



IEEE SA STANDARDS BOARD NEW STANDARDS COMMITTEE (NesCom) MEETING MINUTES 25 October 2023

Teleconference/Webex 9:00 a.m. - 12:00 p.m. ET (UTC-4)

Attendees

Members Present:

Lei Wang, Chair Guido Hiertz, Vice Chair Johnny Lin, Vice Chair Sara Biyabani Xiaofeng Chen Doug Edwards Wei Hong Howard Li Gui Liu Daleep Mohla Andrew Myles Annette Reilly

Members Absent:

Ramy Fathy Daidi Zhong

IEEE Staff:

Christy Bahn Teresa Belmont, Administrator Kim Breitfelder Matthew Ceglia Karen Evangelista Jonathan Goldberg Dalisa Gonzales Jodi Haasz Yvette Ho Sang Patrycja Jarosz Konstantinos Karachalios Soo Kim Michael Kipness Jiajia Liu Greg Marchini Karen McCabe Erin Morales Christian Orlando Shana Pepin Markus Plessel Dave Ringle Pat Roder Jennifer Santulli Rudi Schubert Alpesh Shah Tom Thompson Meng Zhao

IEEE Outside Legal Counsel:

Claire Topp – Dorsey & Whitney LLP

Guests:

Latonia Gordon Gary Hoffman Tyler Jaynes Yousef Kimiagar Thomas Koshy David Law Joseph Levy Kevin Lu Ryan Musgrove Gene Poletto Barry Tilton Mark Torstud Don Wright

1. CALL TO ORDER

Chair Lei Wang called the meeting to order at 9:34 a.m. ET (UTC-4). There was a round of introductions.

It was noted that the meeting was quorate.

2. REVIEW OF AGENDA

Chair Wang reviewed the agenda. It was noted that PC57.153 will need to be time specific at 10:00 a.m. ET (UTC-4).

There was a motion to approve the agenda, including the consent agenda. In the absence of objection, the motion was approved.

2.1 CONSENT AGENDA 2.1.1 Withdrawal Requests

IEEE Computer Society/Learning Technology

P7004.1

Recommended Practices for Virtual Classroom Security, Privacy and Data Governance **Recommendation:** Approve PAR withdrawal.

IEEE Computer Society/Standards Activities Board P2858

Recommended Practice for Mini-program Interoperability **Recommendation:** Approve PAR withdrawal.

P3190

Recommended Practice for Open Source Software Project Governance **Recommendation:** Approve PAR withdrawal.

2.1.2 Standards Committee Transfer

2.1.2.1 NesCom approved that the following Standards and PARs be transferred from Computer Society/ Standards Activities Board Standards Committee (C/SAB) to Computer Society/Knowledge Engineering Standards Committee (C/KESC):

PARs:

- P2807.1 Standard for Technical Requirements and Evaluation of Knowledge Graphs
- P2807.4 Guide for Scientific Knowledge Graphs
- P2807.5 Guide for Medical Clinical Diagnosis and Treatment Oriented Knowledge Graphs
- P2807.6 Guide for K-12 Educational Knowledge Graphs
- P2807.7 Guide for Open Domain Knowledge Graph Publishing and Crowdsourcing Service
- P2807.8 Standard for Knowledge Exchange Protocol with Knowledge Fusion Among Knowledge Graphs
- **2.1.2.2** NesCom approved the transfer of P7017 from Robotics and Automation Society/Standing Committee for Standards (RAS/SC) to Society on Social Implications of Technology/Social Implications of Technology Standards Committee (SSIT/SC)
- **2.1.2.3** NesCom approved the transfer of 1044-2009 from Computer Society/Software & Systems Engineering Standards Committee (C/S2ESC) to Reliability Society Standards Committee (RS/SC)

3. APPROVAL OF MINUTES FROM THE 20 SEPTEMBER 2023 MEETING

There was a motion to approve the <u>20 September 2023 meeting minutes</u>. In the absence of an objection, the motion was approved.

