4.0 CHAIR'S REPORT - BRUCE FORSYTH

4.1 IEEE PES TECHNICAL COUNCIL

The Technical Council of the IEEE Power Energy Society (PES) is composed of the Chairs of the PES Technical and Coordinating Committees, plus the Chairs of Standing Committees reporting to it. The full organizational structure of the PES is shown in the current version of the IEEE PES Organization Chart and Committee Directory (https://www.ieee-pes.org/images/files/pdf/membership/protected/2021-PES-Org-Chart.pdf). The PES Technical Committees report to the Technical Council on matters concerning membership, recognition, technical publications, scope, and the coordination of the Power Energy Society generated standards. For standards relating to their technical scope, the Technical Committees work directly with the IEEE-SA Standards Board and the PES Standards Coordinating Committee. For further details on the Statement of Purpose and Scope of Activities for the PES Technical Council Please see; http://www.ieee-pes.org/statement-of-purpose-and-scope-of-activities-for-the-pes-technical-council.

4.1.1 Technical Council Officers & Members

The officers and members of the Technical Council are listed below for your reference. Each individual listed here is the chair of that respective committee.

TECHNICAL COUNCIL OFFICERS 2020-2021

| Chair | Vijay Vittal (Arizona State University) |
|------------|-----------------------------------------|
| Vice Chair | |
| | Diane Watkins (Xcel Energy) |
| - | Farnoosh Rahmatian (Quanta Technology) |

| TECHNICAL COMMITTEES | Chair |
|-----------------------------------------------------|-----------------------|
| Analytical Methods for Power Systems (AMPS) | Kwok Cheung |
| Electric Machinery (EM) | John Yagielski |
| Energy Development & Power Generation (EDPG) | Robert Thornton-Jones |
| Energy Storage & Stationary Battery (ESSB) | Babu Chalamala |
| Insulated Conductors (IC) | Henk Geene |
| Nuclear Power Engineering (NPE) | John White |
| Power System Communications & Cybersecurity (PSCC) | Craig Preuss |
| Power System Dynamic Performance (PSDP) | Leonardo Lima |
| Power System Instrumentation & Measurements (PSIM) | Ernst Hanique |
| Power System Operation Planning & Economics (PSOPE) | Fran Li |
| Power System Relaying & Control (PSRC) | Murty Yalla |
| Smart Buildings Loads & Customer Systems (SLCS) | Ron Melton |
| Substations (SUB) | Patrick Fitzgerald |
| Surge Protective Devices (SPD) | Steven Hensley |
| Switchgear (SWGR) | Keith Flowers |
| Transformers (TRANS) | Bruce Forsyth |
| Transmission and Distribution (T&D) | Surya Santoso |
| COORDINATING COMMITTEES | Chair |
| Energy Internet Coordinating Committee | Hongbin Sun |
| Intelligent Grid & Emerging Technologies (IGETCC) | |
| Marine Systems (MSCC) | |

STANDING COMMITTEES Awards Committee Farnoosh Rahamatian Organization & Procedures Committee Diane Watkins Power and Energy Education Committee Siddharth Suryanarayanan Standards Coordination Committee Ted Burse Technical Sessions Committee Hong Chen Entity Proposal Management Committee Farnoosh Rahamatian

4.1.2 PES Technical Council Activities

The Technical Council meeting schedule for 2021 is as follows:

- January 10-14, 2021 JTCM Web Meeting
- April 16, 2021 Web Meeting
- July 25-29, 2021 PES General Meeting
- Fall 2021 Technical Council Retreat

4.1.3 Satellite Committees

The PES Technical Council has issued revised guidance related to the protocol for interaction between satellite committees and the parent PES technical committees. The revised procedure is as follows:

- a) Each satellite committee, subcommittee, working group, or task force will interact with the corresponding parent technical committee, subcommittee, working group, or task force via designated liaisons. The satellite committees could designate multiple liaisons.
- b) The technical committees in their organization and procedures manuals (O&P manual) have an established mechanism to interact with other entities using a liaison. This is the preferred means of interaction with other entities.
- c) The liaisons will have to become familiar with the process of interacting with the parent committee, subcommittee, working group or task force. Many of these parent entities, meet several times a year and in each of these meeting have an administrative session where reports are given on various activities conducted under the auspices of the parent entities by the liaisons. These reports are then included in the minutes of the meetings.
- d) It is also important to realize that not all individuals interested in a particular committee's activities immediately become members of the parent committee. This requires the individual to show intent and also participate and actively pursue technical activities starting at the task force, working group, and subcommittee levels. Participation is also provided by actively reviewing journal and conference papers for these entities. The committees do have an established procedure for starting activities at the task force level and gradually progressing to become a member of the technical committee. The progression is outlined in the organization and procedures manual.
- e) In addition to the liaisons, other individuals from the satellite committees are encouraged to get personally involved in the working groups and task forces. Working groups and task forces are open to all contributing individuals (no country or regional limitations). Again, the PES strongly encourages all liaisons and interested individuals to read the relevant technical committee's O&P Manual, as well as their Working Group and Standards Policies & Procedures (WG P&P and Std P&P) manuals if they get involved in working groups.

