

**IEEE SA STANDARDS BOARD (SASB)
Meeting Minutes
11 December 2024
Bridgewater, New Jersey, USA and Webex/Teleconference
9:00 a.m. – 5:00 p.m. ET (UTC-5)**

Attendees

Chair:

David Law

Vice Chair:

Jon Rosdahl

Past Chair:

Gary Hoffman

Secretary:

Alpesh Shah

Members:

Sara Biyabani

Ted Burse

Stephen Dukes

Doug Edwards

Travis Griffith

Guido Hiertz

Ron Hotchkiss

Yousef Kimiagar

Xiaohui Liu

Haiying (John) Lu

Kevin Lu

Hiroshi Mano

Paul Nikolich [TAB Rep.]

Robby Robson

Lei Wang

Keith Waters

Sha Wei

Philip Winston

Don Wright

Members Absent:

Hao Hu

Howard Li

Joe Koepfinger, Member Emeritus

IEEE Staff:

Christy Bahn

Michael Ballard

Teresa Belmont

Kim Breitfelder

Matthew Ceglia

Donna Ceruto

Chirag Desai

Susan England-Lutz

Karen Evangelista

Josh Gay

Franca Giuliani

Jonathan Goldberg

Dalisa Gonzalez

Lloyd Green

Jodi Haasz

John Havens

Yvette Ho Sang

Patrycja Jarosz

Soo Kim

Michael Kipness

Victoria Kuperman-Super

Vanessa Lalitte

Jiajia Liu

Sandra Maru

Karen McCabe

Suzanne Merten

Erin Morales

Karen Mulberry

Tania Olabi-Colon

Christian Orlando

Moirra Patterson

Shana Pepin

Dave Ringle, Recording Secretary

Pat Roder

Heather Robinson
Anasthasie Sainvilus-Cantrell
Jennifer Santulli
Rosalinda Saravia
Rudi Schubert
Tom Thompson
Michelle Turner
Malia Zaman
Tony Zertuche

IEEE Outside Legal Counsel:

Claire Topp – Dorsey & Whitney LLP

Guests:

Hassan Abouseada
Chuck Adams
Edward Au
Xiaofeng (Alfred) Chen
Subir Das
Rich Forselius
Latonia Gordon
Tyler Jaynes
Thomas Koshy
Joseph Levy
Meng Lu
Daleep Mohla
Yukimasa Nagai
Glenn Parsons
Annette Reilly
Dan Sabin
Dorothy Stanley
Donnie Swing
Constance Weise

[NOTE: Some presentations are available to SASB Members in the IEEE SA [Standards Board document repository](#), in the Files & Discussions area, in the December 2024 folder.]

1 Call to Order

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

Chair Law welcomed everyone to the meeting.

Chair Law discussed meeting protocol.

2 Introductions

There was a round of introductions by all present.

The meeting was quorate.

Chair Law noted the new GEPS representatives since the last SASB meeting.

3 Agenda

3.1 Approval of [Agenda](#)

P3302 (RevCom submittal) was removed from the consent agenda and added as item 10.1.

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

3.2 Consent Agenda

3.2.1 Approval of the 26 September 2024 SASB Meeting [Minutes](#)

3.2.2 AudCom Recommendations

Standards Committee P&Ps

Accepted (*standards work authorized*):

- C/BDL IEEE Computer Society/Blockchain and Distributed Ledgers
- COM/DySpan-SC IEEE Communications Society/Dynamic Spectrum Access Networks Standards Committee
- DEI/SC IEEE Dielectrics and Electrical Insulation Society/Standards Committee
- EMB/11073 IEEE Engineering in Medicine and Biology Society/IEEE 11073 Standards Committee
- PE/EDPG IEEE Power and Energy Society/Energy Development & Power Generation
- PE/SUB IEEE Power and Energy Society/Substations

- PE/T&D IEEE Power and Energy Society/Transmission and Distribution

Conditionally Accepted (*standards work authorized*):

- AES/RS IEEE Aerospace and Electronic Systems Society/
Radar Systems Panel
- IAS/ICPS/SDC IEEE Industry Applications Society/Industrial &
Commercial Power Systems Standards Development
Committee

3.2.3 NesCom Recommendations

PARs for Administrative Withdrawal

PAR	Committee	Title
P2413.1	BOG/CAG/IoT Architecture	Standard for a Reference Architecture for Smart City (RASC)
P802.1CQ	C/LAN/MAN/802.1 WG	Standard for Local and Metropolitan Area Networks: Multicast and Local Address Assignment
P1484.1	C/LT/CM4LTS WG	Guide for Conceptual Model for Learning Technology Systems (CM4LTS)
P1394	C/MSC/1394_WG	Standard for a High-Performance Serial Bus
P7131	C/SABSC/QCB-WG	Standard for Quantum Computing Performance Metrics & Performance Benchmarking
P1922.1	COM/GreenICT-SC/GICT	Standard for a Method for Calculating Anticipated Emissions Caused by Virtual Machine Migration and Placement
P1931.1	COM/MobiNet-SC/ROOF	Standard for an Architectural Framework for Real-Time Onsite Operations Facilitation (ROOF) for the Internet of Things
P1951.1	COM/NetSoft-SC/DISCCS	Standard for Smart City Component Systems Discovery

