

**IEEE SA STANDARDS BOARD (SASB)  
Meeting Minutes  
06 December 2023  
New Brunswick, NJ, USA and Teleconference/Webex  
9:00 a.m. – 5:00 p.m. ET (UTC-5)**

**Attendees**

**Chair:**

David Law

**Vice Chair:**

Ted Burse

**Past Chair:**

Gary Hoffman

**Secretary:**

Konstantinos Karachalios

**Members:**

Sara Biyabani

Doug Edwards

Ramy Fathy

Guido Hiertz

Yousef Kimiagar

Thomas Koshy

John Kulick

Joseph Levy

Howard Li

Johnny Lin

Gui Liu

Xiaohui Liu

Kevin Lu

Daleep Mohla

Andrew Myles

Paul Nikolich [TAB Rep.]

Annette Reilly

Robby Robson

Lei Wang

Keith Waters  
Karl Weber  
Philip Winston  
Don Wright

**Members Absent:**

Joe Koepfinger, Member Emeritus

**IEEE Staff:**

Christy Bahn  
Teresa Belmont  
Jennifer Biolsi  
Hermann Brand  
Kim Breitfelder  
Matthew Ceglia  
Sri Chandrasekaran  
Chirag Desai  
Karen Evangelista  
Joshua Gay  
Patrick Gibbons  
Jonathan Goldberg  
Katherine Gomez  
Dalisa Gonzalez  
Lloyd Green  
Jodi Haasz  
Yvette Ho Sang  
Patrycja Jarosz  
Anja Kaspersen  
Soo Kim  
Michael Kipness  
Victoria Kuperman-Super  
Vanessa Lalitte  
Donald Lee  
Juanita Lewis  
Jiajia Liu  
Kelly Lorne  
Sandra Maru  
Karen McCabe  
Patrick McCarren  
Suzanne Merten  
Erin Morales  
Karen Mulberry

Mary Lynne Nielsen  
Tania Olabi-Colon  
Christian Orlando  
Maira Patterson  
Shana Pepin  
Lisa Perry  
Dave Ringle, Recording Secretary  
Pat Roder  
Anasthasie Sainvilus-Cantrell  
Jennifer Santulli  
Rosalinda Saravia  
Rudi Schubert  
Alpesh Shah  
Tom Thompson  
Ernesto Vega Janica  
Malia Zaman  
Meng Zhao

**IEEE Outside Legal Counsel:**

Claire Topp – Dorsey & Whitney LLP

**Guests:**

Chuck Adams  
Miguel Aranda  
Michael Atlass  
Edward Au  
Kit August  
Dennis Brophy  
Helena Costa  
Latonia Gordon  
Haiying Lu  
Meng Lu  
Ralf Ma  
Hiroshi Mano  
Jim Matthews  
Celestin Ntahomvukiye  
Sophia Papathanasopoulou  
Glenn Parsons  
Cristina Popa  
Jon Rosdahl  
Jessy Rouyer  
Lachlan Scully

Mark Siira  
Robby Simpson  
Dorothy Stanley  
Gary Stuebing  
Donnie Swing  
Barry Tilton  
Victoria Wang  
Constance Weise  
John Wnuk

[NOTE: Some presentations are available to SASB Members in the IEEE SA [Standards Board document repository](#), in the Files & Discussions area, in the December 2023 folder.]

## **1 Call to Order**

SASB Chair David Law called the meeting to order at 9:00 a.m. ET (UTC-5).

## **2 Introductions**

There was a round of introductions by all present.

It was noted that the meeting was quorate.

Chair Law welcomed the attending GEPS representatives and the IEEE SA Standards Fellowship Program participants to the meeting.

## **3 Agenda**

3.1 Approval of [Agenda](#)

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

3.2 Consent Agenda

3.2.1 Approval of 21 September 2023 SASB Meeting [Minutes](#)

3.2.2 AudCom Recommendations

Standards Committee P&Ps

Accepted (standards work authorized):

C/S2ESC	IEEE Computer Society/Software & Systems Engineering Standards Committee
C/SAB	IEEE Computer Society/Standards Activities Board
GRSS/SC	IEEE Geoscience and Remote Sensing Society/Standards Committee: Standards for Earth Observation Technical Committee
IM/NDE&II	IEEE Instrumentation and Measurement Society/TC1 – Non-Destructive Evaluation and Industrial Inspection
PEL/SC	IEEE Power Electronics Society/Standards Committee

Conditionally Accepted (standards work authorized):

CASS/HSSC	IEEE Circuits and Systems Society/Hardware Security Standards Committee
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New Standards Committee Recognition with Accepted P&Ps

Motion: Recognize the IEEE Circuits and Systems Society/Hardware Security Standards Committee to be abbreviated as CASS/HSSC as an official Standards Committee, in accordance with IEEE SASB Bylaws 5.2.2, upon satisfaction of the conditions related to acceptance of their Standards Committee P&P.

