

**REPORT of  
SC17A MT47/IEEE WG C37.60 for the Revision of IEC  
62271-111/IEEE C37.60-2003, Automatic Circuit Recloser  
Standard**

**(Las Vegas, Nevada, USA; September 28, 2010)**

The Working Group for the revision of C37.60-2003 held its 12th meeting on September 28, 2010 in Las Vegas Nevada, USA between 8:00 AM and 4:00 PM.

The agenda was reviewed followed by introductions. The Chair recognized guests M. Ceglia and J. Haasz, IEEE Staff members. Attendance included 24 members of the Dual Logo Maintenance Team and 15 guests. Eight members of the DLMT were absent or excused. Refer to Annex A for attendance list.

The Chair displayed and reviewed the IEEE patent policy and guidelines for the conduct of meetings (inappropriate topics of discussion).

### **Dual Logo Maintenance Team (DLMT) Timeline**

Chairman Stone outlined the timeline for pending goals for the WG/MT activities.

- The target date for the IEC CDV of June 1, 2010 was missed due to the unresolved issue of dependent manual close operations. A new target date of January 30, 2011 has been set with SC17A. The ballot period for a CDV in IEC is five months, making closing before the May 2011 meeting problematic.
- The Chairman will report on the progress of the project at the IEC 17A plenary meeting in October (Seattle, OR, USA).
- Concurrent with the IEC CDV ballot, a third ballot within IEEE will be held.
- The IEC FDIS (two month ballot period) and final IEEE ballot will be in 2011.
- The earliest estimate for publication date (assuming approval) will be early 2012.

### **Documents available on IEEE web site**

All documents from the WG are posted on the IEEE web site. The Chairman updates the list as required. Last update was in mid September. The Web address, ID and password have been given to all Working Group members. Contact the Chair if you need help.

### **WG/MT47 Membership**

There are no changes to the membership of the IEEE Working Group.

### **Discussion of Open Comments**

Eight issues or comments were discussed with agreement of the WG as noted below:

1. **Line and Cable charging current tests:**
  - a. Figure 4 has been expanded to include a single-phase circuit.

- b. Test circuit parameters:
    - i. Zs proposed at 15% of the 100% load current circuit impedance. T100 impedance suggested as an alternate. Task team to resolve.
    - ii. TRV control will not be required
  - c. Add clarification that both single and three-phase reclosers required to do both cable and line charging current tests.
  - d. Reduce the allowed number of restrikes from four to three.
2. TRV - IEEE comment to use TRV valued taken from the fuse standard for ratings equal to or below 12.5 kA will be rejected.
  3. Altitude correction comment: Proposal accepted to change last paragraph in 2.2.1 to read:  
***“In this standard, the rated symmetrical interrupting current (rated short-circuit breaking current), related required capabilities and interrupting times do not require correction for altitude”***
  4. Clause on flammability will not apply.
  5. Mechanical endurance test will be revised to place the cutout mounted recloser on the same footing as the traditional recloser. This includes the operating sequence during the test and the dielectric withstand requirement after the test.
  6. Rewording of clause 6.103.3 and 6.103.4.1 to clarify the intent of two operations with full peak current and two operations with full rated symmetrical current.
  7. Allow a time delay for fast openings to compensate for high X/R ratio in the test lab. Agreed except that labs must adjust X/R to specified values consistent with TRV requirements.
  8. Dependent manual operation. At the conclusion of the April 2010 meeting, the following motion was approved and a task team of four members was asked to develop the specific changes to the standard to implement the motion. In the weeks that followed, the task team was unable to come to agreement on the wording. Accordingly, discussion of this question was taken up again at this meeting.

Motion from April 2010 meeting:

*“That the recloser standard be revised to specifically prohibit dependent manual fault closing operations. In the case where there is no fault making rating assigned, all faults must be removed from the protected line before closing the device.”*

After considerable discussion, the following motion was proposed and approved by a roll-call vote, 2/3 majority required: (20 in favor; 2 opposed; 2 abstained)

*Motion – That the motion passed at the April 27, 2010 WG meeting in Myrtle Beach be amended to read:*

*That the recloser standard be revised to specifically prohibit dependent manual fault closing operations. That the scope of the recloser standard be revised as follows: Add a new sentence:*

*“Devices that require a dependent manual closing operation are not covered by this standard.”*

The Chairman observed that the implementation of this motion would necessitate a review of language in the draft concerning dependent manual closing and fault clause testing/rating.

