

**IEEE SA STANDARDS BOARD NEW STANDARDS COMMITTEE (NesCom)**

**MEETING MINUTES**

**25 September 2024**

**Athens, Greece and via Webex**

**8:00 a.m. – 12:00 p.m. UTC+3**

**Attendees**

**Members Present:**

Lei Wang, Chair  
Guido Hiertz, Vice Chair  
Kit August  
Sara Biyabani  
Xiaofeng (Alfred) Chen  
Yuan Chi  
Stephen Dukes  
Doug Edwards  
Darren Galpin  
Howard Li  
Johnny Lin  
Daleep Mohla  
Jon Rosdahl  
Daidi Zhong

**Members Absent:**

Ramy Fathy  
Hao Hu

**IEEE Staff:**

Christy Bahn  
Teresa Belmont, Administrator  
Ahsaki Benion  
Matthew Ceglia  
Karen Evangelista  
Josh Gay  
Jonathan Goldberg  
Jodi Haasz  
Yvette Ho Sang  
Patrycja Jarosz  
Soo Kim  
Michael Kipness  
Vanessa Lalitte  
Jiajia Liu  
Karen McCabe  
Erin Morales  
Christian Orlando  
Dave Ringle

Heather Robinson  
Rudi Schubert  
Tom Thompson  
Malia Zaman  
Meng Zhao

**Guests:**

Hassan Abouseada  
Edward Au  
Periklis Chatzimisios  
Scott Digby  
Jean-Philippe Faure  
Alex Gelman  
James Gilb  
Latonia Gordon  
Travis Griffith  
Yan Hongming  
Chen Hui  
Tyler Jaynes  
Xiangjuan Jia  
Ruiquan Jing  
Stephan Kehrer  
Yousef Kimiagar  
Thomas Koshy  
David Law  
Joseph Levy  
Ruth Lewis  
Haiying Lu  
Kevin Lu  
Ralf Ma  
Hiroshi Mano  
Ryan Musgrave  
Glenn Parsons  
Annette Reilly  
Robby Robson  
Ping Tang  
Claire Topp  
Andre Uhl  
Mehmet Ulema  
Philip Winston  
Don Wright  
Nuonuo Zhejiang

**1. CALL TO ORDER**

Chair Lei Wang called the meeting to order at 8:00 a.m. (UTC+3). There was a round of introductions.

It was noted that the meeting was quorate.

**2. REVIEW OF AGENDA**

Chair Wang reviewed the agenda. There was a request that PC57.12.10 be discussed at 9:00 a.m. UTC+3.

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

### **3. APPROVAL OF MINUTES FROM THE 05 JUNE 2024 MEETING**

There was a motion to approve the [05 June 2024 meeting minutes](#). In the absence of objection or abstention, the motion was approved.

### **4. PARS FOR DISCUSSION**

Unless indicated otherwise, the motions were approved unanimously.

#### **4.1 Withdrawal Requests**

There was a bucket motion to approve P802.1Qdd, P1722b, P3131, and P1599 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 or abstention, the motion was approved.

#### **IEEE Computer Society/LAN/MAN Standards Committee**

##### **P802.1Qdd**

Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks Amendment: Resource Allocation Protocol

**Recommendation:** Approve PAR withdrawal.

#### **IEEE Computer Society/Microprocessor Standards Committee**

##### **P1722b**

Standard for a Transport Protocol for Time-Sensitive Applications in Bridged Local Area Networks – Amendment: New and Extended Streaming Formats

**Recommendation:** Approve PAR withdrawal.

#### **IEEE Computer Society/Software & Systems Engineering Standards Committee**

##### **P3131**

Recommended Practice for Data Engineering with Heterogeneous Ecosystems and Data Sources for Efficient Data Processing, Management, and Consumption

**Recommendation:** Approve PAR withdrawal.

#### **IEEE Computer Society/Standards Activities Board Standards Committee**

##### **P1599**

Recommended Practice for the Definition of a Multilayer Representation of Music Using eXtensible Markup Language (XML)

**Recommendation:** Approve PAR withdrawal.

#### **4.2 Modified PARs**

There was a bucket motion to approve P3152, P2881, P2943, PN42.61, P1215, P3453, P1067, and P2817 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 or abstention, the motion was approved.

#### **IEEE Computer Society/Artificial Intelligence Standards Committee**

##### **P2874**

Standard for Spatial Web Protocol, Architecture and Governance

**Recommendation:** Approve modified PAR.

**There was a motion to approve the recommendation for P2874. In the absence of objection or abstention, the motion was approved.**

### **P3152**

Standard for Transparent Agency Identification of Humans and Machines

**Recommendation:** Approve modified PAR.

### **IEEE Computer Society/Learning Technology**

#### **P2881**

Standard for Learning Metadata Terms

**Recommendation:** Approve modified PAR.

### **IEEE Industry Applications Society/Industrial Power Conversion Systems Department**

#### **P2943**

Recommended Practice for Testing Energy Efficiency of Variable Frequency Drive Systems

**Recommendation:** Approve modified PAR.

### **IEEE Instrumentation and Measurement Society/TC45 - Radiation and Nuclear Instrumentation and Systems**

#### **PN42.61**

Standard for Data Format for Real-Time Streaming from Radiation Detection Instruments

