T&I Meeting Minutes

October 16, 2024 – Oklahoma City, Oklahoma

Chair:	**Alex Cochran**
Secretary :	**Caryn Riley**
Location:	**Omni Oklahoma City Hotel, Oklahoma City, Oklahoma - Room Oklahoma II**
Time:	**October 16, 2024 3:45 PM – 5:30 PM (CDT)**

Meeting Minutes

1. **Call to order**

   The meeting was opened and called to order at 3:46 pm CDT.

2. **Introductions of Guests**

   All attendees announced themselves and their affiliation. Sign-up sheet was circulated and attendees were asked to declare their primary subcommittee.

3. **Attendance**

   12 Members, 18 Guests

4. **Approval of the agenda**

   IEEE TI Fall 24 Agenda R2.pdf – Attachment 1
   Motion to approve the amended agenda from J. Mizener, seconded by S. Cochran. The agenda was approved by consensus.

5. **IEEE Slides**

   IEEE patent slides were shared with the attendees with no comments from the group. Additional references to the IEEE copyright and codes of conduct were also made by the chair.

6. **Meeting minutes approval**

   S24TImiRev0.pdf
   No revisions.
   Motion to approve the meeting minutes from J. Wenzel, K. McGlown seconded. The meeting minutes were approved by consensus.

7. **Chairman's report**

   a. TI Scope was reviewed.

   b. Attendance review

      The following attendees will act as liaisons back to the noted subcommittees the actions of this subcommittee today.
      LVSD – Jeff Mizener
      SA – Albert Livshitz

HVCB – Dan Benedict
HVF – Jeramie Cooper
RODE – Caryn Riley
HVS – Francois Trichon

8. Task force reviews:

a. Power Frequency Over-Voltages >= 200% of Rated Voltage Across an Open Gap (A. Cochran)

- Submitted to ERP after Spring 2024 meeting, they approved for it to go on to the Main committee for approval to publish.
- M. Chhabra moved to take to ADSCOM to submit to the Main Committee for approval to publish. Seconded by N. Uzelac.
- Abstain:3, Deny: 0, Approve: 9, Motion passes.

b. Aging Switchgear: condition assessment and lifecycle management (A. Cochran)

- Document is on imeet Central here: https://ieee-sa.imeetcentral.com/wg-ae/
  - Or within the T&I imeet Central Site within Files & Discussions in the Drafts -> Mature Drafts folders
- Window is open for 6 weeks to review by T&I group and Main Committee officers
- Once comments are resolved, we can move to Main Committee for permission to publish.

c. T&D switchgear special applications (A. Cochran)

- Appealed for volunteers, had a conflict with this meeting
- Topics:

1. Arc furnace switching,
2. Gen synch application with HV circuit breakers in the absence of generator circuit breaker
3. Circuit breakers used in HVDC station on the AC side for filter banks
4. Power factor testing of CB in the field (this test is not done part of routine production)
5. Influence of renewables on HV circuit breakers in terms of harmonics, SC rating. X/R ratios, overvoltage
6. Electronics which is integrated into switchgear such as electronics used for fiber optic current sensors, electronics used with motor operating drives
7. Impact of HV disconnect switch transients on HV circuit breaker

- No new volunteers for the work.

9. Open Topics

a. Microgrids: request for proposals of switchgear needs for microgrids – what are the gaps, what technology intelligence is needed; Impact of Microgrid Applications on Switchgear Standards

- J. Mizener discussed the potential project.
  - US Department of Energy Definition of Microgrid: A microgrid is a group of interconnected loads and distributed energy resources within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid.
- M. Chhabra and N. Uzelac to chat with J. Mizener to see if a proposal for work can be submitted as they expressed interest.

- Request/Description from J. Mizener requesting participants:
    - The TF on Microgrids is searching for direction. Prior to this meeting, attempts to engage potentially interested parties had not been successful. It is hoped that the tide will turn shortly.