		and Semantic Exchange of Objectives
P2953	CTS/SDSC/ISTDWG	Standard for Technical Requirements for Industrial Smart Terminal Devices
P11073-10426	EMB/11073/PHD	Health Informatics – Device Interoperability – Part 10426: Personal Health Device Communication – Device Specialization – Home Healthcare Environment Ventilator
P2864	EMB/Std Com/3D-B TEMPs	Guide for a Software Change Control System for Three-Dimensional (3D) Bioprinting of Tissue-Engineered Medical Products (TEMPs)
P2673	EMB/Std Com/IA Medical Imaging	Standard for Patient Digital Biomedical Data Files with 3D Topological Mapping of Macroanatomy and Microanatomy for Use in Big Data and Augmented Intelligence Systems
P2727	EMB/Std Com/MDMF	Standard for General Vocabulary for Conformity Assessment of Medical Devices with Measuring Function
P2727.1	EMB/Std Com/MDMF-2727.1 WG	Standard for Conformity Assessment Testing of Cardiac Defibrillators for Legal Metrology Purposes
P2792	EMB/Std Com/NEUROSTIM	Therapeutic Electrical Stimulation Waveforms
P2650	EMB/Std Com/PSAS	Standard For Enabling Mobile Device Platforms to be Used as Pre-Screening Audiometric Systems
P3007.2	IAS/ICPS/SDC/P3007.2WG	Recommended Practice for the Maintenance of Industrial and Commercial Power Systems
P21451-002	IES/IES/LPST	Recommended Practice for Low-Power Smart Transducers Applications

P1588f	IM/ST/PNCS	Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems Amendment: Enhancements for latency and/or asymmetry calibration
P21451-1-5	IM/ST/SNMPI	Standard for a Smart Transducer Interface for Sensors, Actuators, and Devices – Simple Network Management Protocol (SNMP) for Networked Device Communication
P1451.5	IM/ST/WS	Standard for a Smart Transducer Interface for Sensors and Actuator – Wireless Communication Protocols and Transducer Electronic Data Sheet (TEDS) Formats
P807	PE/EDPG/HPS - WG 807	Recommended Practice for Unique Identification in Hydroelectric Facilities
P666	PE/EDPG/SDOC-WG666	Design Guide for Electric Power Service Systems for Generating Stations
P2800.1	PE/EDPG/WSPPID/WSPI/WSPI-TV	Guide for Test and Verification Procedures for Inverter-Based Resources Interconnecting with Associated Transmission Electric Power Systems
P97	PE/EM/P97_WG	Diagnostic Test Methods for testing the Insulation of AC Electric Machinery Using Direct Voltage
P2421	PE/NPEC/WG_5.2	Guide for Designing and Developing Computer-Based Displays for Monitoring and Control of Nuclear Facilities
P510	PE/PSIM/IEEE 510	Guide for Electrical Safety in High-Voltage Testing
PC37.101	PE/PSRCC/J16 - Revision to C37.101	Guide for Generator Ground Protection

PC62.38	PE/SPDLV/LV3.6.2	Test Methods and Preferred Values for Hybrid Integrated Circuit Components Containing Gas Discharge Tube and Metal Oxide Varistor Technologies
P1267	PE/SUB/WGD8	Guide for Development of Specifications for Turnkey Substation Projects
P2656	PE/SUB/WGI10	Guide for Functional Specification of Voltage-Sourced Converter for HVDC Stations
P1240	PE/SUB/WGI7	Guide for the Evaluation of the Reliability of HVDC Converter Stations
P1243	PE/T&D/Lightning-1410_WG	Guide for Improving the Lightning Performance of Transmission Lines
PC135.62	PE/T&D/TPC-15.11.08-10	Standard for Zinc-Coated Forged Anchor Shackles
P2520.4.1	SEN/SC-SC/TMODS/CM/2520.4.1	Standard for Performance of Machine Olfaction Devices and Systems for Chemical Manufacture
P2520.3.1	SEN/SC-SC/TMODS/IOM/2520.3.1	Standard for Machine Olfaction Devices and Systems Used for General Indoor Odor Monitoring
P2520.2.2	SEN/SC-SC/TMODS/LO/2520.2.2	Standard for Landfill Odor Monitoring Devices and Systems
P2520.2.1	SEN/SC-SC/TMODS/OOM/2520.2.1	Standard for Machine Olfaction Devices and Systems Used for General Outdoor Odor Monitoring
P2030.1.2	VT/ITS/EVSEWG	Standard Technical Specifications for Ultra-High-Power Electric Vehicle Chargers