**Recommendation:** Approve modified PAR.

### **IEEE Instrumentation and Measurement Society/TC9 - Sensor Technology**

#### **P1451.9**

Standard for Tidal/Wind Turbine Health Monitoring System (HMS) with Wireless Communication Protocols and Transducer Electronic Data Sheet (TEDS) Formats

**Recommendation:** Approve modified PAR.

**There was a motion to approve the recommendation for P1451.9. In the absence of objection or abstention, the motion was approved.**

### **IEEE Power and Energy Society/Insulated Conductors**

#### **P1215**

Guide for the Application of Separable Insulated Connectors

**Recommendation:** Approve modified PAR.

### **IEEE Power and Energy Society/Power System Instrumentation and Measurements**

#### **P3453**

Guide for Evaluation and Application of Overall Measurement Uncertainty of Electrical Energy Metering Devices

**Recommendation:** Approve modified PAR.

### **IEEE Power and Energy Society/Transmission and Distribution**

#### **P1067**

Guide for In-Service Use, Care, Maintenance, and Testing of Conductive Clothing Used for Live Work and Power Frequency AC Induction Protection

**Recommendation:** Approve modified PAR.

### **IEEE Robotics and Automation Society/Standing Committee for Standards**

#### **P2817**

Guide for Verification of Autonomous Systems

**Recommendation:** Approve modified PAR.

**IEEE Society on Social Implications of Technology/Social Implications of Technology Standards Committee**  
**P2895**

Standard Taxonomy for Responsible Use and Privacy of Human-Generated Data

**Recommendation:** Approve modified PAR.

**There was a motion to approve the recommendation for P2895. In the absence of objection or abstention, the motion was approved.**

**4.3 Extension Requests**

There was a bucket motion to approve P1904.4, P1941.1, P2872, P3202, P2887, P802.1DP, P802.3da, P802.11bf, P802.15.7a, P802.16t, P2247.4, P2806.1, P2959, P2971, P1450.1, P1581, P1687.2, P2654, P2929, P3807, P3808, P2861.1, P2861.2, P2898.1, P2898.2, P2898.3, P2951, P2855, P4001, P4002, P4005, P2943, P2964, P2822, PC50.12, P421.5, P1679.3, P2681, P2030.100.1, P259, PC57.32.10, P563, P664, P1227, P1854, P1413, P2520.1, P7012, and P1653.1 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/Access and Core Networks Standards Committee**  
**P1904.4**

Standard for Service Interoperability in 25 Gb/s and 50 Gb/s Ethernet Passive Optical Networks

**Recommendation:** Approve request for an extension until 31 December 2025.

**P1941.1**

Recommended Practice for Internet Grades of Service in Rural Areas

**Recommendation:** Approve request for an extension until 31 December 2026.

**IEEE Communications Society/Mobile Communication Networks Standards Committee**  
**P2872**

Standard for Interoperable and Secure Wireless Local Area Network (WLAN) Infrastructure and Architecture

**Recommendation:** Approve request for an extension until 31 December 2026.

**IEEE Computer Society/Blockchain and Distributed Ledgers**  
**P3202**

Standard for Capability Evaluation Requirements of Blockchain Practitioners

**Recommendation:** Approve request for an extension until 31 December 2026.

**IEEE Computer Society/Cybersecurity and Privacy Standards Committee**  
**P2887**

Recommended Practice for Zero Trust Security

**Recommendation:** Approve request for an extension until 31 December 2026.

**IEEE Computer Society/LAN/MAN Standards Committee**  
**P802.1DP**

Standard for Local and Metropolitan Area Networks – Time-Sensitive Networking for Aerospace Onboard Ethernet Communications

**Recommendation:** Approve request for an extension until 31 December 2026.

**P802.3da**

Standard for Ethernet Amendment: Physical Layer Specifications and Management Parameters for Enhancement of 10 Mb/s Operation over Single Balanced Pair Multidrop Segments

**Recommendation:** Approve request for an extension until 31 December 2026.

### **P802.11bf**

Standard for Information Technology -- Telecommunications and Information Exchange Between Systems Local and Metropolitan Area Networks -- Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications Amendment: Enhancements for Wireless Local Area Network (WLAN) Sensing

**Recommendation:** Approve request for an extension until 31 December 2026. (Recuse: Dukes)

### **P802.15.7a**

Standard for Local and Metropolitan Area Networks - Part 15.7: Short-Range Optical Wireless Communications Amendment: Higher Speed, Longer Range Optical Camera Communication (OCC)

**Recommendation:** Approve request for an extension until 31 December 2025.

### **P802.16t**

Standard for Air Interface for Broadband Wireless Access Systems Amendment - Fixed and Mobile Wireless Access in Narrowband Channels

**Recommendation:** Approve request for an extension until 31 December 2025.

### **IEEE Computer Society/Learning Technology**

#### **P2247.4**

Recommended Practice for Ethically Aligned Design of Artificial Intelligence (AI) in Adaptive Instructional Systems

**Recommendation:** Approve request for an extension until 31 December 2025.

### **IEEE Computer Society/Smart Manufacturing Standards Committee**

#### **P2806.1**

Standard for Connectivity Requirements of Digital Representation for Physical Objects in Factory Environments

