IEEE SA STANDARDS ASSOCIATION

IEEE-SA STANDARDS BOARD (SASB) MEETING MINUTES
07 November 2019
IEEE Operations Center, Piscataway, New Jersey, USA
9:00 a.m. – 5:00 p.m.

Attendees

Chair:
Gary Hoffman

Vice Chair:
Ted Burse

Past Chair:
Jean-Philippe Faure

Secretary:
Konstantinos Karachalios

Members:
Stephen Dukes, TAB Rep.
Travis Griffith
Guido Hiertz
Christel Hunter
Thomas Koshy
John Kulick
David Law
Joseph Levy
Xiaohui Liu
Kevin Lu
Daleep Mohla
Andrew Myles
Annette Reilly
Dorothy Stanley
Philip Winston
Howard Wolfman
Feng Wu
Jingyi Zhou

Members Absent:
Masayuki Ariyoshi

Howard Li
Sha Wei
Phil Wennblom

Joe Koepfinger, Member Emeritus

IEEE Staff:
Julie Alessi
Tina Alston
Melissa Aranzamendez
Christy Bahn
Ian Barbour
Adrien Barmaksiz
Christina Bellottie
Christina Boyce
Kim Breitfelder
Justin Caso
Matthew Ceglia
Ravindra Desai
Karen Evangelista
Josh Gay
Jonathan Goldberg
Jodi Haasz
Mary Ellen Hanntz
Yvette Ho Sang
Karen Kenney
Soo Kim
Michael Kipness
Vanessa Lalitte
Juanita Lewis
Greg Marchini
Karen McCabe
Patrick McCarren
Ashley Moran
Luigi Napoli
Mary Lynne Nielsen
Nikoi Nikoi
Lauren Rava
Dave Ringle, Recording Secretary
Pat Roder
Anasthasie Sainvilus
Gil Santiago

Rudi Schubert
Sam Sciacca
Alpesh Shah
Tanya Steinhauser
Tom Thompson
Lisa Weisser
Jonathan Wiggins
Malia Zaman
Meng Zhao

IEEE Outside Legal Counsel:
Claire Topp – Dorsey & Whitney LLP

IEEE Government Engagement Program on Standards (GEPS) Representatives:
Ramy Ahmed Fathy – Egypt, National Telecom Regulatory Authority (NTRA)
Simon Hicks – United Kingdom, Department for Digital, Culture, Media & Sport (DCMS)
Thomas Koshy – United States, Nuclear Regulatory Commission (NRC)

Guests:
Chuck Adams
Karen Bartleson
Alan Berkema
Cindy Bian
Evelyn Chen
Doug Edwards
Mai Elhafez
Robert Fish
Christine Eve Gadzikwa
Scott Gilfillan
Rich Hulett
Alfiya Kazi
Marco Lo Bue
Jim Matthews
Mogomotsi Motaung
Gil Ohana
Kishik Park
Glenn Parsons
Robby Robson
Jon Rosdahl
Yoshito Sakurai

Akif Sesli
Ryuji Suzuki
Donald Swing
Lei Wang
Constance Weise
Don Wright
Isamu Yamada
Yu Yuan
George Zimmerman

1 Call to Order

Chair Hoffman called the meeting to order at 9:00 a.m.

Chair Hoffman noted the IEEE Government Engagement Program on Standards (GEPS) Representatives and the IEEE-SA Standards Exchange Fellowship program participants.

2 Introductions

There was a round of introduction by all present.

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 05 September 2019 SASB Meeting Minutes
3.2.2 AudCom Recommendations

Standards Committee P&Ps

Accepted (*standards work authorized*):

- CES/SDSC Consumer Electronics Society/Smart Devices Standards Committee
- CRFID/SC Council on RFID/Standards Committee
- EDS/MEMS Electron Devices Society/Microelectromechanical Systems (MEMS) Standards Committee
- VT/AVSC Vehicular Technology Society/Automated Vehicles Standards Committee

Conditionally Accepted (*standards work authorized*):

- PE/IC Power and Energy Society/Insulated Conductors
  [Contingent upon minor editorial corrections, to be completed before SASB meeting]
  NB: This condition has been met.
- VT/ITS Vehicular Technology Society/Intelligent Transportation Systems
  [Contingent upon minor editorial corrections, to be completed before SASB meeting]
  NB: This condition has been met.

New Standards Committee Recognition with Accepted P&Ps

The SASB recognized the Consumer Electronics Society/Smart Devices Standards Committee, to be abbreviated as CES/SDSC, as an official Standards Committee, in accordance with IEEE SASB Bylaws 5.2.2.

The SASB recognized the Vehicular Technology Society/Automated Vehicles Standards Committee, to be abbreviated as VT/AVSC, as an official Standards Committee, in accordance with IEEE SASB Bylaws 5.2.2.

3.2.3 ICCom Recommendations

Revised/Renewed Industry Connections Activities:

IC15-004-03 3D Body Processing
ICAID: https://ieee-sa.imeetcentral.com/p/eAAAAAAAQekNAAAAAAecWBs
Recommendation: APPROVE

IC17-015-02 Optical Networks 2020
ICAID: https://ieee-sa.imeetcentral.com/p/eAAAAAAAQekQAAAAAFnhhJ8
Recommendation: APPROVE

IC17-016-02 IC Industry Consortium on Learning Engineering (ICICLE)
ICAID: https://ieee-sa.imeetcentral.com/p/eAAAAAAAQekTAAAAABrTfaQ
Recommendation: APPROVE

IC17-017-02 Blockchain Asset Exchange
ICAID: https://ieee-sa.imeetcentral.com/p/eAAAAAAAQe1MAAAAACHvl5U
Recommendation: APPROVE

IC17-018-02 IEEE VR/AR Advisory Board
ICAID: https://ieee-sa.imeetcentral.com/p/eAAAAAAAQe1QAAAAAFzNR9A
Recommendation: APPROVE

Terminated Industry Connections Activities:

IC19-008 Arc Flash Calculator
Recommendation: APPROVE

3.2.4 NesCom Recommendations

Withdrawal Requests:

IEEE Computer Society/Cloud Computing Standards Committee

P2303
Standard for Adaptive Management of Cloud Computing Environments
Recommendation: Approve PAR withdrawal

IEEE Industry Applications Society/Industrial & Commercial Power Systems

P3005.7
Recommended Practice for the Application of Metering for Energy Management of Industrial and Commercial Power Systems
Recommendation: Approve PAR withdrawal

IEEE Instrumentation and Measurement Society/TC4 – High Frequency Measurement

P287.1
Standard for Precision Coaxial Connectors at RF, Microwave and Millimeter-Wave Frequencies
Recommendation: Approve PAR withdrawal

IEEE-SASB Coordinating Committees/SCC39 – International Committee on Electromagnetic Safety

P62209-3
Human Exposure to Radio Frequency Fields from Hand-Held and Body-Mounted Wireless Communication Devices – Human Models, Instrumentation, and Procedures – Part 3: Vector Probe Systems (Frequency Range of 100 MHz to 6 GHz)

Recommendation: Approve PAR withdrawal

Modified PARs:

IEEE Computer Society/Standards Activities Board

P2418.3
Standard for the Framework of Distributed Ledger Technology (DLT) Use in Agriculture
Recommendation: Approve modified PAR

IEEE Communications Society/Green ICT Standards Committee

P1922.2
Standard for a Method to Calculate Near Real-Time Emissions of Information and Communication Technology Infrastructure
Recommendation: Approve modified PAR

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

P1679
Recommended Practice for the Characterization and Evaluation of Energy Storage Technologies in Stationary Applications
Recommendation: Approve modified PAR

IEEE-SASB Coordinating Committees/SCC39 – International Committee on Electromagnetic Safety

P62704-5
The Assessment of Power Density of Human Exposure to Radio Frequency Fields from Wireless Devices in Close Proximity to the Head and Body, Part 2: Computational Procedure (Frequency Range of 6 GHz to 300 GHz)
Recommendation: Approve modified PAR

IEEE Systems, Man, and Cybernetics Society/Standards Committee

P7010
Recommended Practice for Assessing the Impact of Autonomous and Intelligent Systems on Human Well-Being
Recommendation: Approve modified PAR

IEEE SA STANDARDS ASSOCIATION

Extension Requests:

IEEE Antennas and Propagation Society/Antennas

P1502
Recommended Practice for Radar Cross-Section Test Procedures
Recommendation: Approve request for an extension until December 2020

IEEE Computer Society/Cloud Computing Standards Committee

P2301
Guide for Cloud Portability and Interoperability Profiles (CPIP)
Recommendation: Approve request for an extension until December 2020

IEEE Computer Society/LAN/MAN Standards Committee

P802.11ay
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: Enhanced Throughput for Operation in License-Exempt Bands above 45 GHz
Recommendation: Approve request for an extension until December 2021

P802.11az
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 - Enhancements for Positioning
Recommendation: Approve request for an extension until December 2021

IEEE Computer Society/Microprocessor Standards Committee

P1722.1
Standard for Device Discovery, Connection Management, and Control Protocol for Time-Sensitive Networking Systems
Recommendation: Approve request for an extension until December 2021

IEEE SA STANDARDS ASSOCIATION

IEEE Computer Society/Standards Activities Board

P1857.8
Standard for 2nd Generation Audio Coding
Recommendation: Approve request for an extension until December 2020

P1857.9
Standard for Immersive Visual Content Coding
Recommendation: Approve request for an extension until December 2021

IEEE Consumer Electronics Society/Standards Committee

P360
Standard for Wearable Consumer Electronic Devices –Overview and Architecture
Recommendation: Approve request for an extension until December 2021

P2025.1
Standard for Consumer Drones: Taxonomy and Definitions
Recommendation: Defer request for an extension until the next NesCom meeting; contingent upon staff verifying the status of the draft and the project's schedule.
AI: Staff to obtain the timeline/action plan from the WG.

