

Meeting Minutes

Revision 01

IEEE Switchgear Committee Meeting C37.81 and C37.82 Working Group

April 26, 2016

IEEE C37.81 Guide for Seismic Qualification of Class 1E Metal-Enclosed Power Switchgear Assemblies

IEEE C37.82 Standard for the Qualification of Switchgear Assemblies for Class 1E Applications in Nuclear Power Generating Stations

The meeting was opened by Dave Riffe with an introduction to the subject documents.

1. All members and Guests introduced themselves and affiliation. The working group chair and 2 of 4 working group members were present for a quorum.

Berenguela	Diego	Google	Guest
Biasse	Jean-Marc	Schneider	Guest
Cohn	Bob	Powercon	Guest
Edwards	Doug	Siemens	Guest
Grahor	Lou	Eaton	Guest
Hidaka	Jeff	UL	Guest
Hines	Jared	Eaton	Guest
Jivanani	Anurag	Schneider	Guest
Lafond	Michael	General Electric	Guest
Lau	Bob	Hoffman Enclosures	Guest
Morse	Allan	Siemens	Guest
Moser	Darryl	ABB	Guest
Nayar	Raj	Siemens	Guest
Qasem	Ahmad	Bechtel	Guest
Riffe	Dave	Westinghouse	Chair
Rohr	Richard	Powell	Guest
Rowell	Amy	Eaton	WG
Sauve	Todd	Rockwell Automation	Guest
Sigmon	Dean	Eaton	Guest
Webb	John	ABB	Guest
Woodyard	Terrance	Siemens	WG

2. The meeting agenda was approved.
3. No members or guest had objections to the Fall 2016 meeting minutes.
4. Chairs Remarks

The status of both C37.81 and C37.82 were discussed. The initial ballot results for both C37.81 and C37.82 were received in April 2016. Both documents met the required 75% return and approval rates.

5. The following items were discussed based on comments received.

5.1. Are dates required when referencing IEEE 323 and 344?

The working group chair will contact all balloters that requested removal of dates from the references to IEEE 323 and 344 standards. The working group is concerned that the C37.81 and C37.82 standards may not meet the intent of future revisions of IEEE 323 and 344.

5.2. Should the reference to IEEE 323 be changed to IEC/IEEE Std. 60780-323-2016 (issued March 2016)

By consensus of members and guests present, references to IEEE 323 reference will not be changed to IEC/IEEE Std. 60780-323-2016. The working group has not reviewed IEC/IEEE Std. 60780-323-2016 to verify that the C37.81 and C37.82 standards meet the intent of this new dual standard.

5.3. Is pre-conditioning required prior to seismic testing

By consensus of members and guests present, it was agreed that pre-conditioning will be a requirement prior to seismic testing.

5.4. Addition of C37.20.10 to clause 2

By consensus of members and guests present, C37.20.10 will be added to clause 2 of both documents.

5.5. Delete references to qualified life – change to design life

By consensus of members and guests present, the term qualified life will not be changed to design life. Qualified life (time or endurance values) is determined during a qualification program, and may be different than a design life specified by a manufacturer.

5.6. What are the allowable interruptions (chatter) for primary and secondary circuits during seismic testing? The current draft allows < 2 msec for both primary and secondary circuits.

By consensus of members and guests present, chatter will not be permitted on primary circuits. Secondary circuits may have chatter up to 2 msec.

5.7. Should Metal enclosed bus be included in C37.81.

By consensus of members and guests present, Metal Enclosed Bus should not be included C37.81. Although the end user may need seismically qualified Metal Enclosed Bus, the

construction and mounting are significantly different than switchgear, therefore the C37.81 standard is not the appropriate document to describe the qualification requirements.

5.8. Should C37.81 be changed from a guide to standard or re-worded in the manner of a guide?

By consensus of members and guests present, C37.81 will remain in the current format.

5.9. Is 60 g an appropriate maximum allowable weight for items ejected during a seismic test?

By consensus of members and guests present C37.81 will allow ejection of non-critical components that weigh less than 60 g.

6. All comments (127) received on the C37.82 ballot were reviewed and dispositioned. The majority of the comments were editorial; primarily punctuation, grammar or format. The working group chair will provide additional detail on comments rejected or revised prior to recirculation.

7. 97 of 176 comments on the C37.81 were reviewed and dispositioned. The majority of the comments were editorial; primarily punctuation, grammar or format. The working group chair will provide additional detail on comments rejected or revised prior to recirculation process.

8. Next Actions

Prior to Fall 2016 meeting

- Reach a consensus on use of dated or undated references for IEEE 323 and IEEE 344.
- Complete the disposition of C37.81 ballot comments.
- Submit the comment resolution for C37.81 and C37.82.
- Create the next draft of C37.81 and C37.82 with accepted comments.

Submitted:

Dave Riffe PE

Westinghouse Electric Company

May 16, 2016