**Recommendation:** Approve request for an extension until 31 December 2026.

### **P2959**

Standard for Technical Requirements of Standard-Oriented Knowledge Graphs

**Recommendation:** Approve request for an extension until 31 December 2026.

### **P2971**

Standard for the Test Requirements of a Gateway Supporting a Time Sensitive Networking in the Field of Industrial Internet

**Recommendation:** Approve request for an extension until 31 December 2026.

### **IEEE Computer Society/Test Technology**

#### **P1450.1**

Standard for Extensions to Standard Test Interface Language (STIL) (IEEE Std 1450-1999) for Semiconductor Design Environments

**Recommendation:** Approve request for an extension until 31 December 2025.

### **P1581**

Standard for Static Component Interconnection Test Protocol and Architecture

**Recommendation:** Approve request for an extension until 31 December 2026.

### **P1687.2**

Standard for Describing Analog Test Access and Control

**Recommendation:** Approve request for an extension until 31 December 2025.

#### **P2654**

Standard for System Test Access Management (STAM) to Enable Use of Sub-System Test Capabilities at Higher Architectural Levels

**Recommendation:** Approve request for an extension until 31 December 2026.

#### **P2929**

Standard for System-level State Extraction for Functional Validation and Debug

**Recommendation:** Approve request for an extension until 31 December 2026.

#### **IEEE Consumer Technology Society/Digital Finance and Economy Standards Committee**

##### **P3807**

Standard for Consortium Chain Certificate Application

**Recommendation:** Approve request for an extension until 31 December 2026.

##### **P3808**

Standard for Consortium Chain Traceability Application

**Recommendation:** Approve request for an extension until 31 December 2026.

#### **IEEE Consumer Technology Society/Emerging Technology Standards Committee**

##### **P2861.1**

Standard for Troubleshooting Touch Operation Issues for Mobile Gaming

**Recommendation:** Approve request for an extension until 31 December 2026.

##### **P2861.2**

Standard for Mobile Gaming Systems Integration Framework

**Recommendation:** Approve request for an extension until 31 December 2026.

##### **P2898.1**

Standard for General Requirements of Evaluating Intelligent Performance of Household and Similar Electrical Appliances

**Recommendation:** Approve request for an extension until 31 December 2026.

##### **P2898.2**

Standard for Requirements of Evaluating Intelligent Performance of Air Conditioners

**Recommendation:** Approve request for an extension until 31 December 2026.

##### **P2898.3**

Standard for Requirements of Evaluating Intelligent Performance of Refrigeration Appliances

**Recommendation:** Approve request for an extension until 31 December 2026.

#### **IEEE Consumer Technology Society/Smart Devices Standards Committee**

##### **P2951**

Technical Requirements and Evaluation Methods for Intelligent Levels of Smart Home Devices

**Recommendation:** Approve request for an extension until 31 December 2025.

#### **IEEE Electromagnetic Compatibility Society/Standards Development Committee**

##### **P2855**

Recommended Practice for the Electromagnetic Characterization of Cable/Connector Assembly Shielding Effectiveness in Frequency Range of Direct Current to 40 GHz

**Recommendation:** Approve request for an extension until 31 December 2026.

### 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 31 December 2025.

#### P4002

Standard for Synthetic Aperture Radar Metadata Content

**Recommendation:** Approve request for an extension until 31 December 2026.

#### P4005

Standard Protocol and Scheme for Measuring Soil Spectroscopy

**Recommendation:** Approve request for an extension until 31 December 2026.

### IEEE Industry Applications Society/Industrial Power Conversion Systems Department

#### P2943

Energy Efficiency Test Methods for Three-Phase Variable Frequency Drive Systems

**Recommendation:** Approve request for an extension until 31 December 2026.

#### P2964

Standard for Datasheet Parameters and Tests for Integrated Gate Drivers

**Recommendation:** Approve request for an extension until 31 December 2025.

### IEEE Microwave Theory and Techniques Society/Standards Committee

#### P2822

Recommended Practice for Microwave, Millimeter-wave and THz On-Wafer Calibrations, De-Embedding and Measurements

**Recommendation:** Approve request for an extension until 31 December 2026.

### IEEE Power and Energy Society/Electric Machinery

#### PC50.12

Standard for 50 Hz and 60 Hz Synchronous Generators and Generator/Motors Coupled to Hydraulic Turbines and Rated 5 MVA and Above

**Recommendation:** Approve request for an extension until 31 December 2026.

### IEEE Power and Energy Society/Energy Development & Power Generation

#### P421.5

Recommended Practice for Excitation System Models for Power System Stability Studies

**Recommendation:** Approve request for an extension until 31 December 2026.

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

#### P1679.3

Guide for the Characterization and Evaluation of Flow Batteries in Stationary Applications

**Recommendation:** Approve request for an extension until 31 December 2025.

### IEEE Power and Energy Society/Insulated Conductors

#### P1215

Guide for the Application of Separable Insulated Connectors

**Recommendation:** Approve request for an extension until 31 December 2026.



**There was a motion to amend the four year extension request to a two year extension request. In the absence of objection or abstention, the motion was approved.**

