

RODE PC37.60 WG, Reclosers

April 25, 2016 – Hilton Head Island, South Carolina USA



Chair: David Stone

Meeting Minutes

1. Call to order and introduction:

The Working Group for the revision of IEC 62271-111/IEEE C37.60-2012 ed. 2 held its 9th meeting on April 25, 2016 in Hilton Head Island, South Carolina, USA in conjunction with the IEEE Switchgear meetings. Convener David Stone opened the meeting at 8:05 AM.

2. Roster Check:

Introductions were made. Attendance included 20 members of the Dual Logo Maintenance Team (DLMT) and 14 guests. 15 members of the DLMT were absent or excused. Refer to the attendance list at the end of this report.

Mr. Andy Seccombe of the Australian Standards Organization was removed from the membership as expert appointed by the Australian National Committee. He no longer resided in Australia. Two IEEE members were removed due to retirement and one new IEEE member was added.

3. Agenda and Previous Meeting Minutes

The agenda was reviewed and approved without change. The meeting minutes of the C37.60 San Diego meeting held in October 2015 were approved as previously distributed.

4. Meeting Highlights

- **Documents available on IEEE website:** All documents from the DLMT will be posted on the IEEE web site. Members may contact the Convener for the log-in ID and password.
- **Actions since last meeting were summarized:**
 - Results of the 2nd CD for IEC 62271-111 that closed on August 28, 2015:
 - Of the 285 comments received, 30 were not accepted by the DLMT and discussed at the IEC SC17A Plenary meeting held in December 2015.
 - The SC17A Committee requested the DLMT to review or reconsider eight of these 30 comments; the decision of the DLMT was accepted for the balance.
 - The decision of SC17A was to have the DLMT prepare a CDV draft to be submitted to the Secretary by July 1, 2016.
 - A WG draft for the CDV was prepared and distributed to the DLMT on 6 March 2016.
- The balance of the meeting was devoted to discussion and resolution of the open comments from both IEEE and IE C. Approximately 30 items were reviewed or discussed with the following significant decisions:
 - Annex F: **Kirkland Smith** will review to expand and clarify information on recloser vs. circuit breaker.

- Publically accessible: Definition will be added. **P. Found** will re-write information in construction clause to indicate special conditions to be defined by user and manufacturer on a special needs basis.
- IK Ratings: The IEC reference standard requires significant input from the relevant equipment standards. It is therefore felt that no common requirements specifications should be made.
- Rated (symmetrical) breaking (and making) current descriptions will be expanded by notes to clarify intent between basis, i.e. asymmetrical vs. symmetrical. **C. Ambrose** will provide a proposal.
- Test method #3 for verification of $kpp = 1.3$ was deleted from the CDV draft due to its complexity. **C. Heinrich** will evaluate wording and offer proposal to simplify the method in order to preserve a single-phase test alternative while recognizing that a recloser cannot (or may not) be able to be timed for controlled opening.
- Clauses 8 – 12: **D. Stone** will distribute draft of these clauses that cover topics not normally considered in IEEE standard but which are included in IEC 62271-1 Common Specifications.
- Low temperature test: **C. Lettow** will provide revised wording for the specification of the low temperature consistent with the wording used for the high temperature in the high temp. test.
- Low temperature test manual operations: The specifications will not be changed. It was felt that the test labs should be able to adapt their methods to accommodate this requirement in their cold chambers.
- Clause numbering: Clauses will be renumbered pending approval of change by the IEC National Committees. Normative references would become clause 2; Definitions remain as clause 3; Service conditions would become clause 4; and Ratings, Design and Construction, Design tests, and Routine tests would be bumped to clauses 5 through 8 respectively. A questionnaire will be sent to the IEC NC's on this question with results expected by mid. June.
- There is a draft of an STL Guide for IEC 62271-111 that will be reviewed by the STL Technical Committee this Fall. **A. Bonner** will review the draft to see if there are any items that should be considered in the final CDV draft of the standard to remove the need for any STL clarification. Two items that have been identified are: 1) test voltage for line & cable charging for triple-single reclosers (**A. Bonner** to make proposal), and 2) Tests at 50 Hz vs. 60 Hz. (**C. Heinrich** and **D. Stone** to make proposal).
- Preliminary tests on vacuum interrupters for lightning impulse withstand voltage testing. The DLMT voted to change subclause 6.2.5 to allow a maximum of 25 preliminary impulse tests for each polarity. **L. Falkingham** and **E. Dullni** to propose actual wording.
- D. Stone will prepare an updated draft for the CDV for final review by the DLMT before submitting to IEC for the CDV voting. The CDV is due to IEC by July 1, 2016. An IEEE recirculation ballot will be made in parallel with the IEC CDV.