A second motion was proposed.

*Motion - That we rescind the motion of May 5<sup>th</sup>, 2009 to add “Cutout mounted Reclosers” to the Recloser standard C37.60.*

This motion, requiring a 2/3 majority, failed on a roll-call vote. (10 in favor; 8 opposed; 6 abstained)

The meeting adjourned at 4:00 PM.

David T. Stone  
Working Group Chairperson, C37.60 and  
Convenor for IEC MT47  
Reclosers and Other Distribution Switchgear Subcommittee  
October 8, 2010

**Annex A: Attendance**

**IEC MT47/IEEE C37.60 Working Group Meeting September 28, 2010**

X = present at meeting

Role	First Name	Last Name	Company	Country	9/28/2010
Chair	Robert	Behl	ABB	USA	X
Chair	David	Stone	DTS Technical Services	USA	X
IEC Member	Herman	Bannink	KEMA Netherlands	Netherlands	X
Member	Craig	Befus	BC Hydro	Canada	X
Member	Antone	Bonner	Cooper Power Systems	USA	X
Member	Raymond	Capra	Consultant	USA	Absent
Member	Frank	DeCesaro	Cooper Power Systems	USA	X
IEC Member	Leslie	Falkingham	Vacuum Interrupters Limited	UK	X
Member	Lawrence	Farr	Eaton Electrical	USA	X
Member	Jeffrey	Gieger	Thomas & Betts	USA	X
Member	Peter	Glaesman	Reuel, Inc.	USA	X
IEC Member	Christian	Heinrich	Siemens AG	Germany	X
Member	Harold	Hirz	Thomas and Betts	USA	Absent
Member	Edward	Jankowich	Thomas & Betts	USA	X
IEC Member	Stephen	Lane	FKI Switchgear	UK	X
Member	Chris	Lettow	S&C Electric Company	USA	X
Member	Steven	Meiners	GE	USA	X
Member	Donald	Parker	Alabama Power Company	USA	X
Member	Timothy	Royster	Dominion Virginia Power	USA	X
Member	Christian	Sasse	Tavrida Electric North America Inc	Canada	X
Member	Robert	Smith	Eaton Corporation	USA	X
Member	Francois	Soulard	Hydro-Quebec	Canada	X
Member	James	Swank	Cooper Power Systems	USA	X
Member	Tim	Taylor	Thomas & Betts	USA	X
Member	Nenad	Uzelac	G&W Electric	USA	X
Member	Walt	Von Miller	Delta Technology Consulting, Inc.	USA	Absent
Member	Jan	Zawadzki	Powertech	Canada	X
Member, Corres	Chris	Ambrose	Florida Power & Light Company	USA	Excused
Member, Corres	Randall	Dotson	Lakeland Electric, City of Lakeland, FL	USA	Excused
Member, Corres	Michael	Ennis	S&C Electric Company	USA	Excused
Member, Corres	Marcel	Fortin	Hydro-Quebec Distribution	Canada	Excused
Member, Corres	Glenn	Borchardt	S&C Electric	USA	Excused
Guest	Alonso	Castillo	Efacec	USA	X
Guest	Matthew	Ceglia	IEEE	USA	X
Guest	Larry	Davis	Reuel Inc	USA	X
Guest	Ken	Edwards	Bonneville Power Administration	USA	X
Guest	Mark	Feltis	Schweitzer Engineering Laboratories, Inc	USA	X
Guest	Hernan	Figuroa	Hubbell Power Systems	USA	X
Guest	Jodi	Haasz	IEEE	USA	X
Guest	Reid	Herzog	OG&E	USA	X

REPORT of Working Group for the Revision of  
Automatic Circuit Recloser Standard, IEC 62271-111/IEEE C37.60

17A/MT47(Stone041)

Guest	Daniel	Landreman	Cooper Power Systems	USA	X
Guest	Kenneth	Lee	Thomas & Betts Corporation	USA	X
Guest	Herbert	Martinez	Southern California Edison	USA	X
Guest	Sachin	Puranik	Hubbell Power Systems	USA	X
Guest	Larry	Putman	Powell Electrical Systems Inc.	USA	X
Guest	Jason	Stevens	Reuel Inc	USA	X
Guest	Andrew	Swisher	Southern California Edison	USA	X