**There was a motion to approve the amended recommendation for P1215. The motion was approved. (Abstain: Biyabani and Edwards)**

### **IEEE Power and Energy Society/Power System Instrumentation and Measurements**

#### **P2681**

Guide for Testing Medium Voltage Smart Grid Sensor and Intelligent Electronic Device Systems

**Recommendation:** Approve request for an extension until 31 December 2026.

### **IEEE Power and Energy Society/Power System Relaying and Control**

#### **P2030.100.1**

Monitoring and Diagnostics of IEC 61850 Generic Object Oriented Status Event (GOOSE) and Sampled Values Based Systems

**Recommendation:** Approve request for an extension until 31 December 2026.

### **IEEE Power and Energy Society/Switchgear**

#### **PC37.30.7**

Standard Requirements for High-Voltage Air Switches Rated Above 1000 Vdc

**Recommendation:** Approve request for an extension until 31 December 2027.

**There was a motion to approve the recommendation for PC37.30.7. The motion was approved. (Abstain: Edwards)**

### **IEEE Power and Energy Society/Transformers**

#### **P259**

Standard Test Procedure for Evaluation of Systems of Insulation for Dry-Type Specialty and General-Purpose Transformers

**Recommendation:** Approve request for an extension until 31 December 2026.

#### **PC57.32.10**

Guide for the Selection of Neutral-Grounding Devices for High Voltage Direct Current (HVDC) Converter Transformers

**Recommendation:** Approve request for an extension until 31 December 2025.

### **IEEE Power and Energy Society/Transmission and Distribution**

#### **P563**

Guide on Conductor Self-Damping Measurements

**Recommendation:** Approve request for an extension until 31 December 2026.

#### **P664**

Guide for Laboratory Measurement of the Power Dissipation Characteristics of Aeolian Vibration Dampers for Single Conductors

**Recommendation:** Approve request for an extension until 31 December 2026.

#### **P1227**

Guide for the Measurement of DC Electric-Field Strength and Ion Related Quantities

**Recommendation:** Approve request for an extension until 31 December 2025.

#### **P1854**

Guide for Smart Distribution Applications

**Recommendation:** Approve request for an extension until 31 December 2026.

#### **IEEE Reliability Society/IEEE Reliability Society Standards Committee**

#### **P1413**

Standard Framework for Reliability Prediction of Hardware

**Recommendation:** Approve request for an extension until 31 December 2025.

#### **IEEE Sensors Council/Standards Committee**

#### **P2520.1**

Standard for Baseline Performance for Odor Analysis Devices and Systems

**Recommendation:** Approve request for an extension until 31 December 2026.

#### **IEEE Society on Social Implications of Technology/Social Implications of Technology Standards Committee**

#### **P2895**

Standard Taxonomy for Responsible Trading of Human-Generated Data

**Recommendation:** Approve request for an extension until 31 December 2026.

**There was a motion to approve the recommendation for P2895. In the absence of objection or abstention, the motion was approved.**

#### **P7011**

Standard for the Process of Identifying and Rating the Trustworthiness of News Sources

**Recommendation:** Approve request for an extension until 31 December 2026.

**There was a motion to approve the recommendation for P7011. The motion was approved. (Abstain: Biyabani)**

#### **P7012**

Standard for Machine Readable Personal Privacy Terms

**Recommendation:** Approve request for an extension until 31 December 2025.

#### **IEEE Vehicular Technology Society/Traction Power Systems Standards Committee**

#### **P1653.1**

Standard for Traction Power Rectifier Transformers for Substation Applications up to 1500 V DC Nominal Output

**Recommendation:** Approve request for an extension until 31 December 2026.

#### **4.4 New PARs**

There was a bucket motion to approve P1953.1, P1956, P3478, P3479, P3480, P3378.6, P3481, P3482, P3489, P3514, P7999, P7999.1, P7999.2, P3240.05, P3241.03, P3250.03, P1857.13, P2941.4, P3184.3, P802.1DD, P2672.1, P3517, P25070, P2888.1a, P2888.2a, P2888.5a, P2888.7, P3827, P3828, P3494, P2048.501, P2886, P3521, P3524, P1588h, P3502, P3503, P3519, P3523, P3504, P3513, P3522, P48404.1, P60880, P1222-2019/Cor 1, PC37.122.9, PC57.151, PC135.80-2023/Cor 1, P3516, P63195-3, P63195-4, and P3520 based on the fact that preliminary votes have no objections to recommending approval and there are no unresolved NesCom member comments. The motion was approved.