P2025.2
Standard for Consumer Drones: Privacy and Security
Recommendation: Defer request for an extension until the next NesCom meeting; contingent upon staff verifying the status of the draft and the project's schedule.
AI: Staff to obtain the timeline/action plan from the WG.

P3030
Standard for Consumer 3D Printing: Overview and Architecture
Recommendation: Defer request for an extension until the next NesCom meeting with a mentor (staff) being identified; contingent upon staff verifying the status of the draft and the project's schedule.
AI: Staff to obtain the timeline/action plan from the WG.

IEEE SA STANDARDS ASSOCIATION

IEEE Communications Society/Dynamic Spectrum Access Networks Standards Committee

P1900.5.1
Standard Policy Language for Dynamic Spectrum Access Systems
Recommendation: Approve request for an extension until December 2020

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

P1917.1
Standard for Software Defined Networking and Network Function Virtualization Reliability
Recommendation: Approve request for an extension until December 2021

IEEE Communications Society/Standards Development Board

P1916.1
Standard for Software Defined Networking and Network Function Virtualization Performance
Recommendation: Approve request for an extension until December 2021

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

P11073-10101b
Health Informatics – Point-of-Care Medical Device Communication – Part 10101: Nomenclature
Amendment 2: Additional definitions
Recommendation: Approve request for an extension until December 2021

P11073-10103a
Health Informatics – Point-of-Care Medical Device Communication – Part 10103: Nomenclature--Implantable Device, Cardiac
Amendment 1: Additional definitions
Recommendation: Approve request for an extension until December 2023

P11073-10404
Health Informatics – Personal Health Device Communication – Part 10404: Device Specialization – Pulse Oximeter
Recommendation: Approve request for an extension until December 2020

P11073-10407
Health Informatics – Personal Health Device Communication – Device Specialization – Blood Pressure Monitor
Recommendation: Approve request for an extension until December 2020

P11073-10408
Health Informatics – Personal Health Device Communication – Part 10408: Device Specialization – Thermometer
Recommendation: Approve request for an extension until December 2020

P11073-10415
Health Informatics – Personal Health Device Communication – Device Specialization – Weighing Scale
Recommendation: Approve request for an extension until December 2020

IEEE Engineering in Medicine and Biology Society/Standards Committee

P2650
Standard for Enabling Mobile Device Platforms to be Used as Pre-Screening Audiometric Systems
Recommendation: Approve request for an extension until December 2021

IEEE Electromagnetic Compatibility Society/Standards Development Committee

P370
Electrical Characterization of Printed Circuit Board and Related Interconnects at Frequencies up to 50 GHz
Recommendation: Approve request for an extension until December 2020

P1597.1

Standard for Validation of Computational Electromagnetics Computer Modeling and Simulations
Recommendation: Approve request for an extension until December 2021

IEEE Industry Applications Society/Technical Books Coordinating Committee

P3004.3
Recommended Practice for the Application of Low-Voltage Fuses in Industrial and Commercial Power Systems
Recommendation: Approve request for an extension until December 2020

P3004.7
Recommended Practice for the Protection of Conductors Used in Industrial and Commercial Power Systems
Recommendation: Approve request for an extension until December 2020

IEEE Industry Applications Society/Petroleum & Chemical Industry

P1814
Recommended Practice for Electrical System Design Techniques to Improve Electrical Safety
Recommendation: Approve request for an extension until December 2021

P61886-1
Subsea Equipment – Power Connectors, Penetrators, and Jumper Assemblies with Rated Voltage from 3 kV (Umax = 3.6 kV) to 30 kV (Umax = 36 kV)
Recommendation: Approve request for an extension until December 2022

IEEE Instrumentation and Measurement Society/TC9 – Sensor Technology

P1588
Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems
Recommendation: Approve request for an extension until December 2020

IEEE Instrumentation and Measurement Society/TC10 - Waveform Generation Measurement and Analysis

P2414
Standard for Jitter and Phase Noise
Recommendation: Approve request for an extension until December 2020

IEEE Microwave Theory and Techniques Society/Standards Coordinating Committee

P1765
Trial-Use Recommended Practice for Estimating the Uncertainty in Error Vector Magnitude of Measured Digitally Modulated Signals for Wireless Communications
Recommendation: Approve request for an extension until December 2021

IEEE Power and Energy Society/Energy Development & Power Generation

P1248
Guide for the Commissioning of Electrical Systems in Hydroelectric Power Plants
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Electric Machinery

P11
Standard for Rotating Electric Machinery for Rail and Road Vehicles
Recommendation: Approve request for an extension until December 2021

P433
Recommended Practice for Insulation Testing of AC Electric Machinery with High Voltage Rating up to 30 kV at Very Low Frequency
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Insulated Conductors

P532

Guide for Selecting and Testing Jackets for Power, Instrumentation, and Control Cables
Recommendation: Approve request for an extension until December 2020

P1185
Recommended Practice for Cable Installation in Generating Stations and Industrial Facilities
Recommendation: Approve request for an extension until December 2020

P1210
Standard Tests for Determining Compatibility of Cable-Pulling Lubricants with Wire and Cable
Recommendation: Approve request for an extension until December 2021

P1614
Field-Testing of Shielded Power Cable Systems Rated 5 kV and Above with Continuous Alternating Voltage
Recommendation: Approve request for an extension until December 2021

P1617
Guide for Assessment, Mitigation, and Control of Corrosion of Metallic Shields in Extruded Dielectric Cables Rated 5 kV to 46 kV
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Nuclear Power Engineering

P2420
Standard Criteria for Combustion Turbine Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Power System Communications and Cybersecurity

P2030.102.1

Standard for Interoperability of Internet Protocol Security (IPsec) Utilized within Utility Control Systems
Recommendation: Approve request for an extension until December 2021

IEEE Power and Energy Society/Power System Relaying and Control

PC37.242
Guide for Synchronization, Calibration, Testing, and Installation of Phasor Measurement Units (PMUs) for Power System Protection and Control
Recommendation: Approve request for an extension until December 2020

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

PC62.41.3
Guide for Interactions between Power System Disturbances and Surge Protective Devices
Recommendation: Approve request for an extension until December 2020

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 December 2021

P1402
Guide for Physical Security of Electric Power Substations
Recommendation: Approve request for an extension until December 2021

P1427
Guide for Recommended Electrical Clearances and Insulation Levels in Air Insulated Electrical Power Substations
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Switchgear

PC37.62
Standard for Pad Mounted, Dry Vault, Submersible Fault, and Overhead Fault Interrupters for Alternating Current Systems up to 38 kV
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Transmission and Distribution

P1885
Guide for Assessing, Measuring and Verifying Volt-Var Control Optimization on Distribution Systems
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Transformers

PC57.12.60
Standard Test Procedure for Thermal Evaluation of Insulation Systems for Dry-Type Power and Distribution Transformers
Recommendation: Approve request for an extension until December 2020

PC57.13.8
Standard Requirements for Station Service Voltage Transformers
Recommendation: Approve request for an extension until December 2021

PC57.160
Guide for the Electrical Measurement of Partial Discharges in High Voltage Bushings and Instrument Transformers
Recommendation: Approve request for an extension until December 2020

IEEE Power Electronics Society/Standards Committee

P1573
Recommended Practice for Electronic Power Subsystems: Parameters, Interfaces, Elements, and Performance
Recommendation: Approve request for an extension until December 2020

IEEE-SASB Coordinating Committees/SCC39 – International Committee on Electromagnetic Safety

P62704-4
Standard for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body from Wireless Communications Devices, 30 MHz – 6 GHz: General Requirements for Using the Finite Element Method (FEM) for SAR Calculations and Specific Requirements for Modeling Vehicle-Mounted Antennas and Personal Wireless Devices
Recommendation: Approve request for an extension until December 2020

PC95.3
Recommended Practice for Measurements and Computations of Electric, Magnetic, and Electromagnetic Fields with Respect to Human Exposure to Such Fields, 0 Hz-300 GHz
Recommendation: Conditionally approve request for an extension until December 2021; contingent upon receipt of a timeline/action plan by the January NesCom meeting.
AI: Staff to obtain the timeline/action plan from the WG.