4. PARS FOR DISCUSSION

4.1 Modified PARs

There was a motion to approve PC37.431.20 and PC57.19.100 based on the fact that preliminary votes have no objections to recommending approval and there are no unresolved NesCom member comments. In the absence of objection, the motion was approved.

IEEE Power and Energy Society/Substations

PC37.431.20

Guide for Protecting Transmission Dynamic Reactive Power Compensators **Recommendation:** Approve modified PAR.

IEEE Power and Energy Society/Transformers

PC57.19.100 Guide for Application of Power Apparatus Bushings **Recommendation:** Approve modified PAR.

4.2 Extension Requests

There was a motion to approve P145, P1720, P2816, P1003.1, P2806, P2717, P4001, P80005-3, P1188, P2810, P1459, P1646, PC37.1.3, P605, PC37.123, PC37.431.20, PC57.12.35, PC57.12.80, PC57.19.100, PC57.91, PC57.160, PC57.165, P2797, P2824, P2833, PC135.90, P2004, P2815, PC95.1-2345, and P2848 based on the fact that preliminary votes have no objections to recommending approval and there are no unresolved NesCom member comments. In the absence of objection, the motion was approved.

IEEE Antennas and Propagation Society/Antennas and Propagation Standards Committee **P145**

Standard for Definitions of Terms for Antennas **Recommendation:** Approve request for an extension until December 2025.

P1720

Recommended Practice for Near Field Antenna Measurements **Recommendation:** Approve request for an extension until December 2024.

P2816

Recommended Practice for Computational Electromagnetics Applied to Modeling and Simulation of Antennas

Recommendation: Approve request for an extension until December 2025.

IEEE Computer Society/Microprocessor Standards Committee

P1003.1

Standard for Information Technology--Portable Operating System Interface (POSIX) Base Specifications, Issue 8

Recommendation: Approve request for an extension until December 2024.

IEEE Computer Society/Smart Manufacturing Standards Committee

P2806

System Architecture of Digital Representation for Physical Objects in Factory Environments **Recommendation:** Approve request for an extension until December 2025.

IEEE Electromagnetic Compatibility Society/Standards Development Committee

P2717

Recommended Practice for Passive Intermodulation Test Methods for Wireless Systems in Low Noise Environments

Recommendation: Approve request for an extension until December 2024.

IEEE Geoscience and Remote Sensing Society/Standards Committee

P4001

Standard for Characterization and Calibration of Ultraviolet through Shortwave Infrared (250 nm to 2500 nm) Hyperspectral Imaging Devices

Recommendation: Approve request for an extension until December 2024.

IEEE Industry Applications Society/Petroleum & Chemical Industry

P80005-3

Utility Connections in Port - Part 3: Low Voltage Shore Connection (LVSC) Systems - General Requirements

Recommendation: Approve request for an extension until December 2024.

IEEE Power and Energy Society/Energy Storage & Stationary Battery Committee

P1188

Recommended Practice for Maintenance, Testing, and Replacement of Valve-Regulated Lead-Acid (VRLA) Batteries for Stationary Applications

Recommendation: Approve request for an extension until December 2024.

IEEE Power and Energy Society/Insulated Conductors

P2810

Guide for Field Dielectric Enhancement of Polyethylene and Cross-linked Polyethylene Power Cables **Recommendation:** Approve request for an extension until December 2025.

IEEE Power and Energy Society/Power System Instrumentation and Measurements

P1459

Standard Definitions for the Measurement of Electric Power Quantities Under Sinusoidal, Nonsinusoidal, Balanced, or Unbalanced Conditions

Recommendation: Approve request for an extension until December 2025.

IEEE Power and Energy Society/Power System Relaying and Control

P1646

Standard Communication Delivery Time Performance Requirements for Electric Power Substation Automation

Recommendation: Approve request for an extension until December 2025.

PC37.1.3

Recommended Practice for Human Machine Interfaces (HMIs) used with Electric Utility Automation Systems

Recommendation: Approve request for an extension until December 2025.