Standards Committee Reassignment

Request to move the following standards and PARs from IEEE Computer Society/Standards Activities Board Standards Committee (C/SABSC) to IEEE Computer Society/Digital Content Technology Standards Committee (C/DCTSC)

Standards

2888.1-2023
2888.2-2023
2888.4-2023
2888.5-2024
3079-2020
3079.3-2023
3333.1.1-2024
3333.1.2-2024
3333.1.3-2022
3333.1.4-2022
3333.2.1-2015

PARs

P2888.1a
P2888.2a
P2888.3
P2888.5a
P2888.6
P2888.7
P3079.1
P3079.2
P3079.2.1
P3079.2.2
P3079.3.1
P3079.3.2
P3079.4
P3422

Withdrawal Requests

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

P1913

YANG Model for Software-Defined Quantum Communication

Recommendation: Approve PAR withdrawal.

IEEE Computer Society/Standards Activities Board Standards Committee

P2418.3

Standard for the Framework of Distributed Ledger Technology (DLT) Use in
Agriculture

Recommendation: Approve PAR withdrawal.

IEEE Computer Society/Test Technology

P1450.6

Standard Test Interface Language (STIL) for Digital Test Vector Data-Core Test Language (CTL)

Recommendation: Approve PAR withdrawal.

P1687.1

Standard for the Application of Interfaces and Controllers to Access 1687 IJTAG Networks Embedded within Semiconductor Devices

Recommendation: Approve PAR withdrawal.

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

PC62.55

Guide for Surge Protection of DC Power Feeds to Remote Radio Heads

Recommendation: Approve PAR withdrawal.

Modified PARs

IEEE Computer Society/Smart Manufacturing Standards Committee

P2975.1

Standard for Industrial Artificial Intelligence Data Attributes

Recommendation: Approve modified PAR.

IEEE Power and Energy Society/Substations Committee

P2825

Guide for Static Synchronous Series Compensator General Requirements and Test Methods

Recommendation: Approve modified PAR.

IEEE SA Board of Governors/Entity Collaborative Activities Governance Board

P3308

Moving Picture, Audio and Data Coding by Artificial Intelligence – Object and Scene Description v1.0

Recommendation: Approve modified PAR.

Extension Requests

IEEE Aerospace and Electronic Systems Society/Gyro Accelerometer Panel

P1431

Standard for Specifying and Testing Coriolis Vibratory Gyros

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

IEEE Antennas and Propagation Society/Antennas and Propagation Standards Committee

P1720

Recommended Practice for Near Field Antenna Measurements

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

IEEE Communications Society/Green ICT Standards Committee

P1925.1

Standard for Energy Efficient Dynamic Line Rate Transmission System

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

P1926.1

Standard for a Functional Architecture of Distributed Energy Efficient Big Data Processing

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

P1927.1

Standard for Services Provided by the Energy-Efficient Orchestration and Management of Virtualized Distributed Data Centers Interconnected by a Virtualized Network

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

P1928.1

Standard for a Mechanism for Energy Efficient Virtual Machine Placement

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

P1929.1

An Architectural Framework for Energy Efficient Content Distribution

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

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

P1916.1

Standard for Software Defined Networking and Network Function Virtualization Performance

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

P1950.1

Standard for Communications Architectural Functional Framework for Smart Cities

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

P2784

Guide for the Technology and Process Framework for Planning a Smart City

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

IEEE Computer Society/Artificial Intelligence Standards Committee

P2961

Guide for an Architectural Framework and Application for Collaborative Edge Computing

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

IEEE Computer Society/Blockchain and Distributed Ledgers

P3220.01

Standard for Consensus Framework for Blockchain System

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

P3222.01

Standard for Blockchain-Based Digital Identity System Framework

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

P3223.01

Standard for Blockchain-Based Electronic Evidence Interface Specification

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

P3230.03

Standard for Blockchain Service Capability Evaluation

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

P3232.01

Standard for Blockchain System Governance Specification

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

P3270.01

Standard for Blockchain-Based Digital Asset Exchange Model

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

P3270.02

Guide for the Application of Non-Fungible Token (NFT) Based Digital Asset

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

IEEE Computer Society/Design Automation

P2416

Standard for Power Modeling to Enable System-Level Analysis

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

IEEE Computer Society/Learning Technology

P2881

Standard for Learning Metadata Terms

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

IEEE Computer Society/Online Gaming Standards Committee

P2946

Guide for Electronic Sports (Esports) Integrity

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

P2947

Guide for Broadcasting Electronic Sports (Esports) Events

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

**IEEE Computer Society/Simulation Interoperability Stds
Organization/Stds Activity Committee**

P1516

Standard for Modeling and Simulation (M&S) High Level Architecture (HLA) –
Framework and Rules

Recommendation: Conditional approval of request for an extension until
December 2025, subject to the SASB not approving the December 2024 RevCom
submittal of P1516.

P1516.1

Standard for Modeling and Simulation (M&S) High Level Architecture (HLA) – Federate Interface Specification

Recommendation: Conditional approval of request for an extension until December 2025, subject to the SASB not approving the December 2024 RevCom submittal of P1516.1.