IEEE Vehicular Technology Society/Rail Transportation Standards Committee

P1653.5
Recommended Practice for Controlled Rectifiers for Traction Power Substation Applications
Recommendation: Approve request for an extension until December 2021

P1883
Recommended Practice for Electrical and Electro-Mechanical Bench Test Equipment (BTE) for Transit Rail Projects
Recommendation: Approve request for an extension until December 2021

P1884
Guide for Stray Current/Corrosion Mitigation for DC Rail Transit Systems
Recommendation: Approve request for an extension until December 2021

New PARs:

IEEE-SA Board of Governors/Corporate Advisory Group

P2413.2
Standard for a Reference Architecture for Power Distribution IoT (PDIoT)
Recommendation: Approve new PAR until December 2023

IEEE Computer Society/Design Automation

P2851
Standard for Exchange/Interoperability Format for Functional Safety Analysis and Functional Safety Verification of IP, SoC, and Mixed Signal ICs
Recommendation: Approve new PAR until December 2023

IEEE Computer Society/Learning Technology

P9274.4.2
Recommended Practice for Cybersecurity in the Implementation of the Experience Application Programming Interface (xAPI)
Recommendation: Approve new PAR until December 2023

IEEE Computer Society/Standards Activities Board

P1857.10
Standard for Third Generation Video Coding
Recommendation: Approve new PAR until December 2023

P2850
Standard for an Architectural Framework for Intelligent Cities Operation System
Recommendation: Approve new PAR until December 2023

P3333.1.4
Standard for the Quality Assessment of Light Field Imaging
Recommendation: Approve new PAR until December 2023

IEEE Consumer Electronics Society/Blockchain Standards Committee

P2141.2
Standard for Transforming Enterprise Information Systems from Centralized Architecture into Blockchain-Based Decentralized Architecture
Recommendation: Approve new PAR until December 2023

P2141.3

Standard for Transforming Enterprise Information Systems from Distributed Architecture into Blockchain-Based Decentralized Architecture
Recommendation: Approve new PAR until December 2023

IEEE Communications Society/Power Line Communications

P2847
Standard for DC Power Transmission and Communication to DC Loads
Recommendation: Approve new PAR until December 2023

IEEE Electromagnetic Compatibility Society/Standards Development Committee

P2838
Standard for Aircraft Component Lightning Strike Direct Effects Qualification
Recommendation: Approve new PAR until December 2023

IEEE Instrumentation and Measurement Society/TC4 – High Frequency Measurement

P287.1
Standard for Precision Coaxial Connectors at RF, Microwave, and Millimeter-Wave Frequencies Part 1: General Requirements, Definitions, and Detailed Specifications
Recommendation: Approve new PAR until December 2023

IEEE Instrumentation and Measurement Society/TC9 – Sensor Technology

P1451.9
Standard for Tidal Turbine Health Monitoring System (HMS) with Communication Protocols and Transducer Electronic Data Sheet (TEDS) Formats
Recommendation: Approve new PAR until December 2023

IEEE Power and Energy Society/Power System Communications and Cybersecurity

P1815.2
Standard Profile for Communications with Distributed Energy Resources (DERs) using IEEE Std 1815 [Distributed Network Protocol (DNP3)]
Recommendation: Approve new PAR until December 2023

IEEE SA STANDARDS ASSOCIATION

IEEE Power and Energy Society/Power System Instrumentation and Measurements

P4.1
Guide for the Practical Implementation of IEEE Standard 4 on High-Voltage and High-Current Measurement Systems
Recommendation: Approve new PAR until December 2023

IEEE Power and Energy Society/Substations

PC37.431.20
Guide for Protecting Transmission Static Shunt Compensators
Recommendation: Approve new PAR until December 2023

IEEE Power and Energy Society/Transmission and Distribution

P2745.4
Guide for Technology of Unified Power Flow Controller Using Modular Multilevel Converter: Part 4 Control and Protection Application
Recommendation: Approve new PAR until December 2023

P2844
Recommended Practice for Limiting Voltage Imbalance in Electric Power Systems
Recommendation: Approve new PAR until December 2023

P2845
Trial Use Standard for Testing and Evaluating the Dielectric Performance of Celebratory Balloons in Contact with Overhead Power Distribution Lines Rated up to 38 kV System Voltage
Recommendation: Approve new PAR until December 2023

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

P1671.1-2017/Cor 1
Standard for Automatic Test Markup Language (ATML) Test Descriptions – Corrigendum 1
Recommendation: Approve new PAR until December 2023

P2848
Standard for Prognostics and Health Management in Automatic Test Systems

Recommendation: Approve new PAR until December 2023

IEEE-SASB Coordinating Committees/SCC21 – Fuel Cells, Photovoltaics, Dispersed Generation, and Energy Storage

P2030.10.2
Standard for Electricity Access Requirements for DC Low Power not exceeding 60 V
Recommendation: Approve new PAR until December 2023

IEEE Vehicular Technology Society/Intelligent Transportation Systems

P2846
Formal Model for Safety Considerations in Automated Vehicle Decision Making
Recommendation: Approve new PAR until December 2023

PARs for the Revision of Standards:

IEEE Aerospace and Electronic Systems Society/Gyro Accelerometer Panel

P1559
Standard for Inertial Systems Terminology
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Antennas and Propagation Society/Antennas and Propagation Standards Committee

P145
Standard for Definitions of Terms for Antennas
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Computer Society/Design Automation

P1800
Standard for SystemVerilog – Unified Hardware Design, Specification, and Verification Language
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Computer Society/Software & Systems Engineering Standards Committee

P1228
Standard for Software Safety
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Consumer Electronics Society/Standards Committee

P1851
Standard for Design Criteria of Integrated Sensor-Based Test Applications for Household Appliances
Recommendation: Approve PAR for the revision of a standard until December 2023

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

P2410
Standard for Biometric Privacy
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Industry Applications Society/Petroleum & Chemical Industry

P1017
Recommended Practice for Field Testing Electric Submersible Pump Cable
Recommendation: Approve PAR for the revision of a standard until December 2023

P1018
Recommended Practice for Specifying Electric Submersible Pump Cable – Ethylene-Propylene Rubber Insulation
Recommendation: Approve PAR for the revision of a standard until December 2023

P1019
Recommended Practice for Specifying Electric Submersible Pump Cable – Polypropylene Insulation
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Power and Energy Society/Electric Machinery

P1415
Guide for Induction Machinery Maintenance Testing and Failure Analysis
Recommendation: Approve PAR for the revision of a standard until December 2023

P1799
Recommended Practice for Quality Control Testing of External Discharges on Stator Coils, Bars, and Windings
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Power and Energy Society/Nuclear Power Engineering

P1682
Standard for Qualifying Fiber Optic Cables, Connections, and Optical Fiber Splices for Use in Safety Systems in Nuclear Power Generating Stations
Recommendation: Approve PAR for the revision of a standard until December 2023

P62582-3
Nuclear Power Plants – Instrumentation and Control Important to Safety – Electrical Equipment Condition Monitoring Methods – Part 3: Elongation at Break
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Power and Energy Society/Power System Communications and Cybersecurity

P643
Guide for Power-Line Carrier Applications
Recommendation: Approve PAR for the revision of a standard until December 2023

PC37.236
Guide for Power System Protective Relay Applications over Digital Communication Channels
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Power and Energy Society/Substations

P1623
Guide for the Functional Specification of Medium Voltage (1 kV – 35 kV) Electronic Shunt Devices for Dynamic Voltage Compensation
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Power and Energy Society/Transmission and Distribution

P691
Guide for Transmission Structure Foundation Design and Testing
Recommendation: Approve PAR for the revision of a standard until December 2023

P1410
Guide for Improving the Lightning Performance of Electric Power Overhead Distribution Lines
Recommendation: Approve PAR for the revision of a standard until December 2023

PC135.90
Standard for Pole Line Hardware for Overhead Line Construction
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE Power and Energy Society/Transformers

PC57.116
Guide for Transformers Directly Connected to Generators
Recommendation: Approve PAR for the revision of a standard until December 2023

IEEE-SASB Coordinating Committees/SCC21 – Fuel Cells, Photovoltaics, Dispersed Generation, and Energy Storage

P1526
Recommended Practice for Testing the Performance of Stand-Alone Photovoltaic Systems
Recommendation: Approve PAR for the revision of a standard until December 2023

Standards Committee Change:

P1654
Guide for RF Protection of Personnel Working in the Vicinity of Wireless Communications Antennas Attached to Electric Power Line Structures

Current Standards Committee: PE/PSCC; New Standards Committee: PE/T&D

PARs for Administrative Withdrawal:

P2200 (C/MSC)
Standard Protocol for Stream Management in Media Client Devices
(Revision PAR)

P1760 (C/S2ESC)
Information Technology Service Measures and Service Level Agreements
(New PAR)

P1912 (COM/EdgeCloud-SC)
Standard for Privacy and Security Architecture for Consumer Wireless Devices
(New PAR)

P1915.1 (COM/NetSoft-SC)
Standard for Software Defined Networking and Network Function Virtualization Security
(New PAR)

P1493 (PE/IC)
Guide for the Evaluation of Solvents Used for Cleaning Electrical Cables and Accessories
(Revision PAR)

P1637 (PE/IC)
Guide for Selecting and Applying Terminations for Shielded Alternating-Current Power Cable Rated 5 kV – 46 kV
(Revision PAR)

P1891 (PE/NPE)
Standard Criteria for Application of Intelligent Digital Devices to Nuclear Power Generating Stations
(New PAR)

P1138 (PE/PSCC)

Standard for Testing and Performance for Optical Ground Wire (OPGW) for Use on Electric Utility Power Lines
(Revision PAR)

PC62.11 (PE/SPDHV)
Standard for Metal-Oxide Surge Arresters for AC Power Circuits (> 1 kV)
(Revision PAR)

PC62.200 (PE/SPDLV)
Guide for the Application of Surge Protective Devices for a Wind Power Facility
(New PAR)

P563 (PE/T&D)
Guide on Conductor Self-Damping Measurements
(Revision PAR)