      The first order of business is to find a name more descriptive of the goals of the TF. Something along the lines of "Special Requirements for Switchgear used in Microgrids". The requirements would relate to topics such as (but certainly not limited to) Switching transients, Synchronization, Transformer grounding and so on.

      I invite any and all interested parties to get involved and provide input on this subject.

      Please send an email to jeff.mizener@ieee.org and I will set up a brainstorming session. Participation in that session will not obligate you to anything but participants and contributors will be welcomed.

b. SCATE – Bar Coding – C. Worthington

- C. Worthington did not attend.
- K. Trost made a presentation in the RODE Subcommittee meeting on October 17, 2024. See the Fall 2024 minutes of that meeting for complete details. The main points of that presentation are presented below.
    - The Supply Chain and Asset Traceability for Electric Grid (SCATE) committee completed their activity in early 2024 and issued a white paper.
    - In May 2024, a PAR was approved for creation of a new standard, *P3476 Standard for Unique IDs and Smart Tags for Supply Chain and Asset Traceability for the Electric Grid* . This work is under the PES Transmission & Distribution Subcommittee with Alicia Farag as chair.
    - This is a fast moving working group that needs input from members of the Switchgear subcommittees.

c. 2023 NFPA 70B Standard for Electrical Equipment Maintenance - A. Livshitz

- ADSCOM believes T&I Subcommittee is correct group to move this forward.
- A. Cochran presented and edited the proposal intake form {See Attachment 3.}
- Volunteers: A. Livshitz, K. McGlown, O. Hartmann, J. Cooper for the task force
- Motion to start the task force K. McGlown, Seconded by A. Livshitz, Approved by consensus.

d. TRV parameters from the different subcommittees

- Interest in creating a high level document about why are HVF, RODE and HVCB are different between standards – paper/guide on why they align or are different
- D. Sullivan also proposed doing additional studies to measure TRV values for current grid installations and transformer designs
- Comments from S. Cochran, N. Uzelac, A. Livshitz, and D. Sullivan
- Looking for volunteers to write the proposal intake form to define the scope
    - S. Cochran, J. Cooper and D. Sullivan volunteered
    - Liaisons will contact HVCB and RODE subcommittees for additional volunteers

e. How switchgear is influenced by inverter-based technologies

- Super harmonics – aging effects and losses
- How to handle what it does to protection
- Example: PTs are failing and it looks like it may be a harmonics effect
- May be a good idea to merge with the Microgrids proposal
- Look at any research papers on the effects on batteries or PV DER
- Contact N. Uzelac to develop a proposal intake form

f. Other new topics

- From the Panel session, A. Nenning asked is there a need to create a standard for what data records look like?
    - N. Uzelac is concerned that this touches many committees outside of Switchgear
    - A. Livshitz mentioned that there is a good starting point already in IEC 61850
    - N. Uzelac volunteered to write letter between IEEE PES TC and Cigre TC to determine interest

10. Updates from CIGRE A3, N. Uzelac:

- Cigre meeting in Paris
    - Over 1,000 papers, almost 5,000 registered delegates
    - Considerable amount of overlap between different groups/interconnections between areas
    - US uses Resiliency/Europe uses Sustainability/Reduced carbon footprint
    - Replacement of SF6 in Switchgear
        - Alternative gases being used mainly for HV
        - Vacuum-operated and NOG for MV switchgear

11. Future meetings

- Spring 2025: April 6 – 11, Wyndham Grand Orlando Resort Bonnet Creek, Orlando, FL
- Fall 2025: October 5 – 9, Peppermill Resort, Reno, NV
  Note: Training track on Wednesday, Main Committee on Thursday afternoon - plan travel accordingly!
- Spring 2026: April 26 – 30, Sheraton Sand Key Resort, Clearwater Beach, FL
- Fall 2026: October 4 – 8, Catamaran Resort, San Diego, CA
- Spring 2027: April 3 - 8, Hyatt Regency, Orlando, FL
- Fall 2027: October 10 – 14, Alohilani Resort, Waikiki Beach, HI
- Spring 2028: April 23 - 27, Marriott Rivercenter, San Antonio, TX
- Fall 2028: October 8-12, Hyatt Regency, Columbus, OH

12. Adjourn

Meeting adjourned at 5:14 pm CDT.

