Standards Subcommittee, WG – PC57.152 Revision IEEE / PES Transformers Committee

March 25, 2025, 4:45PM – 6:00PM *UNAPPROVED MINUTES*

Welcome

The chair of the working group, Marcos Ferreira, and the secretary, Goran Milojevic, opened the meeting at 04:45PM.

1. Attendance and Attendance for Quorum

At the time of the meeting there were 30 Members, including Chair and Secretary. A total of 18 members were counted as present at the meeting. 72 members and guests signed into the circulating paper roster.

18 members present of 30 mean requirements for quorum were fulfilled. The list of attendees who signed into the paper roster is shown below:

Name	Affiliation	Status
Ferreira, Marcos	FEMA	Chair
Milojevic, Goran	DV Power	Secretary
Bradshaw, Jeremiah	US Bureau of Reclamation	Member
Dutta Roy, Samragni	Siemens Energy	Member
Ermakov, Evgenii	Hitachi Energy	Member
Foata, Marc	Maschinenfabrik Reinhausen	Member
Gara, Lorne	Shermco	Member
Gustavsson, Niklas	Hitachi Energy	Member
Hayes, Roger	GE Vernova	Member
Hernandez, Ronald	Doble Engineering Company	Member
Locarno, Mario	Doble Engineering Company	Member
Mabrey, Stephanie	Weidmann Group	Member
Murray, David	TVA	Member
Poorvi, Patel	EPRI	Member
Robalino, Diego	Megger	Member
Saad, Mickel	Hitachi ABB Power Grids	Member
Sweetser, Charles	OMICRON Electronics Corp USA	Member
Tanaka, Troy	Burns & McDonnell	Member
Woods, Deanna	PTT	Member
Alonso, Mario	Georgia Transformer	Guest
Arnold, Elise	SGB	Guest
Balakrishnan, Mani	Delta Star	Guest
Chanda, Sudip	Delta Star	Guest
Chanmin, Jeong	HD Hyundai Service	Guest
Cordova, Olivia	US Bureau of Reclamation	Guest
Crockett, Dan	Ameren	Guest
Da Silva, Roberto	Maschinenfabrik Reinhausen	Guest

Debass, Sami	EPRI	Guest
Delgado, Gabriel	Invenergy	Guest
Duffy, Jesse	Nashville Electric Service	Guest
Elliott, Will	AEP SWEPCO	Guest
Espindola, Marco	Hitachi Energy	Guest
Faur, Florin	Prolec GE	Guest
Garner, Joshua	RESA Power	Guest
Gyore, Attila	MIDEL & MIVOLT Fluids	Guest
Jarosz, Patrycja	IEEE SA	Guest
Jones, Brexton	SD Myers	Guest
Kumar, Arvind	Delta Star	Guest
Labh, Ashwini	Hitachi Energy	Guest
LaBean	Consumers Energy	Guest
Lachance, Mathieu	Omicron Energy	Guest
Lakhani, Komel	Siemens Energy	Guest
Leal, Fernando	Prolec GE	Guest
Mani, Kumar	Duke Energy	Guest
Mellin, Tony	Vaisala	Guest
Merrill, Logan	Omicron Energy	Guest
Naderian, Ali	Consultant	Guest
Neild, Kris	Megger	Guest
Newbill, Mark	Hitachi Energy	Guest
Ortiz, Cuahtemoc	Niagara Power Transformer Company	Guest
Qiao, Crystal	Trench Group	Guest
Rapelly, Layman	Georgia Transformer	Guest
Robles, Antonio	US Bureau of Reclamation	Guest
Rodriguez, Jesus Sanchez	Vetriv	Guest
Santos, Armindo	Prolec GE	Guest
Sar Kinen, Garret	Xcel Energy	Guest
Scardazzi, Akior	Siemens Energy	Guest
Shaikh, Salahuddin	NRG Energy	Guest
Sinclair, John	Black & Veatch	Guest
Singh, Amitkumar	Con Edison	Guest
Steele, H. Allen	TVA	Guest
Szczechowski, Janusz	Maschinenfabrik Reinhausen	Guest
Sze, Matthew	Omicron Energy	Guest
Tan, Jonathan	Northern Transformer	Guest
Thiede, Andreas	HIGHVOLT Prueftechnik Dresden	Guest
Tolcachir, Eduardo	TTE	Guest
Varghese, Ajith	Prolec GE	Guest
Whitten, Christopher	Hitachi Energy	Guest
Wright, Jeffrey	Duquesne Light	Guest

2. Approval of the Agenda

The motion to approve the agenda was made by Evgenii Ermakov, and seconded by Diego Robalino. The motion was approved unanimously.