P664 (PE/T&D)
Guide for Laboratory Measurement of the Power Dissipation Characteristics of Aeolian Vibration Dampers for Single Conductors
(Revision PAR)

P1243 (PE/T&D)
Guide for Improving the Lightning Performance of Transmission Lines
(Revision PAR)

P1882 (PE/T&D)
Guide for Establishing, Benchmarking, and Maintaining a Working Program for Energized Transmission Lines
(New PAR)

P824 (PE/T&D)
Standard for Series Capacitor Banks in Power Systems
(Revision PAR)

PC135.80-2012/Cor 1 (PE/T&D)
Standard for Fasteners for Overhead Line Construction – Corrigendum 1: Table 5 – Dimensions of Hex Nuts
(New PAR)

P1036 (PE/T&D)
Guide for the Application of Shunt Power Capacitors
(Revision PAR)

P751 (PE/T&D)
Guide for Wood Structures Used for Overhead Electric Transmission Lines
(New PAR)

P2040 (VT/ITS)
Standard for Connected, Automated and Intelligent Vehicles: Overview and Architecture
(New PAR)

P2040.1 (VT/ITS)
Standard for Connected, Automated and Intelligent Vehicles: Taxonomy and Definitions
(New PAR)

P2040.2 (VT/ITS)
Standard for Connected, Automated and Intelligent Vehicles: Testing and Verification
(New PAR)

3.2.5 RevCom Recommendations

NEW

P802.3cg/Draft D3.4 (C/LM) IEEE Draft Standard for Ethernet Amendment 5: Physical Layer Specifications and Management Parameters for 10 Mb/s Operation and Associated Power Delivery over a Single Balanced Pair of Conductors

Recommendation: APPROVE

P802.3cn/Draft D3.1 (C/LM) IEEE Draft Standard for Ethernet Amendment 4: Physical Layers and Management Parameters for 50 Gb/s, 200 Gb/s, and 400 Gb/s Operation over Single-Mode Fiber

Recommendation: APPROVE

P1071/Draft 3 (PE/T&D) IEEE Draft Application Guide for an Engineered Restoration Program for Failed Transmission Structures

Recommendation: APPROVE

P1711.2/Draft D4 (PE/PSCC) IEEE Draft Standard for Secure SCADA Communications Protocol (SSCP)

Recommendation: APPROVE

P1834/Draft 3.4 (BOG/CAG) IEEE Draft Standard for Technology Supervision Code for Wind Turbine Rotor Systems

Recommendation: APPROVE

P1838/Draft D3.00 (C/TT) IEEE Draft Standard for Test Access Architecture for Three-Dimensional Stacked Integrated Circuits

Recommendation: APPROVE

P1847/Draft D2 (EMB/Stds Com) IEEE Draft Recommended Practice for Common Framework of Location Services (LS) for Healthcare

Recommendation: APPROVE

P1863/Draft 11 (BOG/CAG) IEEE Draft Guide for Overhead AC Transmission Line Design

Recommendation: APPROVE

P1865/Draft 08/23/2019 (BOG/CAG) IEEE Draft Specifications for Maintenance and Test of Distributed Control Systems in Thermal Power Stations: General Requirements and Definitions

Recommendation: APPROVE

P1865.1/Draft D5 (BOG/CAG) IEEE Draft Specifications for Maintenance and Test of Distributed Control Systems in Thermal Power Stations: Maintenance and Testing

Recommendation: APPROVE

P1865.2/Draft 08/23/2019 (BOG/CAG) IEEE Draft Standard Specifications for Maintenance and Test of Distributed Control Systems in Thermal Power Stations: Operation Service and Management

Recommendation: APPROVE

P1914.1/Draft D5.3 (COM/MobiNet-SC) IEEE Draft Standard for Packet-Based Fronthaul Transport Networks

Recommendation: APPROVE

P1922.2/Draft 2.1 (COM/GreenICT-SC) IEEE Draft Standard for a Method to Calculate Near Real-Time Emissions of Information and Communication Technology Infrastructure

Recommendation: APPROVE

P2420/Draft P2420/D2 (PE/NPE) IEEE Draft Standard Criteria for Combustion Turbine Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations

Recommendation: APPROVE

P2804/Draft D1 (C/DA) IEEE Draft Standard for Software-Hardware Interface for Multi-Many-Core

Recommendation: APPROVE

P21840/Draft d4 (C/S2ESC) Systems and Software Engineering – Guidelines for the Utilization of ISO/IEC/IEEE 15288 in the Context of System of Systems (S0S)

Recommendation: APPROVE

REVISION

P99/Draft 3 (SASB/SCC04) IEEE Draft Recommended Practice for the Preparation of Test Procedures for the Thermal Evaluation of Insulation Systems for Electrical Equipment

Recommendation: APPROVE

P115/Draft P115/D5 (PE/EM) IEEE Draft Guide for Test Procedures for Synchronous Machines including Acceptance and Performance Testing and Parameter Determination for Dynamic Analysis

Recommendation: APPROVE

P269/Draft 127.5 (COM/SDB) IEEE Draft Standard for Measuring Electroacoustic Performance of Communication Devices

Recommendation: APPROVE

P382/Draft 4 (PE/NPE) IEEE Draft Standard for Qualification of Safety-Related Actuators for Nuclear Power Generating Stations and Other Nuclear Facilities

Recommendation: APPROVE

P484/Draft D7 (PE/ESSB) IEEE Draft Recommended Practice for Installation Design and Installation of Vented Lead-Acid Batteries for Stationary Applications

Recommendation: APPROVE

P521/Draft D3 (AES/RS) IEEE Draft Standard Letter Designations for Radar-Frequency Bands

Recommendation: APPROVE

P644/Draft D7 (PE/T&D) IEEE Draft Standard Procedures for Measurement of Power Frequency Electric and Magnetic Fields from AC Power Lines

Recommendation: APPROVE

P937/Draft D2 (SASB/SCC21) IEEE Draft Recommended Practice for Installation and Maintenance of Lead-Acid Batteries for Photovoltaic (PV) Systems

Recommendation: APPROVE

P1110/Draft 7 (PE/EM) IEEE Draft Guide for Synchronous Generator Modeling Practices and Parameter Verification with Applications in Power System Stability Analyses

Recommendation: APPROVE

P1185/Draft D8 (PE/IC) IEEE Draft Recommended Practice for Cable Installation in Generating Stations and Industrial Facilities

Recommendation: APPROVE

P1222/Draft 2 (PE/PSCC) IEEE Draft Standard for Testing and Performance for All-Dielectric Self-Supporting (ADSS) Fiber Optic Cable for Use on Electric Utility Power Lines

Recommendation: APPROVE

P1302/Draft 4 (EMC/SDCom) IEEE Draft Guide for the Electromagnetic Characterization of Conductive Gaskets in the Frequency Range of DC to 40 GHz

Recommendation: APPROVE

P1406/Draft 11 (PE/IC) IEEE Draft Guide for the Use of Gas-in-Fluid Analysis for Paper and Laminated Paper-Polypropylene Insulated Cable Systems

Recommendation: Conditionally approve
Conditionally approve P1406 based on receipt of the copyright permissions.

P1481/Draft 2 (C/DA) IEEE Draft Standard for Integrated Circuit (IC) Open Library Architecture (OLA)

Recommendation: APPROVE

P1588/Draft P1588 D1.6 (IM/ST) IEEE Draft Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems

Recommendation: APPROVE

P2401/Draft D4 (C/DA) IEEE Draft Standard Format for LSI-Package-Board Interoperable Design

Recommendation: APPROVE

P11073-10408/Draft 9 (EMB/11073) IEEE Draft Standard – Health Informatics – Personal Health Device Communication – Part 10408: Device Specialization – Thermometer

Recommendation: APPROVE

P11073-10415/Draft 9 (EMB/11073) IEEE Draft Standard – Health Informatics – Personal Health Device Communication – Device Specialization - Weighing Scale

Recommendation: APPROVE

P16326/Draft 4 (C/S2ESC) ISO/IEC/IEEE Draft International Standard – Systems and Software Engineering – Life Cycle Processes – Project Management

Recommendation: APPROVE

PC57.13.5/Draft 3.1(replaced) (PE/TR) IEEE Draft Standard of Performance and Test Requirements for Instrument Transformers of a Nominal System Voltage of 115 kV and Above

Recommendation: APPROVE

PC57.123/Draft 11 (PE/TR) IEEE Draft Guide for Transformer Loss Measurement

Recommendation: APPROVE

3.2.6 Standards for Transfer to Inactive-Reserved Status

671-1985 AES/GA/SENSR_WG IEEE Standard Specification Format Guide and Test Procedure for Nongyroscopic Inertial Angular Sensors: Jerk, Acceleration, Velocity, and Displacement

1672-2006 AES/UWBRC/1672_WG IEEE Standard for Ultrawideband Radar Definitions

1672-2006/Cor 1-2008 AES/UWBRC/1672_WG IEEE Standard for Ultrawideband Radar Definitions – Corrigendum 1

208-1995 BTS/AVTech/G-2.1.4 IEEE Standard on Video Techniques: Measurement of Resolution of Camera Systems, 1993 Techniques

1631-2008 BTS/RFTech/G-2.2 IEEE Recommended Practice for Measurement of 8-VSB Digital Television Transmission Mask Compliance for the USA

IEEE SA STANDARDS ASSOCIATION

2600-2008 C/IA/2600_WG IEEE Standard for Information Technology: Hardcopy Device and System Security