Roster:

Role	First Name	Last Name	Company/Affiliation	Attended
Chair	Alex	Cochran	Sparkstone Electrical Group	X
Secretary	Caryn	Riley	Georgia Tech/NEETRAC	X
Member	Dan	Benedict	PPL	X
Member	Mohit	Chhabra	S&C Electric Co.	X
Member	Michael	Christian	ABB	
Member	Ivan	Contreras	ABB	
Member	Jeramie	Cooper	Eaton	X
Member	Kennedy	Darko	G&W Electric Co	
Member	Anil	Dhawan	Allegis Group	
Member	Brian	Gerzeny	Powell Industries, Inc	X
Member	Albert	Livshitz	Qualus	X
Member	Jeff	Mizener	Siemens Industry, Inc.	X
Member	Stephanie	Montoya	MKI	
Member	Andreas	Nenning	OMICRON electronics GmbH	X
Member	Carl	Schuetz	American Transmission Company	
Member	Francois	Trichon	Schneider Electric	X
Member	Nenad	Uzelac	G&W Electric	X
Member	James	Wenzel	Eaton	X
Member	Charles	Worthington	Hubbell Power Systems	
Guest	Mauricio	Aristizabal	Hitachi Energy Sweden	X
Guest	Koustubh	Ashtekar	Siemens Industry, Inc.	X
Guest	Jared	Cantu	Omicron	X
Guest	Sterlin	Cochran	G&W Electric	X
Guest	Oliver	Hartmann	Siemens Industry, Inc.	X
Guest	Eduardo	Henriet	Siemens Energy	X
Guest	Tyler	Holp	Eaton	X
Guest	Umer	Khan	ABB	X
Guest	Colby	Lovins	Federal Pacific	X
Guest	Peter	Mapp	Emspec	X
Guest	Kevin	McGlown	JST Power	X
Guest	Mark	Peterson	Xcel Energy	X
Guest	Amy	Rowell	Schneider Electric	X
Guest	Jason	Sell	Switchgear Power Systems	X
Guest	Aniket	Shirode	ABB	X
Guest	Dustin	Sullivan	Hubbell Power Systems	X
Guest	Bryan	Tatum	UL Solutions	X
Guest	Danish	Zia	UL LLC	X

Note: The HVCB subcommittee members designated by the HVCB chair were not updated by the T&I chair prior to the meeting so this list includes what was used to determine quorum. Moving forward the designated HVCB subcommittee members for the T&I subcommittee are Dan Benedict, Kirk Smith and Steven May.

T&I Meeting Agenda

October 16, 2024 – Oklahoma City, OK Meeting

Chair: Alex Cochran
Secretary : Caryn Riley
Location: Omni Oklahoma City Hotel, Oklahoma City, Oklahoma – Oklahoma 2
Time: Oct 16, 2024 3:45 PM – 5:30 PM (CST)

Meeting Agenda

1.	Call to Order	Alex C.
2.	In-person meeting etiquette	Alex C.
3.	Introduction of Guests	Caryn R.
4.	Attendance	Caryn R.
5.	Approval of Fall Agenda	Alex C.
6.	Patent slides	Alex C.
7.	Approval of Minutes from Spring Meeting	Caryn R.
8.	Chairman's report:	Alex C.
	a. TI Scope review	
	b. New Membership review	
9.	Task forces:	
	a. "Testing for Power Frequency Over-Voltages ≥200% open gap" Vote	Mohit
	b. "Aging Switchgear: condition assessment and lifecycle management"	Andreas
	c. "T&D switchgear special applications"	Mike C.
10.	Open discussion	
	a. Discuss open inquiries.	All
	b. Any new topics that T&I should discuss	All
11.	Updates from relevant organizations:	
	a. CIGRE update	Nenad
12.	Future meetings	
	a. Spring 2025: April 5 – 11, Wyndham Grand Orlando Resort Bonnet Creek, Orlando, FL	
	b. Fall 2025: October 5 – 9, Peppermill Resort, Reno, NV	
	c. Spring 2026: April 26 – 30, Sheraton Sand Key Resort, Clearwater Beach, FL	
13.	Meeting adjourns	Alex C.