#### **IEEE Communications Society/Access and Core Networks Standards Committee**

#### **P1953.1**

Standard for Flexible Optical Service Unit for Optical Networks

**Recommendation:** Approve new PAR until December 2028.

**IEEE Communications Society/Standards Development Board**

**P1956**

Standard for an Intelligent Industrial Data Collection Network Framework and Protocols

**Recommendation:** Approve new PAR until December 2028.

**IEEE Computational Intelligence Society/Standards Committee**

**P3478**

Standard for Technical Specifications of Deep Learning Models for Vehicular Traffic Engineering

**Recommendation:** Approve new PAR until December 2028.

**P3479**

Standard for Multimodal Deep Learning Models for Smart Construction of Buildings

**Recommendation:** Approve new PAR until December 2028.

**P3480**

Standard for Multimodal Deep Learning Models for Urban Underground Space

**Recommendation:** Approve new PAR until December 2028.

**IEEE Computer Society/Artificial Intelligence Standards Committee**

**P3378.6**

Standard for Large-Scale Deep Learning Models for Coding

**Recommendation:** Approve new PAR until December 2028.

**P3378.7**

Standard for Technical Requirements for Large-Scale Deep Learning Models in Power Industry

**Recommendation:** Approve new PAR until December 2028.

**There was a motion to approve the recommendation for P3378.7. In the absence of objection or abstention, the motion was approved.**

**P3481**

Standard for the Functional Requirements for Cybersecurity-Specific Large Language Models

**Recommendation:** Approve new PAR until December 2028.

**P3482**

Standard for Technical Requirements for Modeling and Control of Three Dimensional Digital Human Based on Machine Learning Models

**Recommendation:** Approve new PAR until December 2028.

**P3488**

Standard for Technical Requirements of Artificial Intelligence-Based Data Sample Labeling and Management for Transmission and Distribution Lines

**Recommendation:** Approve new PAR until December 2028.

**There was a motion to approve the recommendation for P3488. In the absence of objection or abstention, the motion was approved.**

### **P3489**

Standard for Test Technical Requirements of Image Recognition Algorithms for Power Line Hidden Danger Monitoring

**Recommendation:** Approve new PAR until December 2028.

### **P3514**

Recommended Practice for Levels of Artificial Intelligence Capabilities for AI Entities and Applications

**Recommendation:** Approve new PAR until December 2028.

### **P7999**

Standard for Integrating Organizational Ethics Oversight in Projects and Processes Involving Artificial Intelligence

**Recommendation:** Approve new PAR until December 2028.

#### **P7999.1**

Standard for Integrating Organizational Ethics Oversight in Projects and Processes Involving Artificial Intelligence – Qualification of Individuals

**Recommendation:** Approve new PAR until December 2028.

#### **P7999.2**

Standard for Integrating Organizational Ethics Oversight in Projects and Processes Involving Artificial Intelligence – Organizational Certification

**Recommendation:** Approve new PAR until December 2028.

### **IEEE Computer Society/Blockchain and Distributed Ledgers**

#### **P3240.05**

Standard for Technical Specifications of Blockchain-Based Electricity Trading Smart Contracts

**Recommendation:** Approve new PAR until December 2028.

#### **P3241.03**

Standard for Carbon Accounting Utilizing Blockchain

**Recommendation:** Approve new PAR until December 2028.

#### **P3250.03**

Guide for Blockchain-Based Data Transfer Applications

**Recommendation:** Approve new PAR until December 2028.

### **IEEE Computer Society/Data Compression Standards Committee**

#### **P1857.13**

Standard for Audio Representation in Virtual Reality

**Recommendation:** Approve new PAR until December 2028.

#### **P2941.4**

Standard for Representation and Application Programming Interface for Graph Neural Network Models

**Recommendation:** Approve new PAR until December 2028.

#### **P3184.3**

Standard for Software-in-the-Loop Simulation Testing of Planning and Control Modules in Autonomous Driving Systems

**Recommendation:** Approve new PAR until December 2028.

### IEEE Computer Society/LAN/MAN Standards Committee

#### P802.1ASed

IEEE Standard for Local and Metropolitan Area Networks--Timing and Synchronization for Time-Sensitive Applications Amendment: Fault-Tolerant Timing with Time Integrity

**Recommendation:** Approve new PAR until December 2028.

**There was a motion to approve the recommendation for P802.ASed. In the absence of objection or abstention, the motion was approved.**

#### P802.1DD

Standard for Local and Metropolitan Area Networks - Resource Allocation Protocol

**Recommendation:** Approve new PAR until December 2028.

### IEEE Computer Society/Smart Manufacturing Standards Committee

#### P2672.1

Guide for a Mass Customization Maturity Model Based on Industrial Cloud Platforms

**Recommendation:** Approve new PAR until December 2028.

#### P3517

Guide for 5G Deterministic Networks for Flexible Manufacturing

**Recommendation:** Approve new PAR until December 2028.

### IEEE Computer Society/Software & Systems Engineering Standards Committee

#### P24748-10

ISO/IEC/IEEE Systems and software engineering-- Life cycle management--Part 10: Guidelines for systems engineering agility

**Recommendation:** Approve new PAR until December 2028. (Abstain =1)

**There was a motion to approve the recommendation for P24748-10. The motion was approved; one abstention.**

#### P25070

Systems and software engineering --Systems and software Quality Requirements and Evaluation (SQuaRE)-- Quality Engineering Concepts

**Recommendation:** Approve new PAR until December 2028.

### IEEE Computer Society/Standards Activities Board Standards Committee

#### P2888.1a

IEEE Standard for Specification of Sensor Interface for Cyber and Physical WorldsAmendment: Binary Representation of Data Formats for Interfacing Sensors and their Capabilities