P1516.2

Standard for Modeling and Simulation (M&S) High Level Architecture (HLA) – Object Model Template (OMT) Specification

Recommendation: Conditional approval of request for an extension until December 2025, subject to the SASB not approving the December 2024 RevCom submittal of P1516.2.

IEEE Computer Society/Software & Systems Engineering Standards Committee

P7003

Algorithmic Bias Considerations

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

IEEE Computer Society/Standards Activities Board Standards Committee

P2957

Standard for a Reference Architecture for Big Data Governance and Metadata Management

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

IEEE Electromagnetic Compatibility Society/Standards Development Committee

P1128

Recommended Practice for Radio-Frequency (RF) Absorber Evaluation in the Range of 30 MHz to 40 GHz

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

IEEE Engineering in Medicine and Biology Society/Standards Committee

P1708

Standard for Wearable Cuffless Blood Pressure Measuring Devices

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

P2731

Standard for a Unified Terminology for Brain-Computer Interfaces

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

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

P3006.1

Recommended Practice for Reliability Planning and Design of Industrial and Commercial Power Systems

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

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 31 December 2025.

IEEE Power and Energy Society/Electric Machinery

P62.2

Guide for Diagnostic Field Testing of Electric Power Apparatus – Electrical 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 2025.

P1719

Guide for Evaluating Stator Cores of AC Electric Machines Rated 1 MVA and Higher

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

IEEE Power and Energy Society/Energy Development & Power Generation

P63197

Standard Terms and Definitions for Turbine Governing Systems

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

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

P1187

Recommended Practice for Installation Design and Installation of Valve-Regulated Lead-Acid Batteries for Stationary Applications

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

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 31 December 2025.

P2962

Recommended Practice for the Installation, Operation, Maintenance, Testing, and Replacement of Li-ion Batteries in Stationary Applications

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 2025.

P1142

Guide for the Selection, Testing, Application, and Installation of 300 V to 500 kV Cables having Radial-Moisture Barriers and/or Longitudinal Water Blocking

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

P1186

Recommended Practice for Applicability of Methods for the Evaluation of Low-Voltage and Medium-Voltage Installed Cable Systems in Nuclear Facilities

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

P1300

Guide for Cable Connections for Gas-Insulated Substations

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

P1511

Guide for Investigating and Analyzing Power Cable, Joint, and Termination Failures on Systems Rated 2.5 kV through 46 kV

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

P1511.1

Guide for Investigating and Analyzing Shielded Power Cable Failures on Systems Rated 2.5 kV through 46 kV

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

IEEE Power and Energy Society/Nuclear Power Engineering Committee

P317

Standard for Electric Penetration Assemblies in Containment Structures for Nuclear Power Generating Stations

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

P833

Recommended Practice for the Protection of Electric Equipment in Nuclear Power Generating Stations from Water Hazards

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

IEEE Power and Energy Society/Power System Communications and Cybersecurity

P487a

Standard for the Electrical Protection of Communications Facilities Serving Electric Supply Locations – General Considerations

Amendment: New Annex J – Guidance for Determining the Ground Potential Rise and Induced Voltages for the Design of Communications Installations at Electric Supply Locations

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

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 2025.

P2658

Guide for Cybersecurity Testing in Electric Power Systems

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

IEEE Power and Energy Society/Power System Relaying and Control

P2030.12

Guide for the Design of Microgrid Protection Systems

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

PC37.1.2

Guide for Databases Used in Utility Automation Systems

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

PC37.90

Standard for Relays, Relay Systems, and Control Devices Used for Protection and Control of Electric Power Apparatus – General Requirements and Tests

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

PC37.251

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

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

PC37.300

Guide for Centralized Protection and Control (CPC) Systems within a Substation

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

IEEE Power and Energy Society/Smart Buildings, Loads and Customer Systems

P2418.5

Guide for Blockchain in Power and Energy Systems

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

IEEE Power and Energy Society/Substations Committee

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 2025.

P525

Guide for the Design and Installation of Cable Systems in Substations

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

P979

Guide for Substation Fire Protection

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

P998

Guide for Direct Lightning Stroke Shielding of Substations

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

P1534

Recommended Practice for Specifying Thyristor-Controlled Series Capacitors

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

P1818

Recommended Practice for the Design of Low-Voltage Auxiliary Systems for Electric Power Substations

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

IEEE Power and Energy Society/Surge Protective Devices Committee

P2770

60099-11 Surge Arresters – Part 11: Metal-Oxide Line Surge Arresters to Protect Power Line Insulation

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

PC62.21

Guide for the Application of Surge Voltage Protective Equipment on AC Rotating Machinery 1000 Volts and Greater

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

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

PC62.220

Guide for the Application of Surge Protective Devices for the Smart Grid

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

IEEE Power and Energy Society/Switchgear

PC37.10

Recommended Practice for Investigation, Analysis, and Reporting of Failures of AC High-Voltage Circuit Breakers and Circuit Switchers with Rated Maximum Voltage above 1000 V