Motion: Recommend that the SASB recognize the IEEE Instrumentation and Measurement Society/TC1 – Non-Destructive Evaluation and Industrial Inspection, to be abbreviated as IM/NDE&II, as an official Standards Committee, in accordance with IEEE SASB Bylaws 5.2.2.

3.2.3 NesCom Recommendations

PARs for Administrative Withdrawal

PAR Number	Standards Committee	Title
P2030.10.2	BOG/SC21/P2030.10.2	Standard for Electricity Access Requirements for DC Low Power not exceeding 60 V (SASB/SC21/P2030.10.2)
P802.1DF	C/LAN/MAN/802.1 WG	Time-Sensitive Networking Profile for Service Provider Networks

P2247.3	C/LT/AIS	Recommended Practices for Evaluation of Adaptive Instructional Systems
P1940	COM/EdgeCloud-SC/PayAuth	Standard Profiles for ISO 8583 Authentication Services
P2418.1	CTS/BSC/BIOTWG	Standard for the Framework of Blockchain Use in Internet of Things (IoT)
P2418.9	CTS/BSC/CBSTWG	Standard for Cryptocurrency Based Security Tokens
P11073-10721	EMB/11073/PoCD	Health Informatics - Device Interoperability - Part 10721: Point-of-Care Medical Device Communication - Device Specialization - High Frequency (200 kHz to < 5 MHz) Surgical Equipment
P11073-10722	EMB/11073/PoCD	Health Informatics - Device Interoperability - Part 10722: Point-of-Care Medical Device Communication - Device Specialization - Endoscopic Camera
P11073-10723	EMB/11073/PoCD	Health Informatics - Device Interoperability - Part 10723: Point-of-Care Medical Device Communication - Device Specialization - Endoscopic Light Source
P11073-10724	EMB/11073/PoCD	Health Informatics - Device Interoperability - Part 10724: Point-of-Care Medical Device Communication - Device Specialization - Endoscopic Insufflator
P11073-10725	EMB/11073/PoCD	Health Informatics - Device Interoperability - Part 10725: Point-of-Care Medical Device Communication - Device Specialization - Suction and Irrigation Pump

P4004	GRSS/SC/MW Cal	Standard for Calibration of Microwave Radiometers in the 300 MHz to 1 THz Frequency Range for Geoscience Applications
P1451.99	IM/ST/DASH	Standard for Harmonization of Internet of Things (IoT) Devices and Systems
P1207	PE/EDPG/HPS - WG 1207	Guide for the Application of Turbine Governing Systems for Hydroelectric Generating Units
P125	PE/EDPG/HPS - WG 125	Recommended Practice for Preparation of Equipment Specifications for Speed-Governing of Hydraulic Turbines Intended to Drive Electric Generators
P665	PE/EDPG/SDOC-WG665/P665	Guide for Generating Station Grounding
P11	PE/EM/Motor - WG11	Standard for Rotating Electric Machinery for Rail and Road Vehicles
P1491	PE/ESSB/WG_1491	Recommended Practice for Battery Monitoring in Stationary Applications
P635	PE/IC/A15W/P635_WG	Guide for Selection and Design of Aluminum Sheaths for Power Cables
P48404.1	PE/IC/B22W: Distr. 48-404/P48404.1	Standard for Test Procedures and Requirements for Joints and Live Front Terminations installed on Extruded or Laminated Dielectric Shielded Power Cable Systems Rated 2.5 kV through 46 kV AC
P48404.2	PE/IC/B23W: Transmission 48-404	Standard for Terminations and Joints for Extruded and Laminar Dielectric Shielded Cables Rated 69 kV through 500 kV

PC62.51	PE/SPDLV/LV3.6.10	Guide for the Application of Plug-in Multiservice Surge-Protective Devices (MSPDs) for Equipment Connected to AC Mains and Information and Communication Technology (ICT) Metallic Cables
PC62.41.1	PE/SPDLV/LV3.6.4	Guide on the Surge Environment in Low-Voltage (1000 V and less) AC Power Circuits
PC62.41.4	PE/SPDLV/LV3.6.4	Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000 V and less) AC Power Circuits
PC37.122.9	PE/SUB/WGK14	Guide for Condition Assessment of Gas-Insulated Substations
PC37.301	PE/SWG/Adscom/C37.301	Standard for High-Voltage Switchgear (Above 1000 V) Test Techniques - Partial Discharge Measurements
P1368	PE/T&D/TPC-1368_WG	Guide for Aeolian Vibration Field Measurements of Overhead Conductors
P691	PE/T&D/TPC-15.11.03	Guide for Transmission Structure Foundation Design and Testing
P1218	PE/T&D/TPC-15.11.08-10	Trial-Use Guide for Maintenance of Wood Transmission and Distribution Line Structures
PC57.13-2016/Cor 1	PE/TR/Instrument-WGC57.13	Standard Requirements for Instrument Transformers - Corrigendum 1
PC57.13.2	PE/TR/Instrument-WGC57.13.2	Standard for Conformance Test Procedure for Instrument Transformers
P2520	SEN/SC-SC/TMODS	Guide for Testing Machine Olfaction Devices and Systems

