

RODE PC37.62 WG, Fault Interrupters

May 6, 2014 – Orlando



Chair: Antone Bonner

Meeting Minutes

1. Call to order and introduction:

- The Working Group for the development of a standard specifically for Fault Interrupters held its second meeting May 6, 2014 in Orlando, Florida, USA in conjunction with the IEEE Switchgear Committee meetings.
- Chair Antone Bonner opened the meeting at 8:00 AM. Introductions of all participants were made.

2. Roster Check:

Attendance included 22 Working Group members and 8 guests. Two guests requested membership status. Refer to Annex A for the attendance list.

3. Previous Meeting Minutes:

Minutes of Fall 2013 meeting (San Antonio, TX) were reviewed and approved on a motion by Francois Soulard and second by Larry Putman.

4. Meeting Highlights:

- Minutes of Fall 2013 meeting (San Antonio, TX) were reviewed and approved on a motion by Francois Soulard and second by Larry Putman.
- Project Authorization Request (PAR) – NESCOM approved the PAR December 11, 2013.
- Standard – PC37.62, D0 was reviewed by the following groups and their changes are uploaded to the Central Desktop working group site. The objective of the tasks was to review assigned chapters of D0, compare them to C37.60–2012 and C37.60-2003, and verify that all portions relevant to fault interrupters were properly transferred and portions unrelated to fault interrupters were excluded.

The assignments are:

1. Chapter 1, 2, 3 and 4: Antone Bonner, Wangpei Li, - review complete
2. Chapter 5: Don Martin, Ben Rosenkrans, Ed Jankowich – review complete
3. Chapter 6: Chris Ambrose, Bill Walter, Tim Royster – review complete
4. Chapter 7: Frank DeCesaro, Scott Reed, Tom Stefanski, Harm Bannink – review in progress, to be complete early July
5. Chapter 8: Larry Putman, Dave Beseda, Jim Swank – review complete
6. Annexes: not complete, Antone to do

Two issues were discussed:

1. Definition of a Fault Interrupter – The definition from IEEE Std C37.100-1992 is “Self-controlled mechanical switching device capable of making, carrying, and automatically interrupting an alternating current. It includes an assembly of control elements to detect overcurrents and control the fault interrupter”. Comments related to application are found in Annex G of C37.60-2012.

The fault interrupter is the combination of mechanism and control elements. A fault interrupter may be in one or more ways of a padmounted switchgear or it may be a standalone device.

2. Applications of FI in overhead systems – Annex G of C37.60-2012 states “It is assumed that a fault interrupter will be applied to a cable connected system. As such, the rate of rise of recovery voltage (RRRV) will be much lower than that of an overhead distribution feeder line due to the capacitance of the cable.”

It was pointed out that fault interrupters are often applied at the juncture between an overhead supply system and an underground feeder system. Therefore the RRRV on the source side of the switch may be higher than in locations where the cable system is on both the source and load sides. It was agreed that the overhead tables would be considered in draft D0.

Next steps:

1. Incorporate review group recommendations into D0 to create D1.
 2. Distribute D1 to WG members for comments. Both a marked up copy and clean copy will be distributed with a comments spreadsheet.
 3. Distribute comments to WG members prior to Fall WG meeting.
- Project Timeline
 1. The Task Force’s intent is not to change the requirements that existed in C37.60 but to roll them over to a new standard with a minimal amount of change.
 2. Timeline: There were several comments that the project schedule was more aggressive than the working group could accommodate. Adjustments have been made accordingly.
 - i. Form Task Force Sep 2013
 - ii. PAR written Sep 2013
 - iii. Standard drafted Sep 2013
 - iv. PAR approved (TF status changes to WG) Dec 2013
 - v. Distribution in WG for comments Jul 2014
 - vi. IEEE Ballot pool formed Oct 2014
 - vii. Balloted in IEEE ballot pool Jan 2015
 - viii. Ballot comments reviewed and incorporated Apr 2015
 - ix. Reballoted in IEEE ballot pool Jun 2015
 - x. Approved by Standards Board

5. New Business;

No new items were presented or discussed.

6. Next meeting:

Since the task force is new and its formation may not be widely known, invitations will be sent to the members of the C37.60 and C37.74 working groups. (Action from Fall 2013 WG meeting not performed)

6. Next meeting:

Fall 2014: September 23, 2014 – Asheville, North Carolina, USA

7. Meeting was adjourned at 9.45 AM

Annex: Member Attendance

| First Name | Last Name | Company | Membership Status | 9/17/13 | 5/6/14 |
|------------|------------|---------------------------|-------------------|---------|--------|
| John Paul | Adigwu | SCE | M | X | X |
| Peter | Agliata | Hubbell PS | M | X | X |
| Chris | Ambrose | Federal Pacific | M | X | X |
| Harm | Bannink | DNV KEMA | M | X | X |
| David | Beseda | S&C Electric Company | M | X | X |
| Antone | Bonner | Eaton's Cooper PS | M | X | X |
| Frank | DeCesaro | Eaton's Cooper PS | M | X | X |
| Leslie | Falkingham | VIL | M | X | |
| Paul | Found | BC Hydro | M | X | X |
| Jeff | Gieger | T&B/Elastimold | M | X | X |
| Ed | Jankowich | ABB/T&B | M | X | X |
| Chris | Lettow | S&C Electric Company | M | | |
| Wangpei | Li | Eaton | M | X | X |
| Don | Martin | G&W Electric Co. | M | X | X |
| Steve | Meiners | GE | M | X | X |
| Larry | Putman | Powell Electrical Systems | M | X | X |
| Scott | Reed | S&C Electric Company | M | X | X |
| Ben | Rosenkrans | Eaton Corp. | M | X | X |
| Tim | Royster | Dominion Virginia Power | M | X | X |
| Francois | Soulard | Hydro Quebec | M | X | X |
| Tom | Stefanski | Powertech Labs | M | X | X |
| Jim | Swank | Eaton's Cooper PS | M | X | X |
| Nenad | Uzelac | G&W Electric Co. | M | | X |
| Bill | Walter | WE Energies | M | X | X |
| Chris | Borck | Eaton's Cooper PS | G | | X |
| David | Dart | Noja Power | G | | X |
| Dan | Gardner | T&B-ABB | G | | X |
| Peter | Glaesman | Reuel | G | X | X |
| Reid | Herzog | Okla Gas & Electric | G | X | X |
| Travis | Johnson | XCEL | G | | X* |
| Ken | Lee | T&B/Elastimold | G | X | |
| Christian | Sasse | Travida Electric | G | | X |
| Andrew | Swisher | SCE | G | X | |
| John | Vartanian | National Grid | G | | X* |

Submitted by:

Antone Bonner
 WG Fault Interrupters Standard chair
 May 29, 2014