**Recommendation:** Approve new PAR until December 2028.

#### P2888.2a

IEEE Standard for Actuator Interface for Cyber and Physical Worlds Amendment: Binary representation of data formats, application programming interfaces and definition of additional actuators

**Recommendation:** Approve new PAR until December 2028.

#### P2888.5a

IEEE Standard for Virtual Training System Evaluation Methods Amendment: Physiological evaluation method for virtual training systems

**Recommendation:** Approve new PAR until December 2028.

#### **P2888.7**

Standard for Architecture of a Digital Twin System for Carbon Emission Management

**Recommendation:** Approve new PAR until December 2028.

#### **IEEE Consumer Technology Society/Digital Finance and Economy Standards Committee**

##### **P3800.1**

Standard for a Data Trading System: Protocol and Object Framework

**Recommendation:** Approve new PAR until December 2028. (Recuse: Lin)

**There was a motion to approve the recommendation for P3800.1. The motion was approved.** (Recuse: Lin)

#### **P3827**

Standard for Data Assets Infrastructure for Smart Home Systems - Requirements and Guidelines for Multimodal Data Fusion

**Recommendation:** Approve new PAR until December 2028.

#### **P3828**

Standard for Digital Product Passport - Reference Architecture and Technical Requirements

**Recommendation:** Approve new PAR until December 2028.

#### **IEEE Consumer Technology Society/Emerging Technology Standards Committee**

##### **P3494**

Standard for Technical Specifications of Smart Reservation System for Free-of-Charge Museums

**Recommendation:** Approve new PAR until December 2028.

#### **IEEE Consumer Technology Society/Metaverse Standards Committee**

##### **P2048.501**

Guide for Metaverse based Training Simulation System for Power Dispatching

**Recommendation:** Approve new PAR until December 2028.

#### **IEEE Consumer Technology Society/Smart Devices Standards Committee**

##### **P2886**

Standard for General Requirements for Smart Residential Water Systems

**Recommendation:** Approve new PAR until December 2028.

#### **P3521**

Standard for Technical and Application Requirements for Intelligent Software Development Tools for Smart Devices

**Recommendation:** Approve new PAR until December 2028.

#### **P3524**

Standard for Active Noise Cancellation Requirements and Testing in Household Range Hoods

**Recommendation:** Approve new PAR until December 2028.

#### **IEEE Instrumentation and Measurement Society/TC9 - Sensor Technology**

##### **P1588h**

IEEE Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems

Amendment: Option to Disable Announcement Messages

**Recommendation:** Approve new PAR until December 2028.

### **P3502**

Standard for Technical Requirements of Wide-band (0 Hz to 100 kHz) High-current (10 kA to 1000 kA) Optical Fiber Sensors

**Recommendation:** Approve new PAR until December 2028.

### **P3503**

Guide for Non-Contact Temperature Measurement by Laser Absorption Spectroscopy

**Recommendation:** Approve new PAR until December 2028.

### **P3519**

Guide for Optical Fiber Vibration Sensors of Public Infrastructures

**Recommendation:** Approve new PAR until December 2028.

## **IEEE Oceanic Engineering Society/Standards Committee**

### **P3501**

Recommended Practice for the Development of Digital Twins of the Earth

**Recommendation:** Approve new PAR until December 2028.

**There was a motion to approve the recommendation for P3501. In the absence of objection or abstention, the motion was approved.**

## **IEEE Photonics Society/Standards Committee**

### **P3523**

Guide for Adaptive Gain Regulation of Industrial Ultraviolet Detection

**Recommendation:** Approve new PAR until December 2028.

## **IEEE Power and Energy Society/Energy Development & Power Generation**

### **P3504**

Guide for Coordination Control of Full-Size Converter Based Variable Speed Pumped Storage Unit

**Recommendation:** Approve new PAR until December 2028.

### **P3513**

Standard for Supply Chain and Asset Traceability for Photovoltaic Solar Module Recycling and Reuse

**Recommendation:** Approve new PAR until December 2028.

## **IEEE Power and Energy Society/Insulated Conductors**

### **P3522**

Guide for Thermal Stability Data Collection Through Laboratory Testing of Soil and Backfill

**Recommendation:** Approve new PAR until December 2028.

### **P48404.1**

Standard for Terminations and Joints used on Extruded and Laminated Dielectric Shielded Alternating-Current Power Cables Rated 2.5 kV through 46 kV

**Recommendation:** Approve new PAR until December 2028.

## **IEEE Power and Energy Society/Nuclear Power Engineering Committee**

### **P60880**

Nuclear power plants—Instrumentation and control systems important to safety—Software aspects for computer-based systems performing category A functions

**Recommendation:** Approve new PAR until December 2028.

**IEEE Power and Energy Society/Power System Communications and Cybersecurity**

**P1222-2019/Cor 1**

IEEE Standard for Testing and Performance for All-Dielectric Self-Supporting (ADSS) Fiber Optic Cable for Use on Electric Utility Power Lines - Corrigendum 1 to IEEE Standard 1222-2019

**Recommendation:** Approve new PAR until December 2028.

**IEEE Power and Energy Society/Substations Committee**

**PC37.122.9**

Guide for Condition Assessment of Gas-Insulated Substations Rated Above 52 kV

**Recommendation:** Approve new PAR until December 2028.

**IEEE Power and Energy Society/Transformers**

**PC57.151**

Guide for the Evaluation of the Environmental Impact and Life Cycle Assessment of Transformers and Shunt Reactors