### Project Number Change Requests

IEEE Instrumentation and Measurement Society/TC9 – Sensor Technology (IM/ST) to change P21451-7 to P1451.7 Title: 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

IEEE Computer Society/Standards Activities Board (C/SAB) to change P3401 to P3079.4 Title: Standard for the Visual Quality Assessment of Auto-Stereoscopic Displays

### Withdrawal Requests

#### **IEEE Communications Society/Dynamic Spectrum Access Networks Standards Committee**

##### **P1900.5**

Standard for Requirements and System Architectures for Dynamic Spectrum Access Systems

**Recommendation:** Approve PAR withdrawal.

#### **IEEE Power and Energy Society/Analytic Methods for Power Systems**

##### **P2882**

Guide for Validation of Software Models of Renewable and Conventional Generators for Power System Studies

**Recommendation:** Approve PAR withdrawal.

### Modified PARs

#### **IEEE Engineering in Medicine and Biology Society/Standards Committee**

##### **P2795**

Standard for Shared Analytics Across Secure and Unsecured Networks

**Recommendation:** Approve modified PAR.

#### **IEEE Industry Applications Society/Petroleum & Chemical Industry**

##### **P61886.2**

Subsea Power Transformers

**Recommendation:** Approve modified PAR.

### **IEEE Power and Energy Society/Electric Machinery**

#### **P43**

Standard for Testing Insulation Resistance of Electric Machinery

**Recommendation:** Approve modified PAR.

### **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 modified PAR.

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

#### **P3199**

Standard for a Synthetic Aperture Sonar Data Format

**Recommendation:** Approve modified PAR.

#### **P3343**

Standard for the Spatio-temporal Synchronization of a Synthetic Aperture of Distributed Sensors

**Recommendation:** Approve modified PAR.

### Extension Requests

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

#### **P1932.1**

Standard for Licensed/Unlicensed Spectrum Interoperability in Wireless Mobile Networks

**Recommendation:** Approve request for an extension until 31 December 2024.

### **IEEE Communications Society/Unmanned Aerial Vehicles Communications Standards Committee**

#### **P1937.3**

Protocol for the Flight Data Transmission of Civil Unmanned Aerial Vehicle Based on BeiDou Short Message

**Recommendation:** Approve request for an extension until 31 December 2024.

**IEEE Communications Society/Virtualized and Software Defined Networks, and Services Standards Committee**

**P1938.1**

Standard for Software Defined Protocol and Functional Requirements for Improvement of the Signal-to-Noise Ratio (SNR) in Communications Channels

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

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

**P1228**

Standard for Software Safety

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

**IEEE Dielectrics and Electrical Insulation Society/Standards Committee**

**P1043**

Recommended Practice for Voltage-Endurance Testing of Form-Wound Bars and Coils

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

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

**P473**

Recommended Practice for an Electromagnetic Site Survey (10 kHz to 40 GHz)

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

**IEEE Engineering in Medicine and Biology Society/IEEE 11073 Standards Committee**

**P11073-10107**

Health Informatics – Device Interoperability – Part 10107: Point-of-Care Medical Device Communication – Nomenclature for External Control of Medical Devices

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

**P11073-10441**

Health Informatics – Device Interoperability – Part 10441: Personal Health Device Communication – Device Specialization – Cardiovascular Fitness and Activity Monitor

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

### **P11073-10702**

Health Informatics – Device Interoperability – Part 10702: Point-of-Care Medical Device Communication – Alert Provisioning by Participants in a Service-Oriented Device Connectivity (SDC) System

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

### **P11073-10703**

Health Informatics – Device Interoperability – Part 10703: Point-of-Care Medical Device Communication – External Control by Participants in a Service-Oriented Device Connectivity (SDC) System

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

### **P11073-10720**

Health Informatics – Device Interoperability – Part 10720: Point-of-Care Medical Device Communication – Module Specifications for a Service-Oriented Medical Device Exchange Architecture

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

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

### **P3002.9**

Recommended Practice for Conducting Transient Stability Studies and Analysis of Industrial and Commercial Power Systems

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

### **P3003.4**

Recommended Practice for Connections to Earth for Alternating Current (AC) Industrial and Commercial Power Systems Facilities

