

RODE C37.75 Switchgear Enclosure Integrity Working Group Meeting Minutes

October 11, 2021 – Virtual



Chair: Anil Dhawan

Secretary: Karla Trost

Meeting Agenda

- 1. Call to Order** Anil Dhawan
The meeting was called to order at 8:04AM CDT.

- 2. 6.3.2 Call for Patents** Anil Dhawan
The IEEE June 2021 slides were shown.

- 3. Confirmation of attendance of Members and Guests**
Members used the chat and verbal methods to announce themselves.

- 4. Attendance and Quorum Check**
There were 16 Members and 15 guests in attendance.
Quorum was met.

- 5. Approval of Agenda** Anil Dhawan
Motion by: C. Riley
Second by: K. Cummings
The agenda was approved.

- 6. Approval of Previous meeting minutes** Anil Dhawan
<https://www.ewh.ieee.org/soc/pes/switchgear/minutes/2021-1/S21RODEa6REV0.pdf>

Motion by: D. Beseda
Second by: B. Lau
The minutes were approved.

- 7. Review of Action Items**
 1. Definition of Submersion: K. Trost, D. Beseda, A. Dhawan C. Ambrose will review the definitions of Submersible, temporary immersion, and prolonged immersion and propose new verbiage if necessary.
 - (1) Discussion on if the “Severe Service Conditions” subclause should be included and if so, any design or test requirements needed.

- (a) One user said they do have examples of equipment which experienced unintended conditions. Specifically, the intention was to meet the 10-day window, but the submersible environment was unexpectedly extended.
 - (b) A user brought up that IP68 allows for more severe conditions because it does not limit the depth or duration. It was suggested that rather than develop a design requirement or design test, the subclause should reference an agreement between the User and Manufacturer. Other users agreed that this would be suitable.
 - (c) The concept of “classes” was brought up and discussion was held that they may more sense in the apparatus standards.
 - (d) K. Trost to update once definitions are reviewed and approved at RODE.**
2. D. Beseda will review other C57.12.XX documents to see if there is a gap and modify the language? (K. Trost to assist, A. Dhawan)
 - (1) Beseda shared the review – in the 2019 standards, the “Coastal Exposure” Test was added for Severe environments. In addition, Humidity, Ultraviolet, and abrasion test were added to the other tests.
 - (2) It is recommended to add a Coastal and Non-Coastal environment for the Submersible columns. **D. Beseda will update the tables in the draft to this recommendation.**
 3. **A. Dhawan lead, Mike Whitney, Travis Johnson to review the requirements and applicability for QUV testing.**
 - (1) Action be carried over.**
 4. A. Dhawan submit for a 2 Year PAR extension. – The PAR Extension was approved to December 2023.

8. New Items:

1. Review status of the document and any open questions for the Working Group from the Spring comment period.
 - (1) It was noted that if we change the reference for the Submersible definition we need to add it to the reference list.
2. Review next steps and timeline.
 - Working Group Editing and final review
 - There are members that would like to have a review of the document before going out for ballot. **The document will be sent out for WG review once the action items are completed. K. Trost**

9. **Next Meeting** is scheduled to take place at the Spring IEEE Switchgear meeting.

10. Adjournment

The meeting was adjourned at 9:00AM CDT.

Annex 1: Attendance

Role	First Name	Last Name	Company	10/11/2021
Chair	Anil	Dhawan	ComEd	X
Member	Peter	Agliata	Hubbell Power Systems	
Member	Edwin	Almeida	Southern California Edison	X
Member	Chris	Ambrose	Federal Pacific (Div. of Electro-Mechanical Corp.)	
Member	David	Beseda	S&C Electric Co.	X
Member	Michael	Culhane	Eaton	X
Member	Katherine	Cummings	G&W Electric	X
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	
Member	Al	Pruitt	The Durham Company	X
Member	Caryn	Riley	Georgia Tech/NEETRAC	X
Member	Francois	Soulard	Hydro-Quebec	X
Member	Joseph	Wisnewski	UL LLC	X
Secretary	Karla	Trost	G&W Electric	X
Guest	Thomas	Ballard	Hubbell Power Systems	
Guest	Steven	Barbera	Arizona Public Service	X
Guest	Dave	Booth	Exiscan	
Guest	Ngoc	Bui	SDG&E	
Guest	Dan	Busilan	Dominion Energy	X
Guest	Stephen	Cary	Eaton	X
Guest	Sterlin	Cochran	Oak & Shield LLC	
Guest	Robert	Cohn	Powercon Corp.	
Guest	Brad	Connor	Xcel Energy	
Guest	Bianca	Cosby	San Diego Gas & Electric	
Guest	Kennedy	Darko	G&W Electric Co	
Guest	Stacey	Davies	Siemens	X
Guest	Frank	DeCesaro	DeCesaro Consulting	X
Guest	Doug	Edwards	Siemens Industry, Inc.	
Guest	nadia	El khattabi	Hydro-Quebec	
Guest	Jeffrey	Gieger	Thomas & Betts	X
Guest	Paul	Gingrich	AZZ Switchgear Systems	
Guest	Ilya	Glinsky	Southern California Edison	X
Guest	Sahadev	Gohil	AZZ Switchgear Systems	
Guest	Jodi	Haasz	IEEE	
Guest	Christopher	Hastreiter	Eaton	X
Guest	Harold	Hirz	G&W	X

Guest	Jason	Hollander	CHA Consulting, Inc.	
Guest	Benjamin	Isaak	American Electric Power	
Guest	Rahul	Jain	S&C Electric Company	
Guest	John	Kaminski	Siemens	
Guest	John	Kapitula	ABB	X
Guest	Ryan	Kowdley	Pacific Gas & Electric	
Guest	Bradley	Lewis	AEP	
Guest	Donald	Martin	G&W Electric Co.	X
Guest	Abraham	Martinez	ABB	X
Guest	Steven	Meiners	Retired	
Guest	Jacob	Midkiff	Dominion Energy	
Guest	Ashley	Moran	IEEE Standards Association (IEEE-SA)	
Guest	Roberto	Olivares	Siemens	
Guest	Brian	ONeil	RMS Energy	
Guest	Stephen	Pell	Siemens	
Guest	Mark	Peterson	Xcel Energy	
Guest	Larry	Putman	Powell	
Guest	Anthony	Ricci	FirstEnergy Corp.	
Guest	Mark	Roberson	AZZ/Calvert	
Guest	Michael	Shook	Hubbell Power Systems	
Guest	Jon	Spencer	Utility Solutions	X
Guest	Erin	Spiewak	IEEE	
Guest	Donald	Swing	Powell Industries	
Guest	Nenad	Uzelac	G&W Electric	X
Guest	Srikant	Venkatesh	Schweitzer Engineering Laboratories	
Guest	Bruce	Venne	Rockwell Automation	
Guest	Nick	Vonfeldt	Ameren Missouri	
Guest	Michael	Wactor	Powell Industries, Inc	
Guest	William	Walter	We-Energies	
Guest	Randy	Ward	Aluma-Form	
Guest	Jerry	Wen	BC Hydro	
Guest	Michael	Whitney	S & C Electric Company	
Guest	Torsten	Wirz	ABB AG	
Guest	Robert	Wolf	Hubbell Power Systems, Inc.	
Guest	Charles	Worthington	Hubbell Power Systems	
Guest	Danish	Zia	UL LLC	
Guest	Antone	Bonner	PAS Consulting	
Guest	Russell	Boyce	Eaton	
Guest	Tim	Rohrer	Exiscan	
Guest	Ian	Rokser	Eaton Corp	