repeated whenever the painting material, painting process, substrate material, or production facility location is changed.

In the clauses/subclauses that precede subclause 5.6.14, “substrate” is listed first (under “5.3 Material requirements”), followed by “coating” (under “5.6 Coating system performance requirements”). Also, the testing for “substrate” and “coating” is referred to as “performance requirements” (“5.3.3 Substrate performance requirements” and “5.6 Coating system performance requirements,” respectively). Thus, to make subclause “5.6.14 Test repetition” more readily understandable, I propose that it instead read as:

These substrate/coating performance requirements/tests shall be repeated whenever the painting material, painting process, substrate material, or production facility location is changed.

The working group agreed to change the statement to read: “These substrate and coating performance requirements and tests shall be repeated whenever the painting material, painting process, substrate material, or production facility location is changed.”

8) New Items:

a) Vote to proceed to recirculation (pending approval of RODE.)
B. Kirkpatrick made a motion to proceed to recirculation, C. Riley seconded.
The motion was unanimously approved.

9) Next Meeting

The next meeting will be in person, the week of April 17th at Clearwater Beach, Floriday.

10) Adjournment

The meeting was adjourned at 1:57PM Central Standard Time.

Annex 1: Attendance

Role	First Name	Last Name	Company	12/12/2022
Chair	Anil	Dhawan	Allegis Group	X
Member	Edwin	Almeida	Southern California Edison	X
Member	Chris	Ambrose	Federal Pacific (Div. of Electro-Mechanical Corp.)	X
Member	David	Beseda	S&C Electric Co.	
Member	Michael	Culhane	Eaton	
Member	Katherine	Cummings	G&W Electric	
Member	Mark	Feltis	Schweitzer Engineering Laboratories, Inc	X
Member	Paul	Found	BC Hydro	X
Member	Travis	Johnson	Xcel Energy	X
Member	Brendan	Kirkpatrick	Southern California Edison	X
Member	Robert	Lau	nVent Hoffman	X
Member	Benson	Lo	Toronto Hydro	X
Member	Al	Pruitt	The Durham Company	
Member	Caryn	Riley	Georgia Tech/NEETRAC	X
Member	Ian	Rokser	Eaton	
Member	Joe	Stemmerich	Trayer Engineering	X
Member	Francois	Soulard	Hydro-Quebec	X
Secretary	Karla	Trost	G&W Electric	X