5. Next meeting:

Week of 9 October 2016; Pittsburg, PA USA

6. Meeting was adjourned at 12:00 noon.

Submitted by:

David T. Stone
 Working Group Chairperson, C37.60 and Convener for IEC MT47
 Reclosers and Other Distribution Switchgear Subcommittee

April 29, 2016

Annex A: Meeting Attendance April 25, 2016

X = present at meeting

Role	First Name	Last Name	Company	Country	4/25/2016
Chair	David	Stone	DTS Technical Services	USA	X
Member	Peter	Agliata	Hubbell Power Systems	USA	
Member	Chris	Ambrose	Federal Pacific	USA	X
Member	Herman	Bannink	KEMA Netherlands	Netherlands	excused
Member	Robert	Behl	ABB	USA	X
Member	Jean-Marc	Biasse	Schneider Electric	France	X
Member	Antone	Bonner	Eaton's Cooper Power Systems	USA	X
Member	Eldridge	Byron	Schneider Electric	USA	
Member	David	Dart	NOJAPower	Australia	excused
Member	Frank	DeCesaro	Eaton's Cooper Power Systems	USA	X
Member	Edgar	Dullni	ABB	Germany	X
Member	Leslie	Falkingham	Vacuum Interrupters Limited	UK	X
Member	Mark	Feltis	Schweitzer Engineering Labs	USA	X
Member	Paul	Found	BC Hydro	Canada	X
Member	Jeffrey	Gieger	Thomas & Betts	USA	X
Member	William	Glennon	Schweitzer Engineering Labs	USA	
Member	Christian	Heinrich	Siemens AG	Germany	X
Member	Harold	Hirz	Thomas and Betts	USA	
Member	Edward	Jankowich	Retired	USA	
Member	Stephen	Lane	Hawker Siddeley Switchgear	UK	
Member	Chris	Lettow	S&C Electric Company	USA	X
Member	Wangpei	Li	Eaton	USA	X
Member	Sachin	Puranik	Hubbell Power Systems	USA	
Member	Larry	Putman	Powell Electrical Systems Inc.	USA	
Member	Ian	Rokser	Eaton's Cooper Power Systems	USA	X
Member	Timothy	Royster	Dominion Virginia Power	USA	X
Member	Christian	Sasse	Tavrida Electric North America Inc	Canada	
Member	Robert	Smith	Eaton	USA	X
Member	Francois	Soulard	Hydro-Quebec	Canada	X
Member	Tom	Stefanski	Powertech Labs Inc	Canada	
Member	Nenad	Uzelac	G&W Electric	USA	X
Member	William	Walter	We-Energies	USA	X
Member	Subir	Chakraborty	Schneider Electric	France	
Member	Tony	Headley	UK	UK	Excused
Member	Zhengli	Kou	China	China	
Guest	Samuel	Chang	Pacific Gas & Electric Co	USA	X
Guest	Anil	Dhawan	ComEd	USA	X

Guest	William	Ernst	Thomas & Betts	USA	X
Guest	Peter	Glaesman	PCORE Electric Company, Inc.	USA	X
Guest	Travis	Johnson	Xcel Energy	USA	X
Guest	Ryan	Kowdley	Pacific Gas & Electric	USA	X
Guest	Bradley	Lewis	AEP	USA	X
Guest	Donald	Martin	G&W Electric Co.	USA	X
Guest	Roberto	Olivares	Siemens	USA	X
Guest	Kevin	Rogerson	Eversource	USA	X
Guest	Jon	Spencer	Thomas & Betts Hi-Tech	USA	X
Guest	Jean-Marc	Torres	Eaton Corporation	USA	X
Guest	Karla	Trost	G&W Electric Co.	USA	X
Guest	Robert	Warren	DNV GL - KEMA Laboratories	USA	X