RODE C37.68 Controls Working Group
Meeting Minutes
May 19, 2022 – Virtual

Chair: Paul Found **Secretary**: Karla Trost

Meeting Minutes

1. Call to Order Paul

The meeting was called to order at 11:06AM Central.

2. Call for Patents/Copyrights Karla

IEEE Patent and Copyright slides were shown.

3. Introduction of Members and Guests

Self-introductions with affiliations were made in the chat.

4. Attendance and Quorum Check Karla

22 members. Quorum requires 11.

13 members were present.

5. Comment Resolution Continuation

- Ad hoc to resolve comments I-159, I-328, I-346: **P. Agliata, C. Ambrose.** *Will be carried over to the next meeting.*
- I-165 (and related) Definitions of Table headings: **P. Meyer** to propose revision to address comments.
    - The revision proposal was shown (Annex 3).
    - In discussion, the group liked the proposal for the consolidated table. It was determined that there is product today where the control is mounted to the outside of the tank but covered by the apparatus enclosure. Therefore, the "pad mount" section would also have "Control mounted to apparatus/enclosure". Therefore, the table footnote would not need be needed.
    - With the simplified formatting, the table names can be simplified to "Design Requirements"; "Design Test Requirements"; "Routine Test Requirements"
- Clause 6 Sub-Team – Updates/ Discussion on comment resolution.
    - P. Meyer presented the resolutions proposed by the sub-team.
- Clause 7 Sub-Team – Updates/ Discussion on comment resolution.
    - Comment i-483 (Clause 7.1/ Line 695)
        - Agreement to remove.

- Comment i-39 (Clause 7.2.1 / Line 700) If "endurance" is equivalent to "some" transportation but also to long-term conditions, maybe we should perform without packaging.
  - One manufacturer shared that they have typically done vibration without packaging and shock/bump with packaging.
  - A user commented that while shipment from the factory is typically within protective packaging while movement from the warehouse to the location would be without packaging.
  - Agreement to remove line 700.
- Comments i-46/197/242/342 (Clause 7.3.7 / Lines 753-754) – Proposal to remove the IEC alternative.
  - Agree to remove.
  - It was pointed out that the SWC test being done in Clause 7 is equivalent as the Impulse Test (in 7.3.2). C. Hastreiter made a motion to change 7.3.7 to Dielectrics only and 8.2 of 37.90-2005. J. Mizener seconded. Motion passed.
- Comment i-49/ 94 (Clause 7.4.4/ Line 775) – Proposal to move the content from 7.4.4 to 6.5.5 and modify as follows: (Also responds to comments 313, 314, 315, 419, 420)
  - 6.5.5.2 Battery Performance
  - When equipped with batteries, the manufacturer shall document the following capabilities along with the battery make and model used.
  - The minimum number of operations which can be performed during a set amount of time during which the control's power requirements will be supported with no power supply input voltage present.
  - The ability to power up and maintain power to the control with no power supply input voltage present.
  - The ability of the battery charger to fully function over the entire specified temperature range.
  - Agreed to move
- Comments I-244/246 (Line 841/844) – The sub team proposed a revision to 6.2.3 (Shown on the next bullet)
  - 6.23 ~~Knockouts~~ Unused Entrances/ Expansion spots
    Expansion Spots (aka Knockouts) are not allowed in the control enclosure unless ~~requested by the~~ acknowledged by the ~~customer~~ user ~~for the purpose of shipping and storage protection.~~ ~~If supplied,~~ Unused/ sealed entrances included for future use (or installation of user supplied items) and expansion spots must be supplied so that the integrity and rating of the enclosure shall not be compromised during shipment, storage, or installation.
  - After discussion the following verbiage was agreed to:
    6.2.3 Unused openings
    Unused openings in the enclosure (designed for future expansion) (e.g. knockouts) are not allowed in the control enclosure unless acknowledged by

the user. These openings must be supplied so that the integrity and rating of the enclosure shall not be compromised regardless of whether the openings are used.

The end of the allotted meeting time was reached. The decision was made to schedule another meeting at 3PM Central on May 26, 2022.

6. **Next steps/ meeting(s):**

7. **Adjournment -** The meeting ended 12:29PM Central

Annex 1: Attendance

Role	First Name	Last Name	Company	5/19/2022
Chair	Paul	Found	BC Hydro	X
Member	Peter	Agliata	Hubbell Power Systems	X
Member	Edwin	Almeida	Southern California Edison	--
Member	Chris	Ambrose	Federal Pacific (Div. of Electro-Mechanical Corp.)	
Member	Katherine	Cummings	G&W Electric	X
Member	Frank	DeCesaro	DeCesaro Consulting Services	X
Member	Anil	Dhawan	ComEd	
Member	Mark	Feltis	Schweitzer Engineering Laboratories, Inc	X
Member	Christopher	Hastreiter	Eaton	X
Member	Travis	Johnson	Xcel Energy	X
Member	Brendan	Kirkpatrick	Southern California Edison	X
Member	Benson	Lo	Toronto Hydro	X
Member	Donald	Martin	G&W Electric Co.	X
Member	Peter	Meyer	S&C Electric Company	X
Member	Jacob	Midkiff	Dominion Energy	
Member	Jeff	Mizener	Siemens Industry, Inc.	X
Member	Stephen	Pell	Siemens	
Member	Caryn	Riley	Georgia Tech/NEETRAC	--
Member	Ian	Rokser	Eaton Corp	--
Member	Francois	Soulard	Hydro-Quebec	--
Member	Nenad	Uzelac	G&W Electric	--
Secretary	Karla	Trost	G&W Electric	X

Annex 2: Sub group comment resolution proposals (Attached)

Annex 3: Comment I-165 proposal

FROM:

489 **5. Application Requirements**

490 Design requirements, design test requirements, and routine test requirements vary by application. The
491 following tables define which requirements are applicable for each specific application.

492 **Table 1— Design Requirements per Control Application**

Design Requirements	Polemount		Padmount			Wet/Dry Vault		
	Separated	Integrated	Inside Apparatus	Mounted to enclosure	Mounted separately from enclosure	Inside Apparatus	Mounted to apparatus/ enclosure	Mounted separately from enclosure
6.2 Enclosure type and rating	X	X		X	X		X	X
6.3 Operational	X	X	X	X	X	X	X	X
6.4 Requirements for Communication and Control Cables	X	X	X	X	X	X	X	X
6.5 Power Supply and Battery Charger	X	X	X	X	X	X	X	X
6.6 Grounding	X	X	X	X	X	X	X	X

493

TO:

Design requirements, design test requirements and routine test requirements vary by the location of the control with respect to the switching device, which includes its base, housing or tank, for the different applications of polemount, padmount and wet/dry vault. The following tables define which requirements are applicable for the different location possibilities for the three applications. The term apparatus is used to denote the switching device including its base, housing or tank and the term enclosure is used for the enclosure around the apparatus. Depending on the type of switching device being used, the housing and enclosure may be combined (for example in the case of air-insulated pad-mounted gear).

Design Requirements	Polemount		Padmount			
	Control inside apparatus	Control separated from apparatus	Control inside apparatus	Control mounted to enclosure	Control separated from enclosure	

OR:

Can Padmount and Wet/Dry Vault be combined?

Design Requirements	Polemount		Padmount & Wet/Dry Vault		
	Control inside apparatus	Control separated from apparatus	Control inside apparatus	Control mounted to apparatus/ enclosure[1]	Control separated from enclosure

[1] For Padmount control mounted to enclosure and for Wet/Dry Vault the control could be mounted to either the apparatus or enclosure.