

C57.150 – IEEE Guide for Transportation of Transformers & Reactors Rated 10 000 kVA or Higher
Tuesday, October 28, 2019; 11:00 am – 12:15 pm
Hyatt Regency Columbus Hotel, Union AB Room
Columbus, Ohio USA
Minutes of WG Meeting

The meeting was called to order at 11:01 am by Chair Greg Anderson. Also present were Vice Chair Ewald Schweiger, and Secretary Marnie Roussell (writer of these Minutes).

A total of 105 people was present. This included 27 of the 45 current members in the working group, resulting in a 60% quorum. Attendance was taken utilizing RFID tabulation. Paper rosters were not passed around, so any guests desiring membership were asked to contact one of the WG leaders.

Greg stated that he moved seven (7) individuals from WG Member status to WG Guest status. The following individuals have not attended the past four meetings, nor otherwise contributed: P. McShane, A. Mukerji, K. Kampshoff, A. Burns, A. Gyore, Y. Weldetnsae, A. Sbravati.

Agenda

1. Welcome and Call to Order
2. Questions, address the Patent Issue & Copyright Issue
3. Determination of Quorum (determined by RFID system)
4. Approval of the Minutes
5. Old Business
 - a. Timeline of Project (PAR expires 12/31/2022)
 - b. Review a sample of a couple of revised sections of the guide
 - c. Review work-in-progress
6. New Business
7. Additional discussion, ideas
8. Adjourn

Introductions of the Chair, Vice Chair, and Secretary were made.

A call for essential patent claims was made. A call for essential copyright issues were made. No patent claims or copyright issues were identified.

Minutes of the Spring 2019 Meeting were approved with a motion by Eduardo Garcia, and seconded by Susan McNelly. The Agenda of this Fall 2019 Meeting were approved with a motion by Wallace Binder, and seconded by Ken Skinger.

Timeline

Greg provided a brief history of the document and the timeline for the revision. He indicated we need to essentially have a complete draft done at least a year prior to the 12/31/2022 expiration of the PAR.

Revision Topics/Assignments

Tasks Assignments were reviewed and status provided.

WORK ASSIGNED AT PREVIOUS MEETINGS				-
	Task	Brief Scope (see meeting minutes)	Assigned To	Status Columbus Meeting
1	CIGRE Guide	Compare CIGRE document 673 - WG A2.42-2016 to our Guide. Identify topics to be included.	H. Abdelkamel, M. Locarno, K. Vijayan, S. Nambi, E. Schweiger, B. Webb	Done

1.3		#3 Definitions	P. Dolloff, M. Alonso	WIP
1.4		#4 Transport Incidents - case studies	P. Dolloff, M. Alonso Need more volunteers	WIP
1.5		#5 Design Considerations for Transportation	Need more volunteers	Need more volunteers
1.7		#7 Design review	See Item 13 below	
1.8		#8, 12, 13 Transport (process, planning, instructions)	Need more volunteers S. Nambi	WIP Help offered by T. MacArthur
1.9		#9 10 Impact recorder application and data interpretation	See item 4 below	WIP Help offered by T. MacArthur
1		Annex Flowchart for test/conditions after transport	Need more volunteers	Need more volunteers
2	Swimlanes	Helpful "matrix/table" to Guide	D. Wallach	Done
3	Impact Recorders	Enhance section on impact recorders	S. Nambi, R. Rathi, J. Watson, P. Dolloff, B. Webb	WIP Input received from J. Watson, W. Binder, B. Webb
4	Internal Bracing	Add guidance (careful, a design issue!)	R. Verdolin, J. Watson, M. Alonso, M. Hrkac	WIP Input received from R. Verdolin
5	External Bracing, Lashing, etc.	Provide some guidance	K. Zibert, P. Selvaraj	WIP Ideas about how to handle requirements in different states requested
6	Exceeding Impact Limits	Add: What to do if specified impact limits are exceeded.	R. Verdolin, J. Watson, S. Sharpless	WIP
7	Tests	Compare Tests, C57.150 vs. C57.152	W. Binder, J. Watson, M. Ferreira	WIP Input received from J. Watson, W. Binder, M. Ferreira
8	Air Pressure	Add: How internal air pressure changes w/ambient temperature.	J. Arteaga, P. Kleine	Done
9	SFRA	Enhance section on SFRA	G. Anderson, R. Su, K. Sullivan	WIP
10	C57.93, Installation Guide	Review C57.93 for overlap and conflicts (Doc published in 2019)	Lead: J. Sen; M. Lau	Done
11	Shipping with fluids / Natural Ester Fluids	Add section of unique issues	R. Simonelli, A. Jhala	WIP
12	Mobile Subs	Add section of unique issues	K. Vijayan Need more volunteers	WIP
13	Design Review Checklist	Checklist of discussion topics during a design review	K. Vijayan, M. Alonso, A. Jhala, A. Sarkav	WIP

WIP = Work in Progress

CIGRE Guide

Mario Alonso made a motion to take some case studies and photos from CIGRE Guide and add to the Annex of C7.150. Sue McNelly seconded the motion, and the motion was amended to add some of our own case studies. Peter Kleine volunteered to add case studies.

Swim Lanes

Dave Wallach completed the Swim Lanes Concept matrix. It is posted to the website.

Impact Recorders

Tara Lee MacArthur, Daniel Weyer, K. Vijayan, Mario Alonso, Bruce Webb, and Eric Doak volunteered to work together.

Internal Bracing

Sue McNelly suggested that internal bracing be located under the design section. Help was requested from manufacturers.

Exceeding Impact Limits

Samuel Sharpless and Roger Verdolin have approached this as “what to do if”, and will join the force with the group on impact recorders.

Compare Tests, C57.150 vs. C57.152

Marcos Ferreira, the Chair of C57.152, volunteered to assist with this section.

Shipping w/Natural Ester Fluids

The suggestion was to include all liquid fluids as a general section. Jeremiah Bradshaw and Paul Dolloff volunteered to develop this section,

Mobile Sub

Krishnamurthy Vijayan earlier submitted a section to Greg.

Design Review Checklist

Dave Wallach will resend a Design Review Transportation Checklist created by Mario Alonso.

New Business – There was no new business

The meeting was adjourned at 12:10 pm, with a motion by Wallace Binder which was seconded by Samuel Sharpless.

The Working Group plans to meet at the Spring 2020 Meeting in Charlotte.

Greg Anderson
WG Chair

Ewald Schweiger
WG Vice Chair

Marnie Roussell
WG Secretary & Technical Editor