IEEE Power and Energy Society/Substations

P605

Guide for Bus Design in Air Insulated Substations **Recommendation:** Approve request for an extension until December 2024.

PC37.123

Guide for Specifications for High-Voltage Gas-Insulated Substations Rated Above 52 kV **Recommendation:** Approve request for an extension until December 2024.

PC37.431.20

Guide for Protecting Transmission Static Shunt Compensators **Recommendation:** Approve request for an extension until December 2025.

IEEE Power and Energy Society/Transformers

PC57.12.35

Standard for Information Coding for Distribution Transformers and Step-Voltage Regulators **Recommendation:** Approve request for an extension until December 2025.

PC57.12.80

Standard Terminology for Power and Distribution Transformers **Recommendation:** Approve request for an extension until December 2025.

PC57.19.100

Guide for Application of Power Apparatus Bushings **Recommendation:** Approve request for an extension until December 2025.

PC57.91

Guide for Loading Mineral-Oil-Immersed Transformers and Step-Voltage Regulators **Recommendation:** Approve request for an extension until December 2025.

PC57.160

Guide for the Electrical Measurement of Partial Discharges in High Voltage Bushings and Instrument Transformers

Recommendation: Approve request for an extension until December 2024.

PC57.165

Guide for Temperature Measurements for Liquid Immersed Transformers and Reactors **Recommendation:** Approve request for an extension until December 2024.

IEEE Power and Energy Society/Transmission and Distribution

P2797

Guide for Forecast and Early Warning of Icing on Overhead Transmission Lines in Micro-topographic

Areas

Recommendation: Approve request for an extension until December 2025.

P2824

Guide for Testing Mechanical Acoustic Imaging of High Voltage Reactors **Recommendation:** Approve request for an extension until December 2025.

P2833

Guide for Overhead Transmission Lines with Composite-Insulated-Crossarm Supports **Recommendation:** Approve request for an extension until December 2025.

PC135.90

Standard for Pole Line Hardware for Overhead Line Construction **Recommendation:** Approve request for an extension until December 2025.

IEEE Power Electronics Society/Standards Committee

P2004

Hardware-in-the-Loop (HIL) Simulation Based Testing of Electric Power Apparatus and Controls **Recommendation:** Approve request for an extension until December 2025.

IEEE SA Board of Governors/Distributed Generation, Energy Storage and Interoperability **Standards Committee**

P2815

Guide for the Technical Specification of Smart Distribution Transformer Terminal **Recommendation:** Approve request for an extension until December 2025.

IEEE-SASB Coordinating Committees/International Committee on Electromagnetic Safety PC95.1-2345

Standard for Military Workplaces -- Force Health Protection Regarding Personnel Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz

Recommendation: Approve request for an extension until December 2024.

IEEE-SASB Coordinating Committees/SCC20 - Test and Diagnosis for Electronic Systems P2848

Standard for Prognostics and Health Management in Automatic Test Systems **Recommendation:** Approve request for an extension until December 2025.

4.3 New PARs

There was a motion to approve P3161.6, P23612, P3401, P2805.5, 2805.6, P3005.7, P3432, P3425, and P3433 based on the fact that preliminary votes have no objections to recommending approval and there are no unresolved NesCom member comments. In the absence of objection, the motion was approved.

IEEE Communications Society/Power Line Communications P2893-2023/Cor 1

IEEE Standard for Flexible Optical Service Unit (OSUFlex) of Optical Transport Network (OTN) in Power Systems - Corrigendum 1 Technical correction **Recommendation:** Approve new PAR until December 2027.

There was a motion to approve P2893-2023/Cor 1. In the absence of objection, the motion was approved.

IEEE Computer Society/Artificial Intelligence Standards Committee

P3423

Standard for End-to-end Framework Design for Autonomous Driving **Recommendation:** Approve new PAR until December 2027.