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

PC37.41

Standard for Design Tests and Specifications for High-Voltage (> 1000 V) Fuses and Accessories

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

PC37.100.1

Standard of Common Requirements for High Voltage Power Switchgear Rated above 1000 V

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

IEEE Power and Energy Society/Transformers

PC57.13.9

Standard for Power-Line Carrier Coupling Capacitors and Coupling Capacitor Voltage Transformers

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

PC57.16

Standard for Requirements, Terminology, and Test Code for Dry-Type Air-Core Series-Connected Reactors

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

PC57.93a

IEEE Approved Draft Guide for Installation and Maintenance of Liquid-Immersed Power Transformers

Amendment: Cold Start of Power Transformers filled with Natural Ester Fluids

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

PC57.98

Guide for Transformer Impulse Tests

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

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 2025.

PC57.166

Guide for Acceptance and Maintenance of Insulating Liquids in Transformers and Related Equipment

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

IEEE Power and Energy Society/Transmission and Distribution

P18

Standard for Shunt Power Capacitors

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

P751

Guide for Wood Structures Used for Overhead Electric Transmission Lines

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

P824

Standard for Series Capacitor Banks in Power Systems

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

P1409

Guide for Technology Methods for Power Quality Improvement in Electric Power Systems

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

P1410

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

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

P2856

Guide for the Definition of Resiliency and Measuring the Resiliency of the Electrical Distribution System

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

P2974

Guide for System Commissioning of Medium and Low (750 V to ± 50 kV) Voltage Direct Current Distribution Network

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

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 2025.

P2940

Standard for Measuring Robot Agility

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

IEEE SA Board of Governors/Entity Collaborative Activities Governance Board

P2958

Standard for a Decentralized Identity and Access Management Framework for Internet of Things

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

P2973

Guide for Field Calibration System for Current Carrying Capacity of Overhead Transmission Lines

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

IEEE SA Board of Governors/International Committee on Electromagnetic Safety

P62704-1

Standard for Determining the Peak Spatial Average Specific Absorption Rate (SAR) in the Human Body from Wireless Communications Devices, 30 MHz to 6 GHz. Part 1: General Requirements for Using the Finite Difference Time Domain (FDTD) Method for SAR Calculations

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

P62704-2a

Standard for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body from Wireless Communications Devices, 30 MHz to 6 GHz – Part 2: Specific Requirements for Finite Difference Time Domain (FDTD) Modelling of Exposure from Vehicle Mounted Antennas
Amendment 1

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

P62704-3

Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body from Wireless Communications Devices, 30 MHz – 6 GHz Part 3: Specific Requirements for Using the Finite Difference Time Domain (FDTD) Method for SAR Calculations of Mobile Phones

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

P63184

Assessment Methods of the Human Exposure to Electric and Magnetic Fields from Wireless Power Transfer Systems – Models, Instrumentation, Measurement and Numerical Methods and Procedures (Frequency range of 1 kHz to 30 MHz)

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

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 31 December 2026.

IEEE SA Board of Governors/Strategic and Emerging Standards Committee

P1

Recommended Practice – General Principles for Temperature Limits in the Rating of Electrical Equipment and for the Evaluation of Electrical Insulation
Recommendation: Approve request for an extension until 31 December 2026.

New PARs

IEEE Communications Society/Edge, Fog, Cloud Communications with IOT and Big Data Standards Committee

P1961

Recommended Practice for Framework of Integrated Energy Data Collection and Perception
Recommendation: Approve new PAR until December 2028.

IEEE Communications Society/Power Line Communications

P1901.3.1

Standard Test Procedures for IEEE Std 1901.3 Standard for Medium Frequency (less than 12 MHz) Power Line Communications with a Hybrid Power Line Communications/Radio Frequency Physical Layer
Recommendation: Approve new PAR until December 2028.

P1957

Standard for a Satellite-based Emergency Communication System Supporting Electric Power Generation and the Power Grid
Recommendation: Conditional approval of a new PAR until December 2028, subject to a Working Group Chair accepting the role within the myProject system. [Note: The condition has been met.]

IEEE Communications Society/Unmanned Aerial Vehicles Communications Standards Committee

P1936.15

Standard for a Transmission Protocol for Equipment Status and Control Data for Remote Sensing Networks that Use Unmanned Aerial Systems

Recommendation: Approve new PAR until December 2028.

P1936.18

Standard for Unmanned Aerial System-Based Multi-Sensor Data Fusion for Power Line Anomaly Detection Applications

Recommendation: Approve new PAR until December 2028.

IEEE Computer Society/Artificial Intelligence Standards Committee

P3507

Standard for Multimodal Large Language Models Platform for Automotive Services

Recommendation: Approve new PAR until December 2028.

P3511

Standard for Risk Management Guidelines for Generative Artificial Intelligence Systems

Recommendation: Approve new PAR until December 2028.