**Recommendation:** Approve new PAR until December 2028.

**IEEE Power and Energy Society/Transmission and Distribution**

**PC135.80-2023/Cor 1**

IEEE Standard for Fasteners for Overhead Line Construction - Corrigendum 1

**Recommendation:** Approve new PAR until December 2028.

**IEEE SA Board of Governors/Entity Collaborative Activities Governance Board**

**P3516**

Recommended Practice for Electrical Installation and System Integration of Energy Storage Shipping Containers

**Recommendation:** Approve new PAR until December 2028.

**IEEE SA Board of Governors/International Committee on Electromagnetic Safety**

**P63195-3**

IEEE/IEC International Standard - Assessment of Power Density of Human Exposure to Radio Frequency Fields from Wireless Devices in Close Proximity to the Head and Body (Frequency Range of 6 GHz to 300 GHz) Part 3: Measurement Procedures for Absorbed Power Density

**Recommendation:** Approve new PAR until December 2028.

**P63195-4**

IEEE/IEC International Standard - Assessment of Power Density of Human Exposure to Radio Frequency Fields from Wireless Devices in Close Proximity to the Head and Body (Frequency Range of 6 GHz to 300 GHz) Part 4: Computational Procedures for Absorbed Power Density

**Recommendation:** Approve new PAR until December 2028.

**IEEE Signal Processing Society/Synthetic Aperture Standards Committee**

**P3520**

Recommended Practice for Leveraging Machine Learning in Synthetic Aperture Imaging and Sensing

**Recommendation:** Approve new PAR until December 2028.

**IEEE Society on Social Implications of Technology/Social Implications of Technology Standards Committee**

**P7019**

Standard for the Implementation and Governance of Autonomous and Intelligent Systems Related to Earth Law Principles

**Recommendation:** Approve new PAR until December 2028.



**There was a motion to approve the recommendation for P7019. In the absence of objection or abstention, the motion was approved.**

#### **4.5 PARs for the Revision of Standards**

There was a bucket motion to approve P1901, P2883, P802.1AB, P802.1AC, P15026-1, P1149.6, P1560, P1668, P844.1, P844.2, P1588, P1549, P848, P62582-5, P4, PC37.06.1, PC37.10.1, PC37.20.2, PC37.20.9, PC37.30.5, PC37.017, P60076-57-1202, PC57.19.04, P519, P1025, P63195-1, P63195-2, PSI 10, and P1859 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 or abstention, the motion was approved.

#### **IEEE Communications Society/Power Line Communications**

##### **P1901**

Standard for Broadband over Power Line Networks: Medium Access Control and Physical Layer Specifications

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

#### **IEEE Computer Society/Cybersecurity and Privacy Standards Committee**

##### **P2883**

Standard for Sanitizing Storage

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

#### **IEEE Computer Society/LAN/MAN Standards Committee**

##### **P802.1AB**

Standard for Local and metropolitan area networks - Station and Media Access Control Connectivity Discovery

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

##### **P802.1AC**

Standard for Local and metropolitan area networks -- Media Access Control (MAC) Service Definition

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

#### **IEEE Computer Society/Software & Systems Engineering Standards Committee**

##### **P15026-1**

ISO/IEC/IEEE International Standard for Systems and software engineering--Systems and software assurance -- Part 1: Concepts and vocabulary

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

#### **IEEE Computer Society/Test Technology**

##### **P1149.6**

Standard for Boundary-Scan Testing of Advanced Digital Networks

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

#### **IEEE Electromagnetic Compatibility Society/Standards Development Committee**

##### **P1560**

Standard for Methods of Measurement of Radio Frequency Power Line Interference Filter in the Range of 100 Hz to 10 GHz

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

**IEEE Industry Applications Society/Industrial & Commercial Power Systems Standards Development Committee**  
**P1668**

Recommended Practice for Voltage Sag and Short Interruption Ride-Through Testing for End-Use Electrical Equipment Rated Less than 1000 V

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

**IEEE Industry Applications Society/Petroleum & Chemical Industry**  
**P844.1**

IEEE/CSA Standard for Skin Effect Trace Heating of Pipelines, Vessels, Equipment, and Structures - General, Testing, Marking, and Documentation Requirements

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

**P844.2**

IEEE/CSA Standard for Skin Effect Trace Heating of Pipelines, Vessels, Equipment, and Structures--Application Guide for Design, Installation, Testing, Commissioning, and Maintenance

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

**IEEE Instrumentation and Measurement Society/TC9 - Sensor Technology**  
**P1588**

Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

**IEEE Microwave Theory and Techniques Society/Standards Committee**  
**P1549**

Standard for Microwave Filter Definitions

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

**IEEE Power and Energy Society/Energy Development & Power Generation**  
**P421.2**

Guide for Testing and Evaluation of the Dynamic Performance of Excitation Control Systems

**Recommendation:** Conditional Approve of PAR for the revision of a standard based upon changing 5.4 of P421.2 to "The purpose of this guide is". The approval of this PAR for the revision of a standard until December 2028. The condition has been met.