There was a motion to approve P3423. In the absence of objection, the motion was approved.

IEEE Computer Society/Data Compression Standards Committee

P3161.5

Standard for Algorithm and Model Repository of Digital Retina Systems **Recommendation:** Approve new PAR until December 2027.

There was a motion to approve P3161.5. In the absence of objection, the motion was approved.

P3161.6

Standard for Storage System of Digital Retina Systems **Recommendation:** Approve new PAR until December 2027.

P3161.7

Standard for End-edge-cloud Collaboration of Digital Retina Systems **Recommendation:** Approve new PAR until December 2027.

There was a motion to approve P3161.7. In the absence of objection, the motion was approved.

IEEE Computer Society/Software & Systems Engineering Standards Committee

P23612

Software and systems engineering -- Incident management **Recommendation:** Approve new PAR until December 2027.

IEEE Computer Society/Standards Activities Board

P3401

Standard for the Visual Quality Assessment of Auto-Stereoscopic Displays **Recommendation:** Approve new PAR until December 2027.

IEEE Industrial Electronics Society/Industrial Electronics Society Standards Committee

P2805.5

Recommended Practice for Low-Code Development in Industrial Edge Computing **Recommendation:** Approve new PAR until December 2027.

P2805.6

Recommended Practice for Cloud-Edge Collaborative Industrial Automation System Architecture **Recommendation:** Approve new PAR until December 2027.

IEEE Industry Applications Society/Industrial & Commercial Power Systems Standards Development Committee

P3005.7

Recommended Practice for Application of Metering for Energy Management of Industrial and Commercial Power Systems

Recommendation: Approve new PAR until December 2027.

IEEE Intelligent Transportation Systems Society/Standards Committee

P3432

Standard for Technical Requirements for Loss Reduction of Bulk Grain in Port **Recommendation:** Approve new PAR until December 2027.

IEEE Vehicular Technology Society/Overhead Contact Systems

P3425

Standard for Overhead Contact System (OCS) Testing and Commissioning **Recommendation:** Approve new PAR until December 2027.

IEEE Vehicular Technology Society/Traction Power Systems Standards Committee P3433

Recommended Practice for Smart Traction Power Substations and Management Systems **Recommendation:** Approve new PAR until December 2027.

4.4 PARs for the Revision of Standards

There was a motion to approve P493, P21451-7, P421.4, PC62.22, P1861, and P1862, based on the fact that preliminary votes have no objections to recommending approval and there are no unresolved NesCom member comments. In the absence of objection, the motion was approved.

IEEE Industry Applications Society/Industrial & Commercial Power Systems Standards Development Committee

P493

Recommended Practice for the Design of Reliable Industrial and Commercial Power Systems **Recommendation:** Approve PAR for the revision of a standard until December 2027.

IEEE Instrumentation and Measurement Society/TC9 - Sensor Technology P21451-7

Standard for Smart Transducer Interface for Sensors and Actuators-Transducers to Radio Frequency Identification (RFID) Systems Communication Protocols and Transducer Electronic Data Sheet (TEDS) Formats

Recommendation: Approve PAR for the revision of a standard until December 2027.

IEEE Power and Energy Society/Energy Development & Power Generation P421.4

Guide for the Preparation of Excitation System Specifications **Recommendation:** Approve PAR for the revision of a standard until December 2027.

IEEE Power and Energy Society/Nuclear Power Engineering P628

Standard Criteria for the Design, Installation, and Qualification of Raceway Systems for Class 1E Circuits for Nuclear Power Generating Stations

Recommendation: Approve PAR for the revision of a standard until December 2027.

There was a motion to approve P628. In the absence of objection, the motion was approved.

IEEE Power and Energy Society/Surge Protective Devices Committee PC62.22

Guide for the Application of Metal-Oxide Surge Arresters for Alternating-Current Systems Over 1000 Volts

Recommendation: Approve PAR for the revision of a standard until December 2027.