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

## **IEEE Industry Applications Society/Petroleum & Chemical Industry**

### **P61886.2**

Subsea Power Transformers

**Recommendation:** Approve request for an extension until 31 December 2024.

## IEEE Instrumentation and Measurement Society/TC41 – Traffic Enforcement Technologies

### P2452

Standard for the Performance of Lidar Used in Traffic Speed Measurements

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

## IEEE Power and Energy Society/Electric Machinery

### P286

Recommended Practice for Measurement of Power Factor Tip-Up of Electric Machinery Stator Coil Insulation

**Recommendation:** Approve request for an extension until 31 December 2024.

### P1415

Guide for Induction Machinery Maintenance Testing and Failure Analysis

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

### P1434

Guide for the Measurement of Partial Discharges in AC Electric Machinery

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

### P1553

Standard for Voltage Endurance Testing of Form-Wound Coils and Bars for Hydrogenerators

**Recommendation:** Approve request for an extension until 31 December 2024.

### P1665

Guide for the Rewind of Synchronous Generators, 50 Hz and 60 Hz, Rated 1 MVA and Above

**Recommendation:** Approve request for an extension until 31 December 2024.

### P2465

Recommended Practice for Pulse-Type Partial Discharge Measurements on Individual Stator Coils and Bars

**Recommendation:** Approve request for an extension until 31 December 2024.

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

### P1189

Guide for Selection of Batteries for Standby Applications

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

**P2685**

Recommended Practice for Energy Storage for Stationary Engine-Starting Systems

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

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

**P495**

Standard for Testing Faulted Circuit Indicators

**Recommendation:** Approve request for an extension until 31 December 2024.

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

**P334**

Standard for Qualifying Alternating Current Class 1E Motors for Nuclear Power Generating Stations

**Recommendation:** Approve request for an extension until 31 December 2024.

**P62582-1**

Nuclear Power Plants – Instrumentation and Control Important to Safety – Electrical Equipment Condition Monitoring Methods – Part 1: General

**Recommendation:** Approve request for an extension until 31 December 2024.

**P62582-3**

Nuclear Power Plants - Instrumentation and Control Important to Safety – Electrical Equipment Condition Monitoring Methods – Part 3: Elongation at Break

**Recommendation:** Approve request for an extension until 31 December 2024.

**P63332-387**

Nuclear Facilities – Electrical Power Systems – Part 387: Diesel Generator Units Applied as Standby Power Sources

**Recommendation:** Approve request for an extension until 31 December 2024.

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

**P1591.4**

Standard for Testing and Performance of Hardware for Optical Fiber Composite Overhead Phase Conductor (OPPC)

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

**P1711.1**

Standard for a Cryptographic Protocol for Cyber Security of Substation Serial Links: Substation Serial Protection Protocol

**Recommendation:** Approve request for an extension until 31 December 2024.

**P2808**

Standard for Function Designations used in Electrical Power Systems for Cyber Services and Cybersecurity

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

**PC37.118.2**

Standard for Synchrophasor Data Transfer for Power Systems

**Recommendation:** Approve request for an extension until 31 December 2024.

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

**P454**

Guide for the Detection, Measurement, and Interpretation of Partial Discharges

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

**P1122**

Standard for Digital Recorders for Measurements in High-Voltage and High-Current Impulse Tests

**Recommendation:** Approve request for an extension until 31 December 2024.

**P2426**

Guide for Field Measurement of Fast-Front and Very Fast-Front Overvoltages in Electric Power System – Part 1: Measuring Techniques

**Recommendation:** Approve request for an extension until 31 December 2024.

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

**PC37.90.2**

Standard for Relays, Relay Systems, and Control Devices used for Protection and Control of Electric Power Apparatus – Radiated Electromagnetic Interference Withstand Capability Requirements and Tests

**Recommendation:** Approve request for an extension until 31 December 2024.

**PC37.99**

Guide for the Protection of Shunt Capacitor Banks

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

**PC37.249**

Guide for Categorizing Security Needs for Protection, Automation, and Control Related Data Files

**Recommendation:** Approve request for an extension until 31 December 2024.

**PC37.251**

Standard for Common Protection and Control Settings or Configuration Data Format (COMSET)

**Recommendation:** Approve request for an extension until 31 December 2024.

**PC37.252**

Guide for Testing Automatic Voltage Control Systems in Regional Power Grids

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

**IEEE Power and Energy Society/Substations**

**P81**

Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Grounding System

**Recommendation:** Approve request for an extension until 31 December 2024.

**PC37.122.3**

Guide for Sulphur Hexafluoride (SF<sub>6</sub>) Gas Handling for High-Voltage (over 1000 Vac) Equipment

**Recommendation:** Approve request for an extension until 31 December 2024.

**IEEE Power and Energy Society/Surge Protective Devices/Low Voltage**

**PC62.37**

Standard for Test Methods and Preferred Values for Thyristor Surge Protective Components