1484.11.3-2005 C/LT/CMI_WG11 IEEE Standard for Learning Technology Extensible Markup Language (XML) Schema Binding for Data Model for Content Object Communication

1484.4-2007 C/LT/DREL_WG4 IEEE Recommended Practice for Digital Rights Expression Languages (DRELs) Suitable for eLearning Technologies

1014-1987 C/MSC/1014_WG IEEE Standard for a Versatile Backplane Bus: VMEbus

1101.1-1998 C/MSC/1101_WG IEEE Standard for Mechanical Core Specifications for Microcomputers Using IEC 60603-2 Connectors

1101.2-1992 C/MSC/1101_WG IEEE Standard for Mechanical Core Specifications for Conduction-Cooled Eurocards

1101.10-1996 C/MSC/1101_WG IEEE Standard for Additional Mechanical Specifications for Microcomputers Using the IEEE 1101.1-1998 Equipment Practice

1101.11-1998 C/MSC/1101_WG IEEE Standard for Mechanical Rear Plug-In Units Specifications for Microcomputers Using IEEE 1101.1 and IEEE 1101.10 Equipment Practice

1156.1-1993 C/MSC/1156_WG IEEE Standard Microcomputer Environmental Specifications for Computer Modules

1156.2-1996 C/MSC/1156_WG IEEE Standard for Environmental Specifications for Computer Systems

1178-1990 C/MSC/1178_WG IEEE Standard for the Scheme Programming Language

1284.1-1997 C/MSC/1284_WG IEEE Standard for Information Technology – Transport Independent Printer/System Interface (TIP/SI)

IEEE SA STANDARDS ASSOCIATION

1301.3-1992 C/MSC/1301_WG IEEE Standard for a Metric Equipment Practice for Microcomputers – Convection-Cooled with 2.5 mm Connectors

1301.4 1996 C/MSC/1301_WG IEEE Standard for a Metric Equipment Practice for Microcomputers – Coordination Document for Mezzanine Cards

1363-2000 C/MSC/1363_WG IEEE Standard Specifications for Public-Key Cryptography

1363.1-2008 C/MSC/1363_WG IEEE Standard Specification for Public Key Cryptographic Techniques Based on Hard Problems over Lattices

1363.2-2008 C/MSC/1363_WG IEEE Standard Specification for Password-Based Public-Key Cryptographic Techniques

1363a-2004 C/MSC/1363_WG IEEE Standard Specifications for Public-Key Cryptography – Amendment 1: Additional Techniques

1394.3-2003 C/MSC/1394_WG IEEE Standard for a High Performance Serial Bus Peer-to-Peer Data Transport Protocol (PPDT)

1596-1992 C/MSC/1596_WG IEEE Standard for Scalable Coherent Interface (SCI)

1620-2008 C/MSC/1620_WG IEEE Standard for Test Methods for the Characterization of Organic Transistors and Materials

1028-2008 C/S2ESC IEEE Standard for Software Reviews and Audits

1175.1-2002 C/S2ESC IEEE Guide for CASE Tool Interconnections – Classification and Description

1175.4-2008 C/S2ESC/1175.4_WG IEEE Standard for CASE Tool Interconnections – Reference Model for Specifying System Behavior

1516.4-2007 C/SI/1516.4 IEEE Recommended Practice for Verification, Validation, and Accreditation of a Federation – an Overlay to the High Level Architecture Federation Development and Execution Process

1450.2-2002 C/TT IEEE Standard for Extensions to Standard Test Interface Language (STIL) (IEEE Std 1450-1999) for DC Level Specification

1450.3-2007 C/TT IEEE Standard for Extensions to Standard Test Interface Language (STIL) (IEEE Std. 1450-1999) for Tester Target Specification

661-1979 COM/SDB/CEA IEEE Standard Method for Determining Objective Loudness Ratings of Telephone Connections

11073-00101-2008 EMB/11073/LL Health Informatics – PoC Medical Device Communication Part 00101: Guide – Guidelines for the Use of RF Wireless Technology

11073-20101-2004 EMB/11073/EMBS_WG ISO/IEEE 11073-20101:2004, Health Informatics – Point-of-Care Medical Device Communication – Application Profile – Base Standard

1140-1994 EMC/SDCom/WG1140 IEEE Standard Procedures for the Measurement of Electric and Magnetic Fields from Video Display Terminals (VDTs) from 5 Hz to 400 kHz

377-1980 EMC/SDCom/WG377 IEEE Recommended Practice for Measurement of Spurious Emission from Land-Mobile Communication Transmitters

499-1997 IAS/CI/499_WG IEEE Recommended Practice for Cement Plant Electric Drives and Related Electrical Equipment

277-2007 IAS/CI/PGD&R IEEE Recommended Practice for Cement Plant Power Distribution

576-2000 IAS/PCI IEEE Recommended Practice for Installation, Termination, and Testing of Insulated Power Cable as Used in Industrial and Commercial Applications

45-2002 IAS/PCI/45_WG IEEE Recommended Practice for Electric Installations on Shipboard

844-2000 IAS/PCI/844WG IEEE Recommended Practice for Electrical Impedance, Induction, and Skin Effect Heating of Pipelines and Vessels

960/1177-1993 NPS/NI&D IEEE Standard FASTBUS Modular High-Speed Data Acquisition and Control System and IEEE FASTBUS Standard Routines

300-1988 NPS/NI&D/NIWG IEEE Standard Test Procedures for Semiconductor Charged-Particle Detectors

301-1988 NPS/NI&D/NIWG IEEE Standard Test Procedures for Amplifiers and Preamplifiers used with Detectors of Ionizing Radiation

325-1996 NPS/NI&D/NIWG IEEE Standard Test Procedures for Germanium Gamma-Ray Detectors

398-1972 NPS/NI&D/NIWG IEEE Standard Test Procedures for Photomultipliers for Scintillation Counting and Glossary for Scintillation Counting Field

583-1982 NPS/NI&D/NIWG IEEE Standard Modular Instrumentation and Digital Interface System (CAMAC) (Computer Automated Measurement and Control)

595-1982 NPS/NI&D/NIWG IEEE Standard Serial Highway Interface System (CAMAC) (Computer Automated Measurement and Control)

596-1982 NPS/NI&D/NIWG IEEE Standard Parallel Highway Interface System (CAMAC) (Computer Automated Measurement and Control)

675-1982 NPS/NI&D/NIWG IEEE Standard Multiple Controllers in a CAMAC Crate (Computer Automated Measurement and Control)

683-1976 NPS/NI&D/NIWG IEEE Recommended Practice for Block Transfers in CAMAC Systems (Computer Automated Measurement and Control)

726-1982 NPS/NI&D/NIWG IEEE Standard Real-Time BASIC for CAMAC

758-1979 NPS/NI&D/NIWG IEEE Standard Subroutines for Computer Automated Measurement and Control (CAMAC)

1160-1993 NPS/NI&D/NIWG IEEE Standard Test Procedures for High-Purity Germanium Crystals for Radiation Detectors

1214-1992 NPS/NI&D/NIWG IEEE Standard Multichannel Analyzer (MCA) Histogram Data Interchange Format for Nuclear Spectroscopy

309/N42.3-1999 NPS/NI&D/NIWG IEEE Standard Test Procedures and Bases for Geiger-Mueller Counters

1650-2005 NTC/SC/1650_WG IEEE Standard Test Methods for Measurement of Electrical Properties of Carbon Nanotubes

1625-2008 PE/ESSBC/WG_1625 IEEE Standard for Rechargeable Batteries for Multi-Cell Mobile Computing Devices

1425-2001 PE/IC IEEE Guide for the Evaluation of the Remaining Life of Impregnated Paper-Insulated Transmission Cable Systems

1299-1996 PE/IC/B06W/PC62.22.1_WG IEEE Guide for the Connection of Surge Arresters to Protect Insulated, Shielded Electric Power Cable Systems

1216-2000 PE/IC/B17W/P1610_WG IEEE Guide for the Application of Faulted Circuit Indicators for 200 A, Single-Phase Underground Residential Distribution (URD)

622-1987 PE/NPE/WG_6.5 IEEE Recommended Practice for the Design and Installation of Electric Heat Tracing Systems for Nuclear Power Generating Systems

1675-2008 PE/PSCC/BPL_WG IEEE Standard for Broadband over Powerline Hardware

C37.117-2007 PE/PSR IEEE Guide for the Application of Protective Relays Used for Abnormal Frequency Load Shedding and Restoration

1313.2-1999 PE/SPDHV/HV3.4.18 IEEE Guide for the Application of Insulation Coordination

C62.45-2002 PE/SPDLV/LV3.6.4 IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000 V and less) AC Power Circuits

C62.48-2005 PE/SPDLV/LV3.6.4 IEEE Guide on Interactions between Power System Disturbances and Surge Protective Devices

1416-1998 PE/SUB/SCK0 IEEE Recommended Practice for the Interface of New Gas-Insulated Equipment in Existing Gas-Insulated Substations

C37.1-2007 PE/SUB/WGC3 IEEE Standard for SCADA and Automation Systems

1585-2002 PE/SUB/WGI1 IEEE Guide for the Functional Specification of Medium Voltage (1 – 35kV) Electronic Series Devices for Compensation of Voltage Fluctuations

C37.100-1992 PE/SWG/Adscom-WG_C37.100 IEEE Standard Definitions for Power Switchgear