T&I meeting
starting
@3:45pm

IEEE T&I Subcommittee Meeting

Alex Cochran(Chair)
Caryn Riley(Secretary)

Oct 16, 2024

IEEE PES Power & Energy Society®

IEEE

Agenda

T&I Meeting Agenda

October 16, 2024 – Fort Lauderdale, FL Meeting

IEEE PES Power & Energy Society™

Chair: Alex Cochran
Secretary: Caryn Riley
Location: Omni Oklahoma City Hotel, Oklahoma City, Oklahoma – Oklahoma 2
Time: Oct 16, 2024 3:45 PM – 5:30 PM (CST)

Meeting Agenda

1.	Call to Order	Alex C.
2.	In-person meeting etiquette	Alex C.
3.	Introduction of Guests	Caryn R.
4.	Attendance	Caryn R.
5.	Approval of Fall Agenda	Alex C.
6.	Patent slides	Alex C.
7.	Approval of Minutes from Spring Meeting	Caryn R.
8.	Chairman's report:	Alex C.
	a. TI Scope review	
	b. New Membership review	
9.	Task forces:	
	a. "Testing for Power Frequency Over-Voltages ≥200% open gap" Vote	Mohit
	b. "Aging Switchgear: condition assessment and lifecycle management"	Andreas
	c. "T&D switchgear special applications"	Mike C.
	d.	
10.	Open discussion	
	a. Discuss open inquiries.	All
	b. Any new topics that T&I should discuss	All
11.	Updates from relevant organizations:	
	a. CIGRE update	Nenad
12.	Future meetings	
	a. Spring 2025: April 5 – 11, Wyndham Grand Orlando Resort Bonnet Creek, Orlando, FL	
	b. Fall 2025: October 5 – 9, Peppermill Resort, Reno, NV	
	c. Spring 2026: April 26 – 30, Sheraton Sand Key Resort, Clearwater Beach, FL	
13.	Meeting adjourns	Alex C.

IEEE PES Power & Energy Society®

IEEE

Participants have a duty to inform the IEEE

- Participants shall inform the IEEE (or cause the IEEE to be informed) of the identity of each holder of any potential Essential Patent Claims of which they are personally aware if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents

- Participants should inform the IEEE (or cause the IEEE to be informed) of the identity of any other holders of potential Essential Patent Claims

Early identification of holders of potential Essential Patent Claims is encouraged

Ways to inform IEEE

- **Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); or**
- **Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or**
- **Speak up now and respond to this Call for Potentially Essential Patents**

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair

Other guidelines for IEEE WG meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
  - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
  - **Don't discuss specific license rates, terms, or conditions.**
    - Relative costs of different technical approaches that include relative costs of patent licensing terms may be discussed in standards development meetings.
      - **Technical considerations remain the primary focus**
  - **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
  - **Don't discuss the status or substance of ongoing or threatened litigation.**
  - **Don't be silent if inappropriate topics are discussed … do formally object.**

For more details, see *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and *Antitrust and Competition Policy: What You Need to Know* at http://standards.ieee.org/develop/policies/antitrust.pdf

IEEE PES Power & Energy Society®

IEEE

Patent-related information

The patent policy and the procedures used to execute that policy are documented in the:

- *IEEE-SA Standards Board Bylaws*
  (http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6)
- *IEEE-SA Standards Board Operations Manual*
  (http://standards.ieee.org/develop/policies/opman/sect6.html#6.3)