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

**PC62.41.2**

Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less) AC Power Circuits

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

**IEEE Power and Energy Society/Switchgear**

**PC37.20.4**

Standard for AC Switches Rated above 1 kV up to 52 kV for Use in Metal-Enclosed Switchgear

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

**PC37.68**

Standard Design, Test, and Application Requirements for Microprocessor-Based Controls of Distribution Padmount, Dry Vault, Wet Vault, and Polemount Switchgear Rated Above 1 kV and up to and including 38 kV

**Recommendation:** Approve request for an extension until 31 December 2024.

**IEEE Power and Energy Society/Transformers**

**P63253-5713-8**

Standard Requirements for Station Service Voltage Transformers

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

**PC57.12.44**

Standard Requirements for Secondary Network Protectors

**Recommendation:** Approve request for an extension until 31 December 2024.

**PC57.124**

Recommended Practice for the Detection of Partial Discharge and the Measurement of Apparent Charge in Dry-Type Transformers

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

**PC57.162**

Guide for the Interpretation of Moisture Related Parameters in Liquid Immersed Transformers and Reactors

**Recommendation:** Approve request for an extension until 31 December 2024.

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

**P18**

Standard for Shunt Power Capacitors

**Recommendation:** Approve request for an extension until 31 December 2024.

**P957**

Guide for Monitoring, Managing, and Cleaning of Contaminated Insulators

**Recommendation:** Approve request for an extension until 31 December 2024.

**P1410**

Guide for Improving the Lightning Performance of Electric Power Overhead Distribution Lines

**Recommendation:** Approve request for an extension until 31 December 2024.

**P2748**

Recommended Practice for Fault Diagnosis and Protection in Smart Distribution System

**Recommendation:** Approve request for an extension until 31 December 2024.

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

**P2751**

3D Map Data Representation for Robotics and Automation

**Recommendation:** Approve request for an extension until 31 December 2024.

**P7008**

Standard for Ethically Driven Nudging for Robotic, Intelligent, and Autonomous Systems

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

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

**P2030.10.1**

Standard for Electricity Access Requirements with Safety Extra Low Voltage (SELV) DC for Tier II and Tier III of Energy Sector Management Assistance Program (ESMAP) Multi-Tier Framework for Household Electricity Supply

**Recommendation:** Approve request for an extension until 31 December 2024.

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

**P2413.2**

Standard for a Reference Architecture for Power Distribution IoT (PDIoT)

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

New PARs

**IEEE Circuits and Systems Society/Flexible and Wearable Circuits and Systems Standards Committee**

**P3435**

Standard for Digital Stethoscope

**Recommendation:** Approve new PAR until December 2027.

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

#### **P3426**

Standard for Defining and Measuring the Capabilities of AI Foundation Models

**Recommendation:** Approve new PAR until December 2027.

#### **P3427**

Standard for Federated Machine Learning of Semantic Information Agents

**Recommendation:** Approve new PAR until December 2027.

#### **P3428**

Standard for Large Language Model Agents for AI-Powered Education

**Recommendation:** Approve new PAR until December 2027.

#### **P3429**

Recommended Practices for Levels of Artificial Intelligence Generated Content Technologies

**Recommendation:** Approve new PAR until December 2027.

#### **P3430**

Recommended Practice for a Holistic Framework for AI Foundation Models

**Recommendation:** Approve new PAR until December 2027.

#### **P3445**

Standard for Privacy Engineering Maturity Model

**Recommendation:** Approve new PAR until December 2027.

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

#### **P3232**

Standard for Blockchain-Based Renewable Energy Certificates Trading Technical Specifications

**Recommendation:** Approve new PAR until December 2027.

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

#### **P3437**

Standard for Privacy Enhancing Machine Learning Based on Terminal and Cloud Collaboration

**Recommendation:** Approve new PAR until December 2027.

### **IEEE Intelligent Transportation Systems Society/Standards Committee**

#### **P3439**

Guide for Driving Risk Assessment Procedure in SAE Level 1 to 3

**Recommendation:** Approve new PAR until December 2027.

#### **P3442**

Standard for Multimodal Logistics Corridors for Resilient Food Supply

**Recommendation:** Approve new PAR until December 2027.

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

#### **P3434**

Guide for the Project Development, Facility Design, Installation, Operations and Maintenance (O&M) for Grid Connected Energy Storage Systems (ESSs)

**Recommendation:** Approve new PAR until December 2027.

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

#### **P3443**

Guide for Substation Physical Resilience

**Recommendation:** Approve new PAR until December 2027.

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

#### **P3413**

Guide for Technical Requirements and Acceptance Methods of Double Horizontal Jibs Gin Pole on Ground for Transmission Tower Erection

**Recommendation:** Approve new PAR until December 2027.

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

#### **P1872.1.1**

Guide for Practical Implementations of IEEE 1872.1-2024 Standard for Robot Task Representation