C37.081-1981 PE/SWG/HVCB-WG_C37.081 IEEE Guide for Synthetic Fault Testing of AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis

C37.081a-1997 PE/SWG/HVCB-WG_C37.081a Supplement to IEEE Guide for Synthetic Fault Testing of AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis

C37.083-1999 PE/SWG/HVCB-WG_C37.083 IEEE Guide for Synthetic Capacitive Current Switching Tests of AC High-Voltage Circuit Breakers

C37.43-2008 PE/SWG/HVF-WG_C37.43 IEEE Standard Specifications for High-Voltage Expulsion, Current-Limiting, and Combination-Type Distribution and Power Class External Fuses, with Rated Voltages from 1 kV through 38 kV, Used for the Protection of Shunt Capacitors

1247-2005 PE/SWG/HVS-WG_1247 IEEE Standard for Interrupter Switches for Alternating Current, Rated Above 1000 Volts

C135.1-1999 PE/T&D/TPC-15.11.08-10 IEEE Standard for Zinc-Coated Steel Bolts and Nuts for Overhead Line Construction

C135.2-1999 PE/T&D/TPC-15.11.08-10 IEEE Standard for Threaded Zinc-Coated Ferrous Strand-Eye Anchor Rods and Nuts for Overhead Line Construction

C135.3-2001 PE/T&D/TPC-15.11.08-10 IEEE Standard for Zinc-Coated Ferrous Lag Screws for Overhead Line Construction

C135.61-1997 PE/T&D/TPC-15.11.08-10 IEEE Standard for the Testing of Overhead Transmission and Distribution Line Hardware

C135.63-1998 PE/T&D/TPC-15.11.08-10 IEEE Standard for Shoulder Live Line Extension Links for Overhead Line Construction

C57.136-2000 PE/TR/PerfCharac-WGC57.136 IEEE Guide for Sound Level Abatement and Determination for Liquid-Immersed Power Transformers and Shunt Reactors Rated over 500 kVA

1515-2000 PEL/SC IEEE Recommended Practice for Electronic Power Subsystems: Parameter Definitions, Test Conditions, and Test Methods

111-2000 PEL/SC/111_WG IEEE Standard for Wide-Band (Greater Than 1 Decade) Transformers

388-1992 PEL/SC/388_WG IEEE Standard for Transformers and Inductors in Electronic Power Conversion Equipment

393-1991 PEL/SC/393_WG IEEE Standard for Test Procedures for Magnetic Cores

390-1987 PEL/SC/ET_WG IEEE Standard for Pulse Transformers

436-1991 PEL/SC/ET_WG IEEE Guide for Making Corona (Partial Discharge) Measurements on Electronics Transformers

449-1998 PEL/SC/ET_WG IEEE Standard for Ferroresonant Voltage Regulators

91-1984 SASB IEEE Standard Graphic Symbols for Logic Functions

315-1975 SASB IEEE Standard for Graphic Symbols for Electrical and Electronics Diagrams (Including Reference Designation Letters)

991-1986 SASB IEEE Standard for Logic Circuit Diagrams

315A-1986 SASB Supplement to Graphic Symbols for Electrical and Electronics Diagrams

91/91a-1991 SASB IEEE Graphic Symbols for Logic Functions (Includes IEEE Std 91a-1991 Supplement, and IEEE Std 91-1984)

1155-1992 SASB/SCC20 IEEE Standard for VMEbus Extensions for Instrumentation: VXIbus

1460-1996 SASB/SCC39/TC95_SC1 IEEE Guide for the Measurement of Quasi-Static Magnetic and Electric Fields

1512-2006 VT/ITS/1512_WG IEEE Standard for Common Incident Management Message Sets for Use by Emergency Management Centers

1512.1-2006 VT/ITS/1512_WG IEEE Standard for Common Traffic Incident Management Message Sets for Use by Emergency Management Centers

1512.3-2006 VT/ITS/1512_WG IEEE Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers

1476-2000 VT/RTSC IEEE Standard for Passenger Train Auxiliary Power Systems Interfaces

1483-2000 VT/RTSC IEEE Standard for Verification of Vital Functions in Processor-Based Systems Used in Rail Transit Control

1536-2002 VT/RTSC IEEE Standard for Rail Transit Vehicle Battery Physical Interface

1558-2004 VT/RTSC IEEE Standard for Software Documentation for Rail Equipment and Systems

1570-2002 VT/RTSC IEEE Standard for the Interface between the Rail Subsystem and the Highway Subsystem at a Highway Rail Intersection

1477-1998 VT/RTSC/1477_WG IEEE Standard for Passenger Information System for Rail Transit Vehicles

4 Update on Security and Fraud

Gil Santiago, Senior Director – Security & Network Management, presented.

5 SASB Standing Committee Report

5.1 Audit Committee (AudCom)

Annette Reilly, AudCom Chair, reported.

There was a motion (from AudCom):
Inactivate the following Standards Committee (VT/RTSC) whose WG P&P was requested prior to 01 March 2019 if the Standards Committee has not submitted WG P&P by 29 February 2020.
In the absence of objection, the motion was approved.

5.2 Industry Connections Committee (ICCom)

Kevin Lu, ICCom Chair, reported.

5.3 New Standards Committee (NesCom)

Dorothy Stanley, NesCom Chair, reported.

Dorothy thanked Lisa Weisser for her diligent work as the NesCom Administrator.

Chair Hoffman noted the 250 PARs (New and Revision) approved in 2019 is a new record for new work approved in a year.

5.4 Patent Committee (PatCom)

Don Wright, Acting PatCom Chair, reported.

5.5 Procedures Committee (ProCom)

Ted Burse, ProCom Chair, reported.

SASB OpMan RE: Parallel Balloting

There was a motion (from ProCom) to approve the following updates to the *IEEE-SA Standards Board Operations Manual*. In the absence of objection, the motion was approved.

IEEE-SA Standards Board Operations Manual

5.4 Standards Association ballots

A Standards Association balloting group shall be one of the following:

— Individuals with voting privileges
— Persons with voting privileges who are of any category other than individual

All Standards Association ballots shall be conducted by the IEEE Standards Balloting Center.

All Standards Association ballots shall be conducted by electronic means.

~~Standards Committees may conduct parallel balloting of a standard using both an individual Standards Association balloting group and an entity Standards Association balloting group. An interested Standards Committee shall make a request to the Standards Committee that is responsible for the standard as identified on the PAR to conduct parallel ballots. The decision to conduct the parallel ballots rests with the Standards Committee that is responsible for the standard as identified on the PAR, and that Standards Committee has the sole discretion on whether or not to use parallel balloting. These parallel ballots shall satisfy all corresponding Standards Association ballot conditions. The management of the parallel ballots rests with the Standards Committee responsible for the standard as identified on the PAR.~~

IEEE-SA shall maintain a single authoritative database for the list of members of the Standards Association balloting group. A request for a Standards Association balloting group membership list shall be submitted to the Standards Committee Chair. The Standards Committee Chair shall then forward such request to the IEEE-SA staff liaison for that Standards Committee. The IEEE-SA staff liaison shall fulfill the request if the

standard has been approved or upon its approval. For individual-based balloting, the supplied membership list shall consist of each member's name, affiliation, and interest category. For entity-based balloting, the supplied membership list shall consist of each entity's name, the entity's designated primary voting representative (and, if designated, the alternate voting representative), entity affiliation, and entity interest category.

SA OpMan RE: External Representatives

There was a motion (from ProCom) to forward the following updates to the *IEEE Standards Association Operations Manual* to the IEEE-SA Board of Governors for final approval consideration. The motion was approved. [Vote: Yes, No=1 (Hunter), Abstain=1 (Mohla)]

IEEE-SA Standards Association Operations Manual

7.1 External Representatives

The policies and procedures stated in this manual apply to External Representatives of ~~the~~ IEEE for which the IEEE-SA has oversight responsibility.

7.1.1 Definition

An External Representative (ER) is a volunteer who has been appointed by the IEEE-SA Board of Governors (BOG) to represent ~~the~~ IEEE on standards matters to an organization, committee, or entity external to ~~the~~ IEEE, and where a voting position on behalf of ~~the~~ IEEE ~~SA~~ is explicitly required.

A volunteer who serves as a liaison between an IEEE-SA committee and an external committee acting only as an information conduit or expressing opinion as part of consensus building is exempt from policies and procedures described in this clause.

An Owning Board/Committee (OBC) is an IEEE-SA board, an IEEE-SA committee, or Standards Committee responsible for ensuring that positions taken by an ER on technical matters represent the consensus view~~s~~ of the OBC and all materially interested IEEE Technical Committees that provide timely input by any deadline established by the OBC. Positions taken by an ER on policy matters are established by the IEEE-SA BOG.

7.1.2 Requirements and oversight

A request to establish a new ER position shall be reviewed by both the IEEE-SA BOG and the IEEE-SA Standards Board to determine the appropriateness of the ER relationship and to determine the OBC.

The ER shall be an IEEE member of any grade except Student grade and shall be a member of the IEEE-SA. The ER shall be a member or designee of the OBC.

If an OBC ceases to function as an OBC, the ER shall be responsible to the next higher board/committee until a replacement OBC is identified. The ER shall supply the next

higher board/committee with the required documentation to enable it to take on this function.