P3540

Standard for Technical Requirements of Artificial Intelligence Personal Computer

Recommendation: Approve new PAR until December 2028.

P3549

Standard for Inference Optimization Systems of Large Language Models

Recommendation: Approve new PAR until December 2028.

IEEE Computer Society/Blockchain and Distributed Ledgers

P3240.06

Standard for Blockchain-Based Hourly Time-matching Green Power Trading

Recommendation: Approve new PAR until December 2028.

IEEE Computer Society/Design Automation

P3537

Standard for 3Dblox – Chiplet Connectivity and Physical Properties Description Language

Recommendation: Approve new PAR until December 2028.

IEEE Computer Society/LAN/MAN Standards Committee

P802.11bq

IEEE 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 Integrated Millimeter Wave Wireless LAN

Recommendation: Approve new PAR until December 2028.

IEEE Computer Society/Software & Systems Engineering Standards Committee

P2675.1

Standard for System Reliability Engineering – Building Automation to Support Continuous Operations

Recommendation: Approve new PAR until December 2028.

IEEE Computer Society/Standards Activities Board Standards Committee

P3552

Guide for Enterprise Data Assets Assessment Model

Recommendation: Approve new PAR until December 2028.

IEEE Consumer Technology Society/Digital Finance and Economy Standards Committee

P3831

Standard for Reference Architecture and Technical Requirements for Electricity Data Asset Management Platform

Recommendation: Approve new PAR until December 2028.

P3832

Standard for General Requirements for Distributed Banking Financial Core Business Systems

Recommendation: Approve new PAR until December 2028.

IEEE Consumer Technology Society/Emerging Technology Standards Committee

P2089.3

Standard for Online Parental Consent

Recommendation: Approve new PAR until December 2028.

P3539

Standard for General Requirements for Refueling Robot Systems

Recommendation: Approve new PAR until December 2028.

IEEE Engineering in Medicine and Biology Society/Standards Committee

P3553

Standard for Unique Electronic Health Record Identification System

Recommendation: Approve new PAR until December 2028.

IEEE Geoscience and Remote Sensing Society/Standards Committee

P4007

Standard for Uplift Monitoring of Public Structures in Permafrost Regions Using Synthetic Aperture Radar

Recommendation: Approve new PAR until December 2028.

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

P3548

Recommended Practice for the Structural Design of Distribution Grid in Photovoltaic-Energy Storage – DC-Flexible Integrated Buildings

Recommendation: Approve new PAR until December 2028.

IEEE Industry Applications Society/Industrial Power Conversion Systems Department

P3542

Standard for Efficiency Classification of 15 kW – 500 kW Fully Integrated Motor Drives when Fed from Three Phase Supplies up to 500 VAC

Recommendation: Approve new PAR until December 2028.

P3543

Standard for Power Quality Requirements for 15 kW – 500 kW Fully Integrated Motor Drives when Fed from Three Phase Supplies up to 500 VAC

Recommendation: Approve new PAR until December 2028.

P3544

Standard for Data Exchange Requirements for Power Factor Correction in Distributed Variable Frequency Motors Drives

Recommendation: Approve new PAR until December 2028.

IEEE Intelligent Transportation Systems Society/Standards Committee

P3538

Guide for Metadata on Road Accidents in Low and Middle Income Countries and Regions

Recommendation: Approve new PAR until December 2028.

IEEE Power and Energy Society/Power System Communications and Cybersecurity

P1591.1-2023/Cor 1

IEEE Standard for Testing and Performance of Hardware for Optical Ground Wire (OPGW) – Corrigendum 1

Recommendation: Approve new PAR until December 2028.

IEEE Power and Energy Society/Substations Committee

P3546

Guide for Arc Flash Safety Program for Substations and Underground and Overhead Lines

Recommendation: Approve new PAR until December 2028.

IEEE Vehicular Technology Society/High Speed Train and Maglev Standards Committee

P3545

Guide for Digital Twin Modeling and Analysis of 27.5 kV High Voltage Systems of High-Speed Trains

Recommendation: Approve new PAR until December 2028.

P3547

Recommended Practice for Using Commercial-Off-The-Shelf Electronic System and Software for Rail Safety-Related Application

Recommendation: Approve new PAR until December 2028.

PARs for the Revision of Standards

IEEE Computer Society/Design Automation

P1801

Standard for Design and Verification of Low Power, Energy Aware Electronic Systems

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

IEEE Computer Society/Software & Systems Engineering Standards Committee

P15289

Systems and Software Engineering – Content of Life-Cycle Information Items (Documentation)

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

P24765

Systems and Software Engineering – Vocabulary

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

P26512

Systems and Software Engineering – Requirements for Acquirers and Suppliers of Information for Users

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

IEEE Power and Energy Society/Energy Development & Power Generation

P125

Recommended Practice for the Specification of Hydraulic Turbine Governing Systems

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

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

PC62.36

Standard Test Methods for Surge Protectors and Protective Circuits Used in Information and Communications Technology Circuits and Smart Grid Data Circuits