**Recommendation:** Approve new PAR until December 2027.

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

**P3300**

Adoption of Moving Picture, Audio and Data Coding by Artificial Intelligence (MPAI) Technical Specification Multimodal Conversation (MMC) Version 2

**Recommendation:** Approve new PAR until December 2027.

**P3301**

Adoption of Moving Picture, Audio and Data Coding by Artificial Intelligence (MPAI) Technical Specification Artificial Intelligence Framework (AIF) Version 2

**Recommendation:** Approve new PAR until December 2027.

**P3305**

Adoption of Moving Picture, Audio and Data Coding by Artificial Intelligence (MPAI) Technical Specification MPAI Metaverse Model (MMM) Architecture Version 1

**Recommendation:** Approve new PAR until December 2027.

**P3306**

Adoption of Moving Picture, Audio and Data Coding by Artificial Intelligence (MPAI) Technical Specification Portable Avatar Format (PAF) Version 1

**Recommendation:** Approve new PAR until December 2027.

**P3307**

Adoption of Moving Picture, Audio and Data Coding by Artificial Intelligence (MPAI) Technical Specification Connected Autonomous Vehicle – Architecture (CAV) Version 1

**Recommendation:** Approve new PAR until December 2027.

**IEEE Systems, Man, and Cybernetics Society/Standards Committee**

**P3436**

Guide for Electric Vehicle Charging Load Prediction

**Recommendation:** Approve new PAR until December 2027.

PARs for the Revision of Standards

**IEEE Communications Society/Dynamic Spectrum Access Networks Standards Committee**

**P1900.5.1**

Standard for Policy Language for Dynamic Spectrum Access Systems

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

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

### P24748-4

Systems and Software Engineering – Life Cycle Management – Part 4: Systems Engineering Management Planning

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

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

### P902

Recommended Practice for Maintenance and Operational Safety of Electrical Power Distribution Systems in Industrial and Commercial Facilities

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

## IEEE Industry Applications Society/Petroleum & Chemical Industry

### P45.3

Recommended Practice for Shipboard Electrical Installations – Systems Engineering

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

## IEEE Microwave Theory and Techniques Society/Standards Committee

### P1785.1

Standard for Rectangular Metallic Waveguides and their Interfaces for Frequencies of 110 GHz and Above – Part 1: Frequency Bands and Waveguide Dimensions

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

### P1785.2

Standard for Rectangular Metallic Waveguides and their Interfaces for Frequencies of 110 GHz and Above – Part 2: Waveguide Interfaces

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

### P1785.3

Recommended Practice for Rectangular Metallic Waveguides and their Interfaces for Frequencies of 110 GHz and Above – Part 3: Recommendations for Performance and Uncertainty Specifications

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

### **IEEE Power and Energy Society/Analytic Methods for Power Systems**

#### **P762**

Standard Definitions for Use in Reporting Electric Generating and Storage Unit Reliability, Availability, and Productivity

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

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

#### **P1249**

Guide for Digital Control for Hydroelectric Power Plant Automation

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

#### **P2778**

Guide for Solar Power Plant Grounding for Personnel Protection

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

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

#### **PC37.231**

Standard Common Format for Documenting Intelligent Electronic Device (IED) Firmware or Software Changes and Confirming their Transmittal

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

### **IEEE Power and Energy Society/Surge Protective Devices/Low Voltage**

#### **PC62.39**

Standard for Test Methods and Preferred Values for Self-Restoring Current-Limiter Components Used in Telecommunication Surge Protection

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

#### **PC62.44**

Guide for the Application of Low-Voltage (1000 V rms or Less) Surge Protective Devices Used on Secondary Distribution Systems (Between the Transformer Low-Voltage Terminals and the Line Side of the Service Equipment)

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

#### **PC62.50**

Standard for Performance Criteria and Test Methods for Plug-In (Portable) Multiservice (Multiport) Surge-Protective Devices for Equipment Connected to a 120 V/240 V Single Phase Power Service and Metallic Conductive Communication Line(s)

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

#### **PC62.72**

Guide for the Application of Surge-Protective Devices for Use on the Load Side of Service Equipment in Low-Voltage (1000 V or Less, 50 Hz or 60 Hz) AC Power Circuits

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

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

#### **PC37.12**

Guide for Specifications of AC High-Voltage Circuit Breakers (over 1000 V)

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

#### **PC37.015**

Guide for the Application of Shunt Reactor Switching

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

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

#### **P638**

Standard for Qualification of Class 1E Transformers for Nuclear Power Generating Stations

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

**PC57.12.32**

Standard for Submersible Equipment – Enclosure Integrity

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

3.2.4 RevCom Recommendations

New

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

**P2986/Draft 1.1**

IEEE Draft Recommended Practice for Privacy and Security for Federated Machine Learning