4.2 TRANSFORMERS COMMITTEE ACTIVITIES

4.2.1 Liaison Representatives - Appointed by Committee Chair

- ASTM D27 Tom Prevost
- CIGRE Craig Swinderman
- IEC TC14 Phil Hopkinson
- TPWRD Editorial Board Xose Lopez-Fernandez
- Standards Coordinating Committee, SCC No. 4 (Electrical Insulation) Evanne Wang

4.2.2 Committee Schedule

The Spring 2021 Transformers Committee meeting was switched from an in-person meeting in Toronto, ON to a virtual meeting to protect the health and well-being of our members and their families. The audio-visual firm Encore has been hired to assist with the issues related to setting up the meetings and managing the "behind the scenes" electronic issues. Our next meeting is scheduled to be an in-person meeting in Milwaukee, WI, subject to review of pandemic related restrictions over the next few months.

4.2.3 WebEx Accounts for Standard Development and Virtual Meeting Notification

To support remote technical meetings the IEEE-SA has made available WebEx accounts for use by volunteers involved in standards development activities. Activity leaders are free to use any other web service available to them, but the IEEE-SA WebEx service is available for those who do not have access to a suitable tool.

During the pandemic, several Transformers Committee activity groups have made effective use of virtual meetings in between the spring and fall main Committee meetings. All activity leaders are encouraged to use the resources available to them to advance their work. In addition, activity leaders are reminded to track attendance at each virtual meeting and to record attendance in the minutes of those meetings as well as in the AMS, just as they would for a meeting held in the spring or fall. Finally, to maintain the openness of our meetings, activity leaders are encouraged to use the Transformers Committee website to post notifications of any meetings that occur outside the spring and fall main meetings, thereby allowing any interested party the opportunity to participate. Website notifications can be made by providing the Committee webmaster the pertinent meeting information.

4.2.4 PAR Extensions

From time-to-time circumstances may prevent a working group from completing its work within the normal lifespan of a PAR, and when that happens a PAR extension is warranted. However, it has been observed that the Transformers Committee has had many PAR extensions requests in recent years. Some of these have been challenged by IEEE-SA. At a time when technology changes quickly and businesses need to be able to adapt to changing demands, it is important that the Transformers Committee strive to complete its tasks quickly and on-time. To that end, subcommittees are encouraged to carefully define the scope of the working groups they form to ensure the task assigned to the working group can be accomplished withing the normal PAR lifetime. In addition, working groups are encouraged to work diligently to complete their tasks within the normal PAR lifetime and to strongly resist scope-creep that may prevent the completion of the document.

There have been some recent discussions related to the process a working group should follow to request a PAR extension, and specifically whether the working group Chair can make that decision without concurrence of the working group members. One can argue that a PAR extension constitutes a modification of the subgroup's duties and that requesting a PAR extension is a recommendation made by the working group. Section 7.1.1 of the Policies and Procedures for Working Groups (Individual Method) requires that such decisions or recommendations require approval by majority vote of the working group. This process allows working group members who may oppose a PAR extension an opportunity to express their opinion.

4.2.5 Meeting App

Based on positive feedback from the previous meetings the Committee plans to continue using the IEEE EventHub App for future in-person meetings.

4.2.6 Association Management System, 123 Signup

All WG's must use AMS to track their membership and meeting attendance. The IEEE PES Technical Council's Organization and Procedures Manual (March 2020) states the following in section 7.1.1:

"To be in compliance as a technical or coordinating committee of the IEEE PES Technical Council all technical and coordinating committees are required to keep accurate and up to date membership and meeting attendance records of their committees, subcommittees, working groups and task forces using the Association Management System selected by the IEEE PES Technical Council."

All activity leaders are asked to ensure their groups are using AMS. In addition to using the AMS, a list of names and affiliations must be included in the meeting minutes.

4.2.7 Website Password Usage

The website password is not for public dissemination. It is for use by our meeting attendees (CM, AP, II) and associated work of the Transformers Committee. Access to the protected information on the Committee website is a benefit of attendance and participation. It may be used by meeting attendees and within attendees' immediate workplace, but not beyond that. A new password is generally implemented immediately after each fall meeting with an announcement made to share the new password during the closing session.

4.2.8 IEEE Copyright Policy

https://standards.ieee.org/ipr/index.html

The Transformers Committee has an obligation comply with the IEEE Copyright Policy and thereby respect and protect the rights of copyright holders by preventing the inappropriate use of material protected by copyright laws.

Compliance with the Copyright Policy requires a certain amount of due diligence on the part of activity leaders, but it is not a daunting task. To assist activity leaders, a webinar was presented on October 5, 2020 that discussed the application of the Copyright Policy during Transformer Committee standards development processes. The presentation is available on the Committee website for those interested in further information.