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

PC62.41.1

Guide for the Surge Environment in Low-Voltage (1000 V and less) AC Power Circuits

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

PC62.45

Recommended Practice for Surge Testing of Equipment Connected to Low-Voltage (1000 V and less) AC Power Circuits

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

IEEE Power and Energy Society/Switchgear

P316

Standard Requirements for Direct Current Instrument Shunts

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

PC37.09

Standard for Test Procedures for AC High-Voltage Circuit Breakers with Rated Maximum Voltage Above 1000 V

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

IEEE Power and Energy Society/Transmission and Distribution

P951

Guide for the Assembly and Erection of Metal Transmission Structures

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

IEEE SA Board of Governors/Entity Collaborative Activities Governance Board

P2857

Standard for Wireless Smart Utility Network Field Area Network

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

IEEE Vehicular Technology Society/Traction Power Systems Standards Committee

P1653.6

Recommended Practice for Grounding of DC Equipment Enclosures in Traction Power Distribution Facilities

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

3.2.4 RevCom Recommendations

New

IEEE Computer Society/Artificial Intelligence Standards Committee

P3152/Draft 4

IEEE Draft Standard for Transparent Human and Machine Agency Identification

Recommendation: APPROVE

IEEE Computer Society/Blockchain and Distributed Ledgers

P3241.01/Draft 5.2

IEEE Draft Standard for Using Blockchain in Low Carbon Zones Evaluation

Recommendation: APPROVE

IEEE Computer Society/Cybersecurity and Privacy Standards Committee

P3117/Draft 2

IEEE Standard for Interworking Framework for Privacy-Preserving Computation

Recommendation: APPROVE

IEEE Computer Society/LAN/MAN Standards Committee

P802.15.7a/Draft 8

IEEE Draft Standard for Local and Metropolitan Area Networks – Part 15.7: Short-Range Optical Wireless Communications

Amendment 1: Higher Speed, Longer Range Optical Camera Communication (OCC)

Recommendation: APPROVE

IEEE Computer Society/Software & Systems Engineering Standards Committee

P7003/Draft 1.5

IEEE Draft Standard for Algorithmic Bias Considerations

Recommendation: APPROVE

IEEE Consumer Technology Society/Emerging Technology Standards Committee

P2811/Draft 9

IEEE Draft Standard for Architectural Framework and Technical Requirements for Smart Lock

Recommendation: APPROVE

IEEE Consumer Technology Society/Metaverse Standards Committee

P3069/Draft 1

IEEE Draft Recommended Practice for Consumer AR/VR Handheld-Controller Location Technology Based on Active Infrared Optics

Recommendation: APPROVE

IEEE Engineering in Medicine and Biology Society/Standards Committee

P1847.1/Draft 1

IEEE Draft Recommended Practice for Location Accuracy User Acceptance Test for Location Services for Healthcare

Recommendation: Conditional approval based on SASB approval of P1847.

IEEE Industrial Electronics Society/Industrial Electronics Society Standards Committee

P2805.1/Draft 0.7

IEEE Draft Standard for Self-Management Protocols for Edge Computing Node

Recommendation: APPROVE

IEEE Power and Energy Society/Power System Relaying and Control

PC37.249/Draft 8.25

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

Recommendation: APPROVE

PC37.300/Draft 6.51

IEEE Draft Guide for Centralized Protection and Control (CPC) Systems within a Substation

Recommendation: APPROVE

IEEE Power and Energy Society/Transmission and Distribution

P2797/Draft 5

IEEE Draft Guide for Forecast and Early Warning of Icing on Overhead Transmission Lines in Micro-Topographic Areas

Recommendation: APPROVE

IEEE Robotics and Automation Society/Standing Committee for Standards

P3177/Draft 3.2

IEEE Draft Standard for a Modular Framework for a Robotically Assisted Surgical System

Recommendation: APPROVE

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

P2815/Draft 6

IEEE Draft Guide for the Technical Specification of Smart Distribution Transformer Terminal

Recommendation: APPROVE

IEEE Vehicular Technology Society/Intelligent Transportation Systems

P2020/Draft 6

IEEE Draft Standard for Automotive System Image Quality

Recommendation: APPROVE

P3321/Draft 2

IEEE Draft Recommended Practice for the Application of Assumptions on Reasonably Foreseeable Behavior of Other Road Users in Safety Related Models

Recommendation: APPROV

Revision

IEEE Communications Society/Dynamic Spectrum Access Networks Standards Committee

P1900.5.2/Draft 2.1

IEEE Draft Standard for Modeling Spectrum Consumption

Recommendation: APPROVE

IEEE Computer Society/LAN/MAN Standards Committee

P802/Draft 2.2

IEEE Draft Standard for Local and Metropolitan Area Networks: Overview and Architecture

Recommendation: APPROVE

P802.3.1/Draft 3.2

IEEE Draft Standard for Ethernet Structure of Management Information Version 2 (SMIv2) Data Model Definitions

Recommendation: APPROVE

IEEE Computer Society/Simulation Interoperability Stds Organization/Stds Activity Committee

P1516/Draft 2

IEEE Draft Standard for Modeling and Simulation (M&S) High Level Architecture (HLA) – Framework and Rules

Recommendation: Conditionally approval with editorial changes to convert ‘must’ to ‘shall’, with the condition to follow normal IEEE word usage.