The chair of an OBC shall not serve as an ER unless an exception is granted by the next higher board/committee upon the request of the OBC. The next higher board/committee may accept or deny the request and, at its discretion, may become the Owning Board/Committee for the purposes of this representation. The next higher board/committee may also grant the exception with such conditions as it believes are necessary to assure that the ER can adequately represent ~~the~~ IEEE ~~-SA~~ while serving as chair of the OBC. If the next higher board/committee becomes the OBC for the purposes of this representation, then the ER shall provide the reports described in 7.1.4 to this next higher board/committee.

The ER shall act in the best interest of the IEEE-SA at all times. The ER should refer to documented IEEE ~~-SA~~ objectives or consensus positions wherever possible and should encourage development and documentation of relevant objectives or positions where they do not exist.

The ER should not represent another group in the same external organization, committee, or entity to which that person is serving as an IEEE ER. However, recognizing that an ER might need to represent another group (such as his/her employer that underwrites travel costs), the ER may be permitted to represent that group as well as ~~the~~ IEEE ~~-SA~~ in the same external organization, committee, or entity. In such situations, the individual serving as an ER shall recuse himself/herself from voting on issues that would result in a conflict between his/her duty to ~~the~~ IEEE ~~-SA~~ and his/her duty to the other group. The ER shall report such situations to the OBC at the earliest practical time. Once the OBC is made aware of the situation by the ER, the OBC shall decide the best course of action to provide the IEEE ~~-SA~~ position on the issue to the external organization.

7.1.3 Attributes

When appointing an ER, the OBC shall review the following:

— Scientific and technical expertise (e.g., membership ~~of~~ in relevant technical societies) relevant to the scope of operations and activities of the external organization, committee, or entity.
— Familiarity with the operations and goals of the specific external organization, committee, or entity.
— The ability to articulate IEEE ~~-SA~~ goals, objectives, and activities clearly in the context of the external organization, committee, or entity.

Before an individual can serve as an ER, the OBC shall determine that the individual does not have a conflict of interest with respect to the activities of the specific external organization, committee, or entity to which the ER would represent ~~the~~ IEEE ~~-SA~~. To enable the OBC to make this determination, the individual shall

a) File, with the OBC and the ~~Secretary~~ Administrator of the IEEE-SA ~~Standards~~ Board of Governors, a letter stating their affiliation(s). This disclosure of affiliation shall meet the requirements of *IEEE-SA Standards Board Operations Manual* sections 5.1.2.3 and 5.1.2.4 and shall be signed by the individual.

b) File, with the OBC and the ~~Secretary~~ Administrator of the IEEE-SA ~~Standards~~ Board of Governors, a letter of endorsement from each affiliation disclosed. The letter(s) shall document several key factors relative to the position as the ER and is to be signed by both the individual and ~~an individual~~ by someone who has management responsibility for the individual for that affiliation. The letter(s) shall contain at least the following:

1) Statement of qualification based on expertise in respect to the attributes described above

2) Statement of support for providing necessary resources (e.g., time, travel expenses to meetings), and

3) Recognition ~~that~~ by the individual and by their affiliation ~~is~~ of the expectation~~ed~~ to act in accordance with the conditions stated in subclause 7.1.2~~; in particular that the individual, when serving as the ER, 'shall act in the best interest of the IEEE-SA at all times'~~.

c) ~~File a c~~Complete~~d~~ the IEEE ~~-SA~~ Conflict of Interest Disclosure Statement [see https://www.ieee.org/about/compliance/conflict-of-interest/coiandpob.html] ~~with the Secretary of the IEEE-SA Standards Board~~.

~~An ER shall update existing, or file new, documentation whenever necessary due to a change in circumstances that would make the existing documentation in any way inaccurate.~~

7.1.4 Reports

The ER shall provide regular written reports to the OBC in a format and frequency that has been prescribed by the OBC.

7.1.5 Duties of the Owning Board/Committee

7.1.5.1 Appointment

Upon recommendation of the OBC, an ~~Each~~ ER candidate shall be considered for appointment~~ed~~ as an ER by the IEEE-SA BOG ~~for a term of no less than one year, and may be reappointed at the discretion of the OBC. Before an individual can serve as an ER, the IEEE-SA BOG shall confirm the appointment, or reappointment, to that position~~. ~~If t~~The OBC ~~does not~~ shall indicate a desired term of appointment for each recommended ER candidate~~, it shall be for two years~~.

An ER may be reappointed upon recommendation of the OBC and confirmation by the IEEE-SA BOG.

An ER shall update documentation whenever necessary due to a change in circumstances that would make the documentation on file with the OBC and/or the IEEE-SA BOG substantively inaccurate, including changes in affiliation or employment.

7.1.5.2 Annual review

The OBC shall establish the report format and frequency for ERs under its responsibility (see 7.1.4).

The OBC shall provide an annual report to ~~both~~ the IEEE-SA BOG ~~Board of Governors and the IEEE-SA Standards Board~~ on the status of ERs under its responsibility.

7.1.5.3 Liaison relationships with other committees within IEEE~~-SA~~

The OBC ~~shall~~ should attempt to identify ~~other committees within~~ IEEE~~-SA~~ technical communities (e.g., IEEE Societies, Standards Committees, IEEE-SA Standards Coordinating Committees, etc.) that ~~would~~ are likely to have an interest in positions ~~taken~~ represented by ~~the~~ ERs under the OBC's responsibility. The OBC shall develop liaison relationships with those ~~other committees~~ IEEE technical communities that have indicated interest in the activities of the OBC and shall keep them informed of~~n~~ positions ~~taken~~ represented by the ERs under the OBC's responsibility.

7.1.5.4 Provision of information to materially interested individuals

The OBC shall provide information about positions represented by ERs under its responsibility to materially interested individuals within IEEE upon request.

7.1.6 Public listing of ERs

The IEEE-SA BOG ~~Board of Governors~~ shall maintain a list of all ERs on the IEEE-SA web site. The web site will include a link to an email alias that will allow any comments about ER activity to be submitted to the Secretary of the IEEE-SA ~~staff~~ Board of Governors, who will then direct their handling through appropriate channels.

SASB Bylaws RE: Standards Committee Representatives (SCRs)

There was a motion (from ProCom) to forward updates to the *IEEE-SA Standards Board Bylaws* to the IEEE-SA Board of Governors for final approval consideration.

There was a motion to Amend:

~~The~~ Each Standards Committee responsible for the entity project is permitted to send a designated Standards Committee Representative (SCR) to meetings of that entity-based working group in a non-voting role.

In the absence of objection, the motion to Amend was approved.

The main motion was then approved. [Vote: Yes=17, No=2 (Dukes, Myles), Abstain=1 (Winston)]

IEEE-SA Standards Board Bylaws

IEEE SA STANDARDS ASSOCIATION

5.2.1.2 Membership requirements for standards developed under the entity method

Officers of IEEE standards working groups developing standards under the entity method shall be representatives of Advanced Entity Members of the IEEE-SA. Designees (those designated to manage the Standards Association ballot) in the IEEE Standards Association entity ballot process shall be representatives of Advanced Entity Members.

Every entity observing a project within an IEEE-SA entity standards working group is required to be at least a Basic Entity Member of IEEE-SA, and only Advanced Entity Members can contribute and hold voting privileges. Entity nonmembers may observe at one IEEE-SA entity standards working group meeting per project.

An entity can represent either itself or another entity's interest in an entity working group. In order to be a voting member in a particular entity working group, each entity's representative shall declare that the interests of that entity are not knowingly represented by another member of the working group and that the entity is not knowingly funding directly or indirectly the participation of another person in that working group for the purposes of influencing the outcome of the vote.

Each entity project shall have at least three voting members in good standing to maintain its validity. Each entity project is required to host its working group email reflector(s) through the IEEE, with designated IEEE staff serving as administrators. Each Standards Committee responsible for the entity project is permitted to send a designated Standards Committee Representative (SCR) to meetings of that entity-based working group in a non-voting role.

The following qualify as entities for standards-development purposes:

Corporation: A for-profit or not-for-profit entity that is not under the control, as defined in 5.2.1.2.1, of another entity and that is organized under articles of incorporation or similar legal structures. Limited Liability Companies are considered to be Corporations.

Partnership: An unincorporated association of two or more individuals who are co-owners of a business.

Sole proprietorship: An unincorporated business owned by a single individual.

Government agency: An entity that is part of an executive, legislative, or judicial branch of a government and that has sufficient discretion in the management of its own affairs to distinguish it as separate from the administrative structure of any other governmental entity.

Academic institution: An educational entity that, in addition to having a controlling body such as a Board of Regents or a Board of Governors, has sufficient discretion in the management of its own affairs to distinguish it as separate from the administrative structure of any other educational entity.

IEEE-SA entity standards working groups may employ up to two individuals in non-voting positions for the purposes of technical editing and other administrative functions that shall not involve technical contributions. Such individuals will be allowed to participate in working group activities as deemed appropriate and need not represent Entity Members of IEEE-SA.

IEEE-SA entity standards working groups may vote to allow individuals to offer specific technical expertise in non-voting positions at up to three entity standards working group meetings during the standards development process for a particular project. Such individuals need not represent Entity Members of IEEE-SA. However, if an individual's expenses to attend entity standards development meetings are sponsored by his or her company, that company must be at least a Basic Entity Member of IEEE-SA.

When entity standards working group meetings are co-located with IEEE individual standards working group meetings, the participants in the individual standards working group may observe such co-located entity working group meetings at up to two meetings per calendar year without having to fulfill any specific membership requirements.

