

Power Transformers Subcommittee Working Group Report

Document #: **638**

Document Title: **Qualification of Class 1E Transformers for
Nuclear Power Generating Stations**

Chair: Craig Swinderman
Secretary: Dominic Pollaro

Vice Chair Robert Allison
Percent Complete: 70%

Meeting Date: Monday, March 24, 2025 Time: 11:00 am to 12:15 pm.
Location: Hyatt Regency; Denver, Colorado- Centennial G(3)

Current draft being worked on: 3.0 Dated: March 2025
PAR Expiration date: December 31, 2027

Attendance: Members:	7
Guests:	21
Guests requesting membership:	3
Total*:	<u>28</u>

* A list of attendees is included at the end of these minutes.

Meeting Minutes / Significant Issues / Comments:

1. Meeting was called to order at 11:00am by Working Group Chair Craig Swinderman.
2. Presentation of Agenda:
The agenda for the meeting was submitted for review in advance of the meeting.
3. Presentation of IEEE Standards Slides:
IEEE Essential Patent Slides and Copyright policy were presented, and no issues received from the attendees.
4. Distribution of attendance sheets:
 - a. Attendance was taken with a paper roster.
 - b. Please send an email to craig.swinderman@meppi.com with the subject: P638 EMAIL to be added to the P638 email list.

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5. Checking the Quorum:
 - a. 7 out of 13 members were in attendance of the meeting so quorum was achieved.
6. Approval of the Meeting Minutes from St. Louis Fall 2024 and Agenda for Spring 2025:
 - a. Approval of the Fall 2024 meeting unapproved minutes
 - i. Robert Allison motioned to approve.
 - ii. Ryan Musgrove seconded.
 - iii. Motion was carried unanimously with no objections or abstentions. – Approved.
 - b. Approval of the Spring 2025 agenda
 - i. Robert Allison motioned to approve.
 - ii. David Murray seconded.
 - iii. Motion was carried unanimously with no objections or abstentions. – Approved.
7. Chair announcements:

The PAR for revision of 638 was recently approved on December 6, 2023, and will expire on December 31, 2027. The target date for completing the updated standard is mid-2026 for submittal to start the ballot process.
8. Old work: Voting on wording changes to P638 Draft 3.

Approval of Section 5.3 Thermal Life qualification

- ✓ Motion to Approve - Grace Yuan
- ✓ Second - Robert Allison
- ✓ No Objections
- ✓ Change Approved

Approval of Section 6.1 Line 28

- ✓ Motion to Approve - Ryan Musgrove
- ✓ Second - Grace Yuan
- ✓ No Objections
- ✓ Change Approved

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Approval of Section Annex A A.3.4.2 -“Insulation life-temperature relationship”

- ✓ Motion to Approve - Robert Allison
- ✓ Second – David Murray
- ✓ No Objections
- ✓ Change Approved

Section A3.3 Deletion to reference of “(more than 100 h)” & replace with “Details of this relationship can be found in IEEE C57.12.60 and IEEE C57.100.”

- ✓ Motion to Approve - Robert Allison
- ✓ Second - Grace Yuan
- ✓ No Objections – Approved

Section A3.4.1 Deletion of formula & replace with “Details of this relationship can be found in IEEE C57.12.60 and IEEE C57.100.”

- ✓ Motion to Approve – Grace Yuan
- ✓ Second – Robert Allison
- ✓ No Objections – Approved

9. New Work:

- ✓ Joseph Tedesco volunteered to update sections 6.4 and 6.5 of the draft P638 to reflect recent changes in Seismic qualification requirements from IEC/IEEE 60980-344 2020, to be completed before next WG meeting.

10. Next meeting: Bonita Springs, FL on Oct. 20, 2025

11. Close of meeting:

The meeting adjourned at 12:00 pm

Submitted by: Craig Swinderman Date: March 25, 2025

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List of Meeting Attendees at Spring '25 Meeting, including affiliation & voting member status.

NAME	COMPANY	ROLE
Anthony Alexander	Hitachi Energy	Guest
Robert Allison	Dominion Energy	Member
Mario Alonso	Georgia Transformer	Guest
Jason Beaudoin	Weidmann	Guest
Juan Carlos Cruz Valdes	Prolec GE	Guest
Ronald Hernandez	Doble Engineering	Guest
Chan Min Jeong	HD Hyundai Electric	Guest
Yeounsoo Kim	JST Power Equipment	Member
Landen Kwan	US NRC	Guest
Weijun Li	Braintree	Guest
Ricardo Lopes	Efacec	Guest
Geraldo Magela, Jr.	Siemens Energy	Guest
Logan Merrill	Omicron	Guest
David Murray	TVA	Member
Ryan Musgrove	OG&E	Member
Kris Neild	Megger	Guest
Niteshkumar Patel	Hyundai Power Transformers USA	Guest
Dominic Pollaro	NASS	Member
Sheila Ray	US NRC	Guest
Marnie Roussell	Entergy	Guest
Hyoung Gon Ryu	HD Hyundai Electric	Guest
Ahmad Skeik	Crosslink Technology	Guest
Craig Swinderman	Mitsubishi Electric Power Products, Inc.	Member
Janusz Szczechowski	Maschinenfabrik Reinhausen	Guest
Joseph Tedesco	Hitachi Energy	Guest
Pedro Trujillo	Hyundai Power Transformers USA	Guest
Christopher Whitten	Hitachi Energy	Guest
Grace Yuan	Hitachi Energy	Member