3. Approval of Minutes of Fall 2024 Meeting

The motion to approve the Minutes of Spring 2024 Meeting was made by Stephanie Mabrey, and seconded by Poorvi Patel. The motion was approved unanimously.

4. Call for Patents

The chair presented slide 1-4, dated January 2, 2018 informing of the IEEE patent policy and participants duty to inform. There were no issues related to patent assurance brought up by attendees in the meeting.

5. IEEE Copyright Policy

The chair presented IEEE-SA Copyright Policy slides 1-2 informing the audience of the policy.

6. Chair's Remarks

The chair, Marcos Ferreira, gave the following remarks.

"Updates since the last meeting, fall 2024, the CRG gathered several times through Teams meetings to address all comments provided by MEC successfully. Goran and I would like to express our sincere appreciation for the dedication and contribution from CRG team. Furthermore, Goran and I will present all technical and general comments to all of you, members of this WG, at this time so we can a vote to accept the responses proposed by CRG team."

7. Report by the WG Secretary on the Comment Resolution Group's (CRG) activities

The secretary, Goran Milojevic, informed the working group about the activities since the Fall 2024 meeting:

- Initial balloting closed on November 5th, 2024, after an extension, once 76% response rate was reached.
- 91% approval rate on the draft
- 145 comments received in regular balloting process
- 32 comments on revised Section 7.2
- 2 comments on revised Section 7.3
- 16 comments on revised Section 7.4
- 34 comments on new annexes J and K
- 61 comments on the rest of the document
- 49 comments were editorial
- 51 comments were technical
- 45 comments were general
- Additional comments received after the close of balloting
- Comment Resolution Group (CRG) was formed at the Fall 2024 meeting with the following membership: Evgenii Ermakov, Niklas Gustavsson, Attila Gyore, Marcos Ferreira, Marc

Foata, Ronald Hernandez, Mario Locarno, Goran Milojevic, Diego Robalino, Charles Sweetser.

- Five online meetings of the CRG were held.
- All 145 comments received during the official balloting process were addressed. The CRG
 members reached out to some commenters for clarification and consulted with other working
 groups within the Transformer Committee.
- During the meetings, CRG decided to accept 45 editorial comments and to revise 4.
- Out of remaining 96 technical and general comments CRG proposes accepting 63, revising 15, and rejecting 18.
- The full list of comments, with resolutions proposed by the CRG, was sent for review by email on March 14th

After the report, Stephanie Mabrey asked for clarification when the additional comments were received. The secretary, Goran Milojevic responded that they were received after the close of balloting.

8. Discussion of responses to technical and general comments proposed by the CRG

The secretary, Goran Milojevic, asked for present members and guests to bring up for discussion any specific comment responses proposed by the comment resolution group. Poorvi Patel asked to provide examples of major technical changes that were made to the document during the comment response process. The secretary, Goran Milojevic, explained the changes made in Table 1, and also additional references to document C57.166 which caused removal of certain parts of the PC57.152 document.

9. Vote on accepting the response proposed by the CRG

After reviewing the proposed comment responses, Mario Locarno made a motion to vote on the full list of 145 comment responses that was submitted to the members for review prior to the meeting. The motion was seconded by Mickel Saad. The motion was accepted unanimously.

Another motion, to authorize the Comment Resolution Group to respond to any general and technical comments received during ballot recirculation, was made by Charles Sweetser and seconded by Mario Locarno. The motion was accepted unanimously.

10. Meeting Adjournment

The motion to adjourn the meeting was made by Evgenii Ermakov, and seconded by Mario Locarno. The meeting was adjourned at 05:30PM.

Respectfully submitted,

Marcos Ferreira - Chair

Goran Milojevic – Secretary