4.2.9 Call for Patents (Essential Patent Claims)

https://standards.ieee.org/about/sasb/patcom/patc.html

A call for patents is required at every Working Group (WG) meeting. This is a reminder to all WG leaders to call for patents and record the results in the meeting minutes. Note it is <u>not required</u> to show the patent slides; it is only necessary to call for patents and record the response in the minutes. If there is a claim reported, the WG chair shall include in the minutes the name & affiliation of the individual asserting a patent claim. Here is what each WG Chair should ask at the beginning of each WG meeting. This applies only to WG's after the PAR is approved by the IEEE-SA Standards Board.

"If anyone in this meeting is aware of any patent claims that are potentially essential to implementation of the document under consideration by this WG, that fact should be made known to the WG and recorded in the meeting minutes."

There should be no discussion of any patent claim identified, only that it be identified and recorded. Even if no patent claims are identified, the minutes are to indicate that the call for patents was made.

If a patent holder or patent applicant is identified, then the WG Chair (or designee) should ask the patent holder or patent applicant of a patent claim that might be or become an Essential Patent Claim to complete and submit a Letter of Assurance in accordance with Clause 6 of the IEEE-SA Standards Board Bylaws.

4.2.10 Letters of Assurance

A Letter of Assurance (LoA) is a document submitted to IEEE-SA by a patent holder which documents the submitter's position with regard to ownership, enforcement, or licensing of an Essential Patent Claim that may be incorporated into a specific IEEE document. As of April 19, 2020, the following twelve (12) existing Accepted Letters of Assurance pertain to our committee:

| Std No. | Patent Owner | Contact for License | Patent Serial No. (if indicated) | Letter Date | Licensing Assurance Received | Date record entered or revised (if known) |
|------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------|------------------------------------|----------------------------------------------------|
| C37.30.2 | Southern Electrical Equipment Company Inc. | Andrew Panto - COO/Director of Engineering aspanto@seecoswitch.com | 5,560,474 (US) | 18 Oct 2011 | yes | 18 Oct 2011 |
| C37.60 | S&C Electric Company | Mark W. Stavnes-Vice President, Fuse Products and Polymer Products Division mstavnes@sandc.com | not indicated | 29 Aug 2008 | non- awareness statement | 2 Sep 2008 |
| C37.245 | Schweitzer Engineering Laboratories, Inc. | Richard Edge, Legal ipmail@selinc.com | 7,319,576 (US) | 11 Apr 2014 | yes | 11 Apr 2014 |
| C57.12.200 | Megger Sweden AB | Niclas Wetterstrand, Product Management niclas.wetterstrand@megger.com | 8,428,895 (US) | 25 Sep 2019 | yes | 30 Sep 2019 |
| C57.104 | Arizona Public Service Company | John Finn - Director Venture Investment Management, Venture Investments john.finn@pinnaclewest.com | not indicated | 12 Apr 2019 | yes | 16 Apr 2019 |
| C57.127 | ABB Technology Ltd. | Bjorn Dahlstrand, ABB AB, Legal Affairs and Compliance/IP bjorn.dahlstrand@seabb.com | 6,340,890 (US) | 31 Aug 2005 | yes | 6 Sep 2005 |
| C57.127 | General Electric Technology GmbH | Frank Landgraff-Executive Counsel, GE Power Legal Department frank.landgraff@ge.com | 7,286,968B2 (US) | 14 Aug 2018 | yes | 16 Aug 2018 |
| C57.139 | Maschinenfabrik Reinhausen GMBH | Stefanie Hofmeister-Counsel, Corporate Legal Services patents@reinhausen.com | not indicated | 13 Jan 2013 | yes | 16 Jan 2013 |
| C57.143 | Roger Fenton | Roger Fenton, Principal Engineer, Fenton Solutions roger.a.fenton@gmail.com | 15/371,085 (US) | 9 Oct 2018 | yes | 12 Oct 2018 |
| C57.147 and C57.155 | Cooper Power Systems, LLC | Alan Yerges, Engineering - Power Systems Division IP alanpyerges@eaton.com | 6,398,986 (US) 6,905,638 (US) 7,651,641 (US) | 5 Apr 2017 | yes, royalty- free | 5 Apr 2017 |
| C57.147 and C57.155 | Cooper Power Systems, LLC | Alan Yerges, Engineering - Power Systems Division IP alanpyerges@eaton.com | PI 9612097-5 | 5 Apr 2017 | NO | 5 Apr 2017 |

| Std No. | Patent Owner | Contact for License | Patent Serial No. (if indicated) | Letter Date | Licensing Assurance Received | Date record entered or revised (if known) |
|---------|----------------------------------------|------------------------------------------------------------------|----------------------------------------|----------------|------------------------------------|----------------------------------------------------|
| C57.163 | Advanced Power Technologies, LLC | Gary Hoffman - Managing Member grhoffmann@advpowertech.com | 20130285671 (US) | 5 May 2014 | yes | 5 May 2014 |

4.2.11 Website

The Committee website has transitioned to a new platform and reformatted to align with the websites of other PES Technical Committees. Susan McNelly continues to serve as primary webmaster and is assisted by Kris Zibert. Many thanks to both Sue and Kris for keeping the website in great shape.

Respectfully submitted,

Buce Joseph.

Bruce Forsyth

Chair, IEEE PES Transformers Committee

Rev. 0, April 20, 2021