Material about the patent policy is available at
http://standards.ieee.org/about/sasb/patcom/materials.html

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org

Approval of Minutes

T&I Meeting Minutes

April 3, 2024 – Fort Lauderdale Beach, Florida

IEEE PES Power & Energy Society™

Chair: Alex Cochran
Secretary : Caryn Riley
Meeting: Westin Fort Lauderdale Beach Resort, Las Olas III
Time: April 3, 2024 10:15 am - Noon (Eastern Daylight Saving Time)

Meeting Minutes

1. **Call to order**

   The meeting was opened and called to order at 10:18 am EDT.

2. **Introductions of Guests**

   All attendees announced themselves and their affiliation. Sign-up sheet was circulated and attendees were asked to declare their primary subcommittee.

3. **Attendance**

   13 Members, 21 Guests

4. **Approval of the agenda**

   IEEE TI Spring 24 Agenda.pdf
   Motion to approve the agenda from M. Christian, seconded by N. Uzelac. The agenda was approved by consensus.

5. **Patent Slides**

   IEEE patent slides were shared with the attendees with no comments from the group.

6. **Meeting minutes approval**

   F23TImiRev0.pdf
   No revisions.
   Motion to approve the meeting minutes from T. Neighbours , J. Mizener seconded. The meeting minutes were approved by consensus.

7. **Chairman's report**

   a. TI Scope

   b. Attendance review

      The following attendees will act as liaisons back to the noted subcommittees the actions of this subcommittee today.
      LVSD – Jeff Mizener
      SA – Albert Livshitz
      HVCB – Dan Benedict
      HVF – Jeramie Cooper
      RODE – Caryn Riley
      HVS – Francois Trichon

8. **Task forces:**

   a. Power Frequency Over-Voltages >= 200% of Rated Voltage Across an Open Gap (M. Chhabra)

      - Sent out paper for review; only comment received was that the PD test voltage should be increased for certain cases
      - Document is ready for publishing.
      - A. Cochran will talk to TCPC chair about next steps and direct M. Chhabra to publish.
      - No further actions for this task force. Suggestion by N. Uzelac to review other aspects of the influence of inverter based technologies/DER effects on switchgear.

   b. Aging Switchgear: condition assessment and lifecycle management (A. Nenning)

      - Slides provided and will be added to minutes
      - Document is on imeet Central here: https://ieee-sa.imeetcentral.com/wg-ae/
      - Work completed since Fall 2023 meeting
        - Survey was completed.
        - Paper was re-organized
          - 40 pages for beginning of paper on Survey Results
          - Maintenance Strategies – 1 page
          - Condition Assessment – 34 pages, finalized
          - Aging Process – 71 pages, finalized
          - Appendix – Addition information from Condition Assessment and Aging Process
          - References – 143
      - Next Steps
        - Resolving the final details in the paper
        - Hand to IEEE editor, A. Cochran directed to talk J. Santulli, will plan to recirculate after the IEEE editor is complete
        - A. Cochran will review next steps at ERP and get back to Task Force Chair

   c. T&D switchgear special applications (M. Christian)

      - Appealed for volunteers
      - Topics:

      1. Arc furnace switching,
      2. Gen synch application with HV circuit breakers in the absence of generator circuit breaker
      3. Circuit breakers used in HVDC station on the AC side for filter banks
      4. Power factor testing of CB in the field (this test is not done part of routine production)
      5. Influence of renewables on HV circuit breakers in terms of harmonics, SC rating. X/R ratios, overvoltage
      6. Electronics which is integrated into switchgear such as electronics used for fiber optic current sensors, electronics used with motor operating drives
      7. Impact of HV disconnect switch transients on HV circuit breaker

IEEE Switchgear T&I sub-committee

- **Facilitates** and **conducts** research related to Switchgear, Circuit breakers and Fuses that are covered under IEEE switchgear standards. The need for innovations arises because of the changing business environment and technology offerings.