SASB Bylaws and SASB OpMan RE: Open Source

Agenda item 5.5.1 was taken prior to discussion on the P&P.

There was a motion (from ProCom) to approve the following updates to the *IEEE-SA Standards Board Operations Manual* and to forward the following updates to the *IEEE-SA Standards Board Bylaws* to the IEEE-SA Board of Governors for final approval consideration. In the absence of objection, the motion was approved.

IEEE-SA Standards Board Bylaws

5.2.1.1 Membership requirements for standards developed under the individual method

Officers ~~Chairs, Vice Chairs, Secretaries, and Treasurers~~ of IEEE standards working groups developing standards under the individual method shall be members of IEEE-SA and shall also be either IEEE members of any grade, except Student grade, or IEEE affiliates. Designees (those designated to manage the Standards Association ballot) in the IEEE Standards Association individual ballot process shall be members of IEEE-SA and shall also be either IEEE members of any grade, except Student grade, or IEEE affiliates.

5.6 Open Source Software Development

IEEE standards development and Industry Connections activities shall comply with all IEEE and IEEE-SA requirements for development of open source software, including

acceptance of the Terms of Use for the IEEE Open Source Platform. Any IEEE Standards project or Industry Connections activity that intends to develop or incorporate open source software (either normatively or informatively) in the standard or Industry Connections deliverable shall indicate this intent on the PAR or ICAID. Approval by the IEEE-SA Standards Board of the PAR or ICAID that indicates possible incorporation of open source software, as well as approval by the IEEE-SA Board of Governors of the use of the IEEE Open Source Platform for these open source activities, constitutes approval for contribution, development, and maintenance of open source software for the IEEE standard or Industry Connections deliverables. An IEEE Standards project or Industry Connections activity shall not develop open source software without prior approval of the IEEE-SA Standards Board.

All Contributions of open source software for use in IEEE standards development and Industry Connections activities shall be accompanied by an approved IEEE Contributor License Agreement (CLA) appropriate for the open source license under which the Work Product will be made available. CLAs, once accepted, are irrevocable.

IEEE-SA Standards Board Operations Manual

2 Related documents

American National Standards Institute, *ANSI Essential Requirements: Due process requirements for American National Standards* (current edition).

IEEE Standards Association Operations Manual.

IEEE-SA Standards Board Bylaws.

IEEE-SA Board of Governors Open Source Operations Manual.

PAR Form.

IEEE-SA Standards Board Working Guide for Submittal of Proposed Standards and Form for Submittal of Proposed Standards. (Known as the IEEE-SA Working Guide for the Submittal of Proposed Standards.)

IEEE Standards Style Manual.

Robert's Rules of Order, Newly Revised (current edition).

5.4.4 Mandatory coordination

The Standards Committee shall coordinate via circulation of drafts with the following entities:

— IEEE Standards editorial staff during Mandatory Editorial Coordination, Standards Association ballot, and RevCom review

— The IEEE-SA Board of Governors when the standard incorporates (either

normatively or informatively) Open Source developed by the Standards Committee or Working Group (see 6.5 and subclause 5.6 of the *IEEE Standards Association Standards Board Bylaws*)

— The IEEE Registration Authority Committee (RAC) when the draft includes registration activity (see subclause 5.7 of the *IEEE Standards Association Operations Manual*):

1) The PAR indicates the possible registration of assigned names or assigned numbers to be included in or used by the proposed project.

2) It becomes apparent through development of the draft that:

a) new registration of assigned names or assigned numbers will be included in the draft that will be assigned under a standards developing organization (SDO), or a Working Group or Standards Committee would like to request authority to conduct such assignment;

b) the draft includes reference to, or new specifications for use of, registration activity defined external to the proposed standard.

The RAC, IEEE Standards editorial staff, or RevCom may request RAC review of a draft.

Comments from mandatory coordination entities shall be given appropriate consideration and response by the Standards Committee. At the time of project submittal to the IEEE-SA Standards Board for approval consideration as an IEEE standard, the Standards Committee shall supply the most recent mandatory coordination comments and indicate either acceptance or a request for a waiver (see 4.2.3.2).

6.5 Open Source

Open Source is digital work for which the human-readable source code is available – in the preferred form for making modifications – for use, study, re-use, modification, enhancement, and re-distribution by the users. Open Source applies to software and hardware, which may include computer code, hardware designs, data, documentation, documents, and other digital objects. Other Open Source terms are defined in Clause 2 of the *IEEE-SA Board of Governors Open Source Operations Manual.*

Development of Open Source for incorporation in IEEE standards, as a normative or informative component, shall utilize the IEEE Open Source Platform and tools that are designated by IEEE for IEEE Open Source Projects. The Standards Committee and Working Group shall comply with IEEE Open Source policies and procedures, and policies of the IEEE Open Source Platform. All IEEE Open Source Projects shall be hosted on the IEEE Open Source Platform.

6.5.1 Project authorization

Project authorization for the incorporation of Open Source in an IEEE standard requires both PAR approval by the IEEE-SA Standards Board and approval by the IEEE-SA Board

of Governors to host the IEEE Open Source Project on the IEEE Open Source Platform, subject to an approved open source license. Addition of Open Source to a completed standard or an active IEEE standards development project requires approval of a Revision or Modified PAR by the IEEE-SA Standards Board, as applicable.

A PAR Study Group shall not develop Open Source (neither code nor documentation).

The PAR shall indicate whether Open Source may be incorporated (whether normatively or informatively), and the type of open source license under which any Open Source developed in connection with the IEEE Open Source Project shall be distributed.

The Standards Committee and Working Group shall obtain approval from the IEEE-SA Board of Governors for development on the IEEE Open Source Platform of the IEEE Open Source Project under a single IEEE approved open source license.

Changes to the type of open source license are discouraged, and will require a Modified PAR with the request for a change of license noted in Section 8.1 of the PAR. If the license type is changed, then appropriate Contributor License Agreements (CLAs) for the new open source license must be obtained from all previous Contributors prior to publicly indicating a change in the license on the IEEE Open Source Platform. The open source license type identified on the PAR shall not be changed once the Standards Association ballot has begun.

If the PAR for an IEEE standard that incorporates Open Source expires or is withdrawn, the Standards Committee shall either

— Transfer the IEEE Open Source Project to another active standards development project (which may require a New or Modified PAR);
— Transition the IEEE Open Source Project to another project category on the IEEE Open Source Platform; or
— Transition the IEEE Open Source Project to inactive status.

6.5.2 Governance of IEEE Open Source Projects incorporated in IEEE standards

Development and maintenance of the technical content (code and documentation) of IEEE Open Source Projects incorporated in an IEEE standard are the responsibility of the Standards Committee and its Working Groups. This responsibility continues as long as the standard is active. A Standards Committee may form an Open Source subgroup that coordinates Open Source development for multiple Working Groups under that Standards Committee. A Standards Committee may establish one or more Open Source subgroups to manage several IEEE Open Source Projects, or delegate responsibility to the applicable Working Group to establish its own Open Source subgroup. The Open Source subgroup shall comply with all IEEE Open Source policies and procedures, and all policies of the IEEE Open Source Platform.

An Open Source subgroup (of the Standards Committee or Working Group) shall be led by an IEEE Open Source Project Lead who shall be designated as an officer of the responsible Standards Committee or Working Group. The IEEE Open Source Project Lead is responsible for the vitality, organization, development, evaluation, operation, security, and maintenance of an IEEE Open Source Project. The IEEE Open Source Project Lead may communicate directly with the IEEE Open Source Platform team regarding technical

matters.

Each IEEE Open Source Project incorporated in an IEEE standard shall have at least one Maintainer, who may be the IEEE Open Source Project Lead. Maintainers have the authority to commit (save changes) to the IEEE code and document repository associated with an IEEE Open Source Project, and to assign Committers. Maintainers shall be a member of the Standards Committee or Working Group responsible for the project and shall be an IEEE member of any grade and a member of IEEE-SA. Committers shall be members of the Standards Committee or Working Group responsible for the project and shall be responsible for committing code to the IEEE code and document repository associated with an IEEE Open Source Project.

The IEEE Open Source Project Lead and Maintainer(s) shall be responsible for coordinating the development of Open Source with the Working Group and comment resolution group, and obtaining applicable CLAs for all Contributions to the IEEE Open Source Project.

6.5.2.1 Contributions to Open Source

An IEEE Open Source Contributor is any person who submits any material to an IEEE Open Source Project, whether as an individual or on behalf of an organization. Material may include, but is not limited to, Open Source works, comments, and marketing materials. IEEE membership is not required to be a Contributor. Every Contributor is required to obtain an IEEE account that requires agreeing to the IEEE Code of Conduct. Every submission by an IEEE Open Source Contributor shall be associated with the IEEE account of the Contributor. All Contributors to IEEE Open Source Projects incorporated in an IEEE standard shall declare their affiliation(s) (see 5.1.2.3).

All members of the Open Source subgroup shall submit CLAs applicable for the entire IEEE Open Source Project(s) for which they are responsible, or for all IEEE Open Source Projects under the applicable open source license(s). The Working Group Chair is responsible for confirming that appropriate CLAs are submitted for all Contributions to any Open Source developed by the Working Group.

Every Contribution to an IEEE Open Source Project shall have an appropriate CLA for the Contribution and