**Recommendation:** APPROVE

**P3156/Draft 2.1**

IEEE Draft Standard for Requirements of Privacy-preserving Computation Integrated Platforms

**Recommendation:** APPROVE

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

**P3224/Draft 5.0**

IEEE Draft Standard for Blockchain-Based Green Power Identification Application

**Recommendation:** APPROVE

**IEEE Computer Society/Standards Activities Board**

**P2888.4/Draft 3**

IEEE Draft Standard on Architecture for Virtual Reality Disaster Response Training System with Six degrees of Freedom (6 DoF)

**Recommendation:** APPROVE

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

**P2718/Draft 10**

IEEE Draft Guide for Near Field Characterization of Unintentional Stochastic Radiators

**Recommendation:** APPROVE

## IEEE Industry Applications Society/Petroleum & Chemical Industry

### P61886.2/Draft 4

IEC/IEEE International Draft Standard – Subsea Equipment – Part 2: Power Transformers

**Recommendation:** Conditionally approved based on SASB approval of the Modified PAR

## IEEE Instrumentation and Measurement Society/TC9 – Sensor Technology

### P1588d/Draft 1.4

IEEE Draft Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems Amendment: GDOI (Group Domain of Interpretation) Key Management

**Recommendation:** APPROVE

## IEEE Power and Energy Society/Electric Machinery

### P2465/Draft 16

IEEE Draft Trial-Use Recommended Practice for Pulse-Type Partial Discharge Measurements on Individual Stator Coils and Bars

**Recommendation:** APPROVE

## IEEE Power and Energy Society/Switchgear

### PC37.68/Draft 3.6

IEEE Draft Standard for Design, Test, and Application Requirements for Microprocessor-Based Controls of Distribution Pad-mount, Dry Vault, Wet Vault, and Polemount Switchgear Rated above 1 kV and up to and including 38 kV

**Recommendation:** APPROVE

## IEEE Power and Energy Society/Transformers

### PC57.105-2019/Cor 1/Draft 5

IEEE Draft Guide for Application of Transformer Connections in Three-Phase Electrical Systems – Corrigendum 1: Update Table 1 – Application Characteristics of Connections

**Recommendation:** APPROVE

### PC57.160/Draft 7.6

IEEE Draft Guide for the Electrical Measurement of Partial Discharge in High Voltage Bushings and Instrument Transformers

**Recommendation:** APPROVE

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

#### **P2748/Draft 5.4**

IEEE Draft Recommended Practice for Fault Diagnosis and Protection in Smart Distribution System

**Recommendation:** APPROVE

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

#### **P2030.10.1/Draft 6**

IEEE Draft Standard for Electricity Access Requirements with Safety Extra Low Voltage (SELV) DC for Tier 2 and Tier 3 of the ESMAP Multi-Tier Framework for Household Electricity Supply

**Recommendation:** APPROVE

### **IEEE SA Board of Governors/SCC20 – Test and Diagnosis for Electronic Systems**

#### **P1671.1-2017/Cor 1/Draft 5**

IEEE Draft Standard for Automatic Test Markup Language (ATML) Test Descriptions - Corrigendum 1

**Recommendation:** APPROVE

Revision

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

#### **P2030.5/Draft 4**

IEEE Draft Standard for Smart Energy Profile Application Protocol

**Recommendation:** APPROVE

### **IEEE Computer Society/Design Automation**

#### **P1800/Draft 18**

IEEE Draft Standard for SystemVerilog – Unified Hardware Design, Specification, and Verification Language

**Recommendation:** APPROVE

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

**P1450/Draft 2**

IEEE Draft Standard Test Interface Language (STIL) for Digital Test Vector Data

**Recommendation:** APPROVE

**IEEE Engineering in Medicine and Biology Society/IEEE 11073 Standards Committee**

**P11073-10419/Draft 15**

IEEE Draft Standard for Health Informatics – Device interoperability – Part 10419: Personal Health Device Communication – Device Specialization – Insulin Pump

**Recommendation:** APPROVE

**IEEE Industry Applications Society/Petroleum & Chemical Industry**

**P1662/Draft 8.2**

IEEE Draft Recommended Practice for the Design and Application of Power Electronics in Electrical Power Systems

**Recommendation:** APPROVE

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

**P1692/Draft 7**

IEEE Draft Guide for the Protection of Communication Installations from Lightning Effects

**Recommendation:** APPROVE

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

**PC37.102/Draft 7.8**

IEEE Draft Guide for AC Generator Protection

**Recommendation:** APPROVE

**PC37.109/Draft 3.6**

IEEE Draft Guide for the Protection of Shunt Reactors

**Recommendation:** APPROVE

**IEEE Power and Energy Society/Substations**

**P605/Draft 11**

IEEE Draft Guide for Bus Design in Air Insulated Substations

**Recommendation:** APPROVE

**P1127/Draft 4.2**

IEEE Draft Guide for the Design, Construction, and Operation of Electric Power Substations for Community Acceptance and Environmental Compatibility