- **Develops** technical reports and makes recommendations for further advancement of IEEE switchgear standards.

- **Coordinates** with other technical committees, groups, societies, and associations as required.

IEEE Switchgear T&I sub-committee

- Will not develop standards
- Will cover the projects that are of interest to more than one switchgear subcommittee
- Anyone can write and submit a project proposal
- Subcommittee members will decide which projects to take.
- Initial members are chosen based on nominations, after will follow IEEE attendance rules.

T&I Membership

- LVSD
  - Brian Gerzeny
  - Jeff Mizener
- SA
  - Alex Cochran
  - Albert Livshitz
- HVCB
  - Stephanie Montoya
  - Carl Schuetz
  - Dan Benedict
  - Ivan Contreras
- HVF
  - Charles Worthington
  - Jeramie Cooper
  - James Wenzel
- RODE
  - Kennedy Darko
  - Anil Dhawan
  - Caryn Riley
- HVS
  - Francois Trichon
- At-Large Members
  - Mohit Chhabra
  - Michael Christian
  - Andreas Nenning
  - Nenad Uzelac

T&I Membership

Removed

- LVSD :
  - Ted Burse
  - Carl Schneider
- HVCB:
  - Dave Johnson
  - Paul Leufkens
- HVS:
  - John Kaminski
  - Phillip Corriveau

New Members

- LVSD:
  - Brian Gerzeny
- HVCB:
  - Stephanie Montoya
  - Carl Schuetz
  - Dan Benedict
  - Ivan Contreras
- HVS:
  - Francois Trichon