IEEE Power and Energy Society/Switchgear P1860

Recommended Practice for Voltage Regulation and Reactive Power Compensation at 1 MV Alternating Current (ac) and Above

Recommendation: Approve PAR for the revision of a standard until December 2027.

There was a motion to approve P1860. The motion was approved. Abstain: Edwards

P1861

Recommended Practice for On-Site Acceptance Tests of Electrical Equipment and System Commissioning of 1 MV Alternating Current (ac) and Above

Recommendation: Approve PAR for the revision of a standard until December 2027. Abstain: Edwards

P1862

Recommended Practice for Overvoltage and Insulation Coordination of Transmission Systems at 1 MV Alternating Current (ac) and Above

Recommendation: Approve PAR for the revision of a standard until December 2027. Abstain: Edwards

PC37.12.1

Recommended Practice for Contents of Instruction Manual for Circuit Breakers Above 1000 V AC **Recommendation:** Approve PAR for the revision of a standard until December 2027.

There was a motion to approve PC37.12.1. The motion was approved. Abstain: Edwards

IEEE Power and Energy Society/Transformers PC57.153

Guide for Paralleling Regulating Transformers **Recommendation:** Approve PAR for the revision of a standard until December 2027.

There was a motion to approve PC57.153. In the absence of objection, the motion was approved.

IEEE SA Board of Governors/Corporate Advisory Group P1899

Guide for Basic Requirements for Line Commutated Converter High Voltage (800 kV and below) Direct Current Transmission Protection and Control Equipment **Recommendation:** Approve PAR for the revision of a standard until December 2027.

There was a motion to approve P1899. In the absence of objection, the motion was approved.

5. Old Business

5.1 DISCUSSION RE: PAR WITHDRAWAL REQUESTS AS PART OF THE NESCOM CONSENT AGENDA

Guido Hiertz reviewed his slides on removing PAR withdrawal requests from the NesCom Consent agenda.

A motion was made by Guido that PAR withdrawal requests shall not be part of NesCom's consent agenda. Instead, a dedicated motion shall be used for the approval of PAR withdrawal requests. The motion was approved. (Vote: 5=Yes; 3=No; 3=Abstain)

5.2 PROPOSAL TO INTRODUCE "VOID" IN THE NESCOM AGENDA WHEN A PAR IS REMOVED FROM THE AGENDA

Guido Hiertz reviewed his slides on adding "Void" to the agenda as a place holder when a PAR is removed. NesCom Committee discussed. Guido made a motion that NesCom kindly requests IEEE SA staff to introduce a "Void" agenda item category into myProject at IEEE SA staff's earliest.

The motion was amended to NesCom kindly requests IEEE SA staff to **research** a "Void" agenda item category into myProject at IEEE SA staff's earliest convenience. The amendment motion was approved by a vote: 10=Yes; 1=No.

The main motion was unanimously approved.

Action: Staff will research the viability of adding VOID to the agenda.

5.3 DISCUSSION: LISTING OF PARS WITHIN MYPROJECT AND VISIBILITY

Doug Edwards reviewed his slides on visibility and sharing of PARs within myProject.

Action: Doug, Greg Marchini, and Matt Ceglia will review myProject regarding sharing and visibility of draft PARs after changes have been made.

6. New Business

6.1 NESCOM CONVENTION FOR NON-TECHNICAL PARS

Sara Biyabani reviewed her slides on creating a NesCom convention for non-technical PARs. Sara asked for feedback on the wording of the draft convention. A discussion took place regarding the appropriate language and location for guidelines on reviewing non-technical PARs. Sara will work with interested NesCom members to refine the text in her proposal and to also identify which potential places to introduce the proposed text in addition to the NesCom Conventions, e.g., NesCom member orientation presentation file, or a separate NesCom document.

7. Next Meeting

The next meeting will be a hybrid meeting and will take place 5 December 2023 in New Brunswick, NJ, USA and by Webex.

8. Adjournment

The meeting was adjourned at 12:23 pm ET (UTC-4).