**There was a motion to amend the recommendation for P421.2 based upon changing 5.4 to "The purpose of this guide". In the absence of objection or abstention, the motion was approved.**

**There was a motion to approve the amended recommendation for P421.2. In the absence of objection or abstention, the motion was approved. The condition has been met.**

**IEEE Power and Energy Society/Insulated Conductors**  
**P848**

Standard Procedure for the Determination of the Ampacity Derating Factor for Fire-Protected Cable Systems

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

**IEEE Power and Energy Society/Nuclear Power Engineering Committee**  
**P62582-5**

IEEE/IEC International Standard - Nuclear power plants -- Instrumentation and control important to safety -- Electrical equipment condition monitoring methods -- Part 5: Optical time domain reflectometry

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

## IEEE Power and Energy Society/Power System Instrumentation and Measurements

### P4

Standard for High-Voltage Testing Techniques

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

## IEEE Power and Energy Society/Substations Committee

### PC37.122.4

Guide for Application and User Guide for Gas-Insulated AC Transmission Lines, Rated 72.5 kV and Above

**Recommendation:** Approve PAR for the revision of a standard until December 2028. (Abstain=1)

There was a motion for conditional approval of PC37.122.4 based upon the first sentence in clause 5.2 being changed from “this document” to “this guide”. The motion failed by a vote of 6=Disapproved; 6=Approved.

**There was a motion to approve the recommendation for PC37.122.4. The motion was approved with one abstention.**

## IEEE Power and Energy Society/Switchgear

### PC37.06.1

Recommended Practice for Preferred Ratings for High-Voltage (>1000 V) AC Circuit Breakers Designated Definite Purpose for Fast Transient Recovery Voltage Rise Times

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

### PC37.10.1

Guide for the Selection of Monitoring for Circuit Breakers

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

### PC37.20.2

Standard for Metal-Clad Switchgear

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

### PC37.20.9

Standard for Metal-Enclosed Switchgear Rated 1 kV to 52 kV Incorporating Gas Insulating Systems

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

### PC37.30.5

Standard for Definitions for AC High-Voltage Air Switches Rated Above 1000 V

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

### PC37.017

Standard for Bushings for High-Voltage (Over 1000 Vac) Circuit Breakers and Gas-Insulated Switchgear

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

## IEEE Power and Energy Society/Transformers

### P60076-57-1202

IEC/IEEE International Standard Power Transformers Part 57-1202: Liquid immersed phase-shifting transformers

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

### PC57.12.10

Standard Requirements for Liquid-Immersed Power Transformers

**Recommendation:** Approve PAR for the revision of a standard until December 2028. (Vote: Yes=6, No=5; Abstain =1).

**There was a motion to approve the recommendation for PC57.12.10. The motion was approved by a vote of 6=Yes; 5=No; 1=Abstain.**

#### **PC57.19.04**

Standard for Performance Characteristics and Dimensions for High Current Power Transformer Bushings with Rated Continuous Current in Excess of 5000 A located within Bus Enclosures

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

#### **IEEE Power and Energy Society/Transmission and Distribution**

##### **P519**

Standard for Harmonic Control in Electric Power Systems

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

##### **P1025**

Guide to the Assembly and Erection of Concrete Pole Structures

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

#### **IEEE SA Board of Governors/International Committee on Electromagnetic Safety**

##### **P63195-1**

IEEE/IEC International Standard Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz)--Part 1: Measurement procedure for Incident Power Density

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

##### **P63195-2**

IEC/IEEE International Standard - Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz)--Part 2: Computational procedure for Incident Power Density

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

#### **IEEE SA Board of Governors/Quantities, Units, and Symbols Standards Committee**

##### **PSI 10**

American National Standard for Metric Practice

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

#### **IEEE Ultrasonics, Ferroelectrics and Frequency Control Society/IEEE Ultrasonics, Ferroelectrics and Frequency Control**

##### **P1859**

Standard for Relaxor-Based Single Crystals for Transducer and Actuator Applications

**Recommendation:** Approve PAR for the revision of a standard until December 2028.

### **5. Old Business**

There was no old business.

### **6. New Business**

#### **6.1. NesCom Website Updates - Belmont**

Teresa provided information regarding NesCom website updates. Teresa also informed the group that the upcoming myProject update will include one of NesCom requested features, "request for following a comment discussion thread".

## **6.2 Any other Business**

Daleep initiated a discussion about IEEE SA project statistics, e.g., # of years to complete a project, # of PAR extension requests, etc.

Daleep initiated a discussion about “completion of a standard is contingent upon the completion of another standard”.

A NesCom member requested including a “thank-you” in meeting minutes to NesCom leaders and administrator for preparing the motions, particularly, the bucket motions. This really helped NesCom to conduct its meeting efficiently to cover over 150+ PARs.

## **7. Next Meeting**

The next meeting will be a teleconference meeting. It is scheduled for 30 October 2024. Chair Wang asked NesCom members to submit new topic ideas for the October meeting no later than 23 October 2024 along with any supporting documentation to the NesCom Administrator.

## **8. Adjournment**

The meeting was adjourned at 11:42 a.m. UTC+3.