P1516.1/Draft 2

IEEE Draft Standard for Modeling and Simulation (M&S) High Level Architecture (HLA) – Federate Interface Specification

Recommendation: Conditionally approval with editorial changes to convert ‘must’ to ‘shall’ and convert ‘ensure’ to ‘help ensure’, with the condition to follow normal IEEE word usage.

P1516.2/Draft 2

IEEE Draft Standard for Modeling and Simulation (M&S) High Level Architecture (HLA) – Object Model Template (OMT) Specification

Recommendation: Conditionally approval with editorial changes to convert ‘must’ to ‘shall’ and convert ‘ensure’ to ‘help ensure’, with the condition to follow normal IEEE word usage.

IEEE Computer Society/Software & Systems Engineering Standards Committee

P29119-5/Draft 4

ISO/IEC/IEEE Draft International Standard for Software and Systems Engineering – Software Testing – Part 5: Keyword-Driven Testing

Recommendation: APPROVE

IEEE Engineering in Medicine and Biology Society/Standards Committee

P1847/Draft 1

IEEE Draft Recommended Practice for Common Framework of Location Services for Healthcare

Recommendation: APPROVE

IEEE Power and Energy Society/Substations Committee

PC37.122.3/Draft 2.8

IEEE Draft Guide for Sulphur Hexafluoride (SF₆) Gas Handling for High-Voltage (over 1000 Vac) Equipment

Recommendation: APPROVE

IEEE Power and Energy Society/Switchgear

PC37.20.10/Draft 4

IEEE Draft Standard Definitions for AC (52 kV and below) and DC (3.2 kV and below) Switchgear Assemblies

Recommendation: APPROVE

PC37.41/Draft 7

IEEE Draft Standard for Design Tests and Specifications for High-Voltage (> 1000 V) Fuses and Accessories

Recommendation: APPROVE

PC37.62/Draft 3

IEEE Draft Standard for Pad-Mounted Dry Vault, Submersible, and Overhead Fault Interrupters for Alternating Current Systems up to and including 38 kV

Recommendation: APPROVE

IEEE Power and Energy Society/Transformers

PC57.12.44/Draft 13

IEEE Draft Standard Requirements for Secondary Network Protectors

Recommendation: APPROVE

PC57.12.80/Draft 1.6

IEEE Draft Standard for Standard Terminology for Power and Distribution Transformers

Recommendation: APPROVE

PC57.143/Draft 1.7

IEEE Draft Guide for Application of Monitoring Equipment to Liquid-Immersed Transformers and Components

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](#))

Robby Robson, PatCom Chair, reported.

4.4 Procedures Committee ([ProCom](#))

Ted Burse, ProCom Chair, reported.

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

Keith Waters, RevCom Chair, reported.

5 Old Business

None.

6 Informational Reports

6.1 CAG Report

Don Wright, SASB Liaison to the CAG, gave a brief verbal report.

The CAG met 05-06 December.

There were 449 IEEE SA entity members as of November 2024.

The CAG will meet 07-11 April 2025 in Kuala Lumpur, Malaysia and 14-18 July 2025 in Munich, Germany.

6.2 IEEE SA President's [Report](#)

IEEE SA President Matthews was unable to attend the meeting but had provided a report.

6.3 IEEE SA Managing Director's [Report](#)

Alpesh Shah, IEEE SA Managing Director, reported.

Matthew Ceglia reported on standards development topics.

6.4 SASB Chair's [Report](#)

Chair Law reported.

At the conclusion of the SASB Chair's Report, IEEE SA Managing Director Alpesh Shah presented David Law with a small gift as a show of appreciation for his leadership and guidance during his term as the IEEE SA Standards Board Chair.

6.5 TAB CoS [Update](#)

Edward Au, TAB CoS Chair, reported.

6.6 OSCom [Update](#)

Chuck Adams, OSCom Chair, reported.

7 New Business

None.

8 [Next Meeting](#)

The next SASB meeting will be scheduled for 27 March 2025 and will be held in Seoul, Republic of Korea.

9 SASB Resolutions

None.

The SASB entered Executive Session at 11:38 a.m. ET (UTC-5).

10 Executive Session Items

10.1 P3302

10.2 Report from Ad Hoc RE: Standards Development Activities

The SASB concluded Executive Session at 12:33 p.m. ET (UTC-5).

Report Out from Executive Session:

- The SASB received a report from the Ad Hoc RE: Standards Development Activities. As the work of the Ad Hoc is completed, the Ad Hoc is disbanded.

11 Adjournment

There being no further business, the meeting was adjourned at 12:34 p.m. ET (UTC-5).