Task Force reports

Task Forces

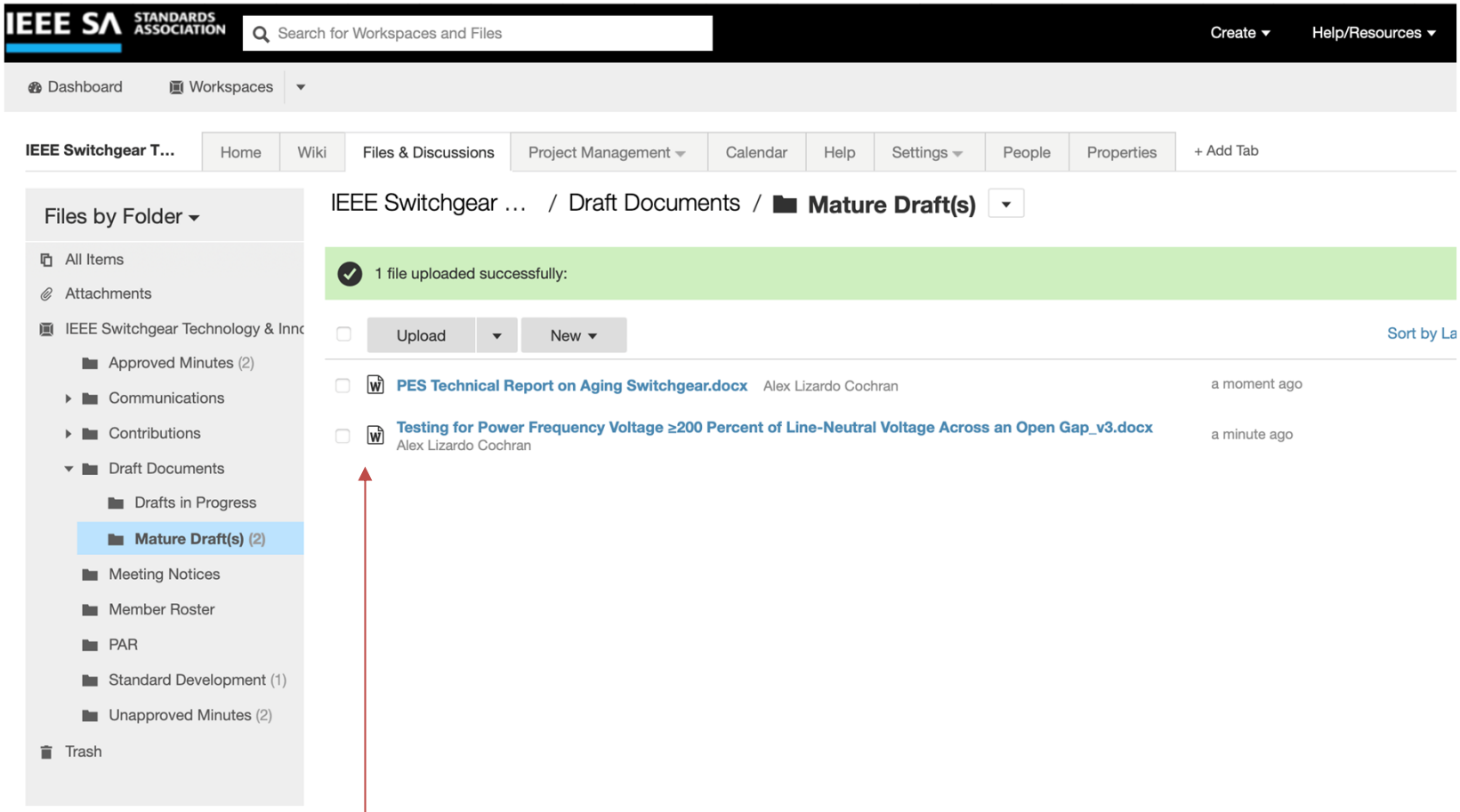
VOTE TO PUBLISH

1) ting for power frequency over-voltages >200% open gap" (paper) ***Lead: Mohit***

2) "Aging Switchgear: condition assessment and lifecycle management" ***Lead Andreas*** *(tech. report)*

3) "T&D switchgear special applications" **Lead: *Mike C*** *(technical report)*

iMeetCentral Location



https://ieee-sa.imeetcentral.com/wg-ae/

IEEE PES Power & Energy Society®

IEEE

TESTING FOR POWER FREQUENCY VOLTAGE ≥200% OF LINE-NEUTRAL VOLTAGE ACROSS AN OPEN GAP

ABSTRACT

During the last two decades there have been significant technological advancements and increasing installations of distributed energy resources (DERs), on the power grid. The impact of these developments on the grid has so far been outside the purview of medium voltage (MV) and high voltage (HV) utilities until recently where switchgear is now being deployed in new applications that include DERs, e.g. microgrids. It is however unclear whether existing switchgear standards adequately account for such applications.

A particular issue is the occurrence of ≥200% of rated power-frequency line-neutral voltage across an open gap in switchgear due to phase angle differences when both sides of the gap are energized via independent power sources. Under steady state conditions, with independent power sources operating across either side of an open gap, the voltage across the gap could be as high as 2.2x of the line-neutral system voltage, assuming a +10% allowable tolerance used by some utilities.

A common application where such a phenomenon would exist is at the point of common coupling (PCC) of a microgrid. The PCC device would periodically experience ≥2x line-neutral system voltage as the frequencies and phases of the voltage waveforms on both sides of the device drift over time. Existing switchgear standards require power frequency withstand tests at ≥3x a device's line-neutral voltage, however for relatively short durations; generally, 60 seconds for dry, and 10 seconds for wet withstand. There is no clear guidance on how to test for durations of several hours or days where 2.2x of line-neutral voltage could periodically occur across an open gap. In the absence of such guidance, manufacturers' current testing practices vary based on the application.

If the frequencies of the grid and the microgrid were constant at 60Hz, Table 1 shows the number of times number of times the voltage across the device's open gap is ≥2x line-neutral system voltage in 60 seconds. If the frequencies were to drift within ±2% (58.8 - 61.2Hz)[1], Table 2 shows the maximum number of times the voltage across the device's open gap is ≥2x line-neutral system voltage in 60 seconds.

IEEE PES Power & Energy Society®

IEEE

REPORT ON AGING SWITCHGEAR

- ERP Review (6 weeks)
- Release the document to Main Committee for Vote

Special Applications

c. T&D switchgear special applications (M. Christian)

- Appealed for volunteers
- Topics:

1. Arc furnace switching,
2. Gen synch application with HV circuit breakers in the absence of generator circuit breaker
3. Circuit breakers used in HVDC station on the AC side for filter banks
4. Power factor testing of CB in the field (this test is not done part of routine production)
5. Influence of renewables on HV circuit breakers in terms of harmonics, SC rating. X/R ratios, overvoltage
6. Electronics which is integrated into switchgear such as electronics used for fiber optic current sensors, electronics used with motor operating drives
7. Impact of HV disconnect switch transients on HV circuit breaker

Open Discussion

1) *Open Topics:*
   - Barcoding (Charles)
   - Microgrids (Jeff M)
   - NFPA 70E Maintenance Requirements (Alex)
   - TRV parameters (Sterlin C)
   - How switchgear is influenced by inverter-based technologies (Nenad)

2) *Any new topics that T&I should discuss*

Updates from

CIGRE A3

Next Meeting

- Spring 2025: April 5 – 11, Wyndham Grand Orlando Resort Bonnet Creek, Orlando, FL
- Fall 2025: October 5 – 9, Peppermill Resort, Reno, NV
- Spring 2026: April 26 – 30, Sheraton Sand Key Resort, Clearwater Beach, FL
- Fall 2026: October 4 – 8, Catamaran Resort, San Diego, CA
- Spring 2027: April 3 - 8, Hyatt Regency, Orlando, FL
- Fall 2027: October 10 – 14, Alohilani Resort, Waikiki Beach, HI
- Spring 2028: April 23 - 27, Marriott Rivercenter, San Antonio, TX
- Fall 2028: October 8-12, Hyatt Regency, Columbus, OH


That's all Folks!

IEEE Switchgear Technology
& Innovation subcommittee

New Research Group Proposal

Date	Oct 16 2024
Rev #	0

	Submitters' Name:	Affiliation	Email
1	Alex Cochran	Sparkstone Electrical Group	Alex.cochran@sparkstone.com
2	Albert?		
3			

Title	Addressing NFPA 70B 2023: Alignment and Adaptation Strategies for IEEE Switchgear Standards					
Deliverable	**Quick feasibility (0-6 mon)**		**White paper (6 – 12 mon)**		**Technical Report (1-3 years)**	
	X					
Affected subcommittees	**HVCB**	**RODE**	**HVF**	**HVS**	**SA**	**LVSD**
	X	X	X	X	X	X
Affected IEEE committees	Switchgear-specific					
Other	NEC/NFPA 70E					

Background information:

In 2023, the NFPA 70B Standard for Electrical Equipment & Maintenance transitioned from a recommended practice to a formal standard, introducing new requirements for switchgear. The IEEE Switchgear Committee has established comprehensive standards and maintenance requirements that address many of these areas. This proposal aims to evaluate the alignment of our existing standards with the updated NFPA 70B requirements.

Scope of Work and deliverables:

The aim of this project is to produce a comprehensive document that addresses the 2023 revision of NFPA 70B, incorporating insights from NETA Conference papers relevant to the new requirements. The document will analyze the implications of these changes, evaluate their alignment with existing IEEE standards, and provide actionable recommendations for adapting our standards and maintenance practices accordingly. Deliverables will include a detailed report outlining the findings, recommendations for revisions, and a proposed action plan for implementation.

Comments from T&I Chair	ADSCOM approved and turned over T&I.	
Approval by T&I subcommittee		
Date	Oct 16, 2024	
Research group timing	**Start**	**Finish**
	Oct 16, 2024	April 10, 2025