**Recommendation:** APPROVE

**PC37.123/Draft 3**

IEEE Draft Guide for Specifications for High-Voltage Gas-Insulated Substations Rated above 52 kV

**Recommendation:** APPROVE

**IEEE Power and Energy Society/Transformers**

**PC57.12.28/Draft 7.3**

IEEE Draft Standard for Pad-Mounted Equipment – Enclosure Integrity

**Recommendation:** APPROVE

**PC57.12.29/Draft 7.3**

IEEE Draft Standard for Pad-Mounted Equipment – Enclosure Integrity for Coastal Environments

**Recommendation:** APPROVE

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

**PC135.80/Draft 2**

IEEE Draft Standard for Fasteners for Overhead Line Construction

**Recommendation:** APPROVE

**4 SASB Standing Committee Reports**

4.1 Audit Committee ([AudCom](#))

Kevin Lu, AudCom Chair, reported.

4.2 New Standards Committee ([NesCom](#))

Lei Wang, NesCom Chair, reported.

4.3 Patent Committee ([PatCom](#))

John Kulick, PatCom Chair, reported.

SASB Chair Law noted that John had served 17 consecutive years on the SASB.

**There was a motion, which was approved by acclamation:**

**The IEEE SA Standards Board thanks John Kulick for his 17 years of service to the IEEE SA Standards Board and to the IEEE SA.**

4.4 Procedures Committee ([ProCom](#))

Ted Burse, ProCom Chair, reported.

4.5 Standards Review Committee ([RevCom](#))

Keith Waters, RevCom Chair, reported.

It was noted that RevCom had recommended approval for a record number of submittals in 2023.

**5 Old Business**

None.

**6 Informational Reports**

6.1 CAG [Report](#)

Don Wright, SASB Liaison to the CAG, reported.

6.2 IEEE SA President's Report

IEEE SA President Jim Matthews gave a verbal update.

Jim thanked the SASB and SASB standing committee members for their work and support in 2023.

Jim noted that Gary Hoffman will be the IEEE SA President Elect in 2024.

6.3 IEEE SA Managing Director's Report

The written IEEE SA Managing Director's [Report](#) was made available in the SASB document repository.

Konstantinos Karachalios, IEEE SA Managing Director, provided a [ten-year story](#) seen from the angle of the IEEE SA strategic goals (defined around 2013).

**There was a motion, which was approved by acclamation and accompanied by a plaque:**

**The IEEE SA Standards Board Award of Distinction is presented to Konstantinos Karachalios for his support and guidance during his tenure as Managing Director of the IEEE Standards Association staff [2012-2023].**

There was a round of applause for Konstantinos.

6.4 SASB Chair's [Report](#)

Chair Law reported.

Chair Law was thanked for his service as Chair in 2023.

6.5 TAB CoS [Update](#)

Edward Au, TAB CoS Chair, reported.

**7 New Business**

None.

**8 2024 Calendar Update**

Chair Law noted that the IEEE SA BOG endorsed the IEEE SA SPCC recommendation that the September 2024 IEEE SA Standards Board meeting series be moved from Tel Aviv, Israel to Athens, Greece.

**There was a motion:**

**Move the September 2024 SASB meeting series venue from Tel Aviv, Israel to Athens, Greece.**

**In the absence of objection, the motion was approved.**

9 [Next Meeting](#)

The next SASB meeting will be scheduled for 21 March 2024 in London, UK.

## **10 SASB Resolutions**

**The SASB recognized the IEEE Circuits and Systems Society/Hardware Security Standards Committee to be abbreviated as CASS/HSSC, as an official Standards Committee, in accordance with IEEE SASB Bylaws 5.2.2.**

**The SASB recognized the IEEE Instrumentation and Measurement Society/TC1 – Non-Destructive Evaluation and Industrial Inspection, to be abbreviated as IM/NDE&II, as an official Standards Committee, in accordance with IEEE SASB Bylaws 5.2.2.**

Chair Law thanked all of the attendees for their participation in the meeting and wished everyone Happy Holidays and a Happy New Year.

The SASB entered Executive Session at 2:00 p.m. ET (UTC-5).

### **11 Executive Session Items**

- 11.1 SASB Oversight Committee RE: a Specific Standards Committee
- 11.2 Report from Ad Hoc RE: Standards Development Activities
- 11.3 Report from Mentors for a Specific Project

The SASB concluded Executive Session at 3:52 p.m. ET (UTC-5).

#### Report Out from the Executive Session:

The SASB requires that the Standards Committee re-form the P1937.7 IEEE SA balloting group.

## **12 Adjournment**

There being no further business, the meeting was adjourned at 3:53 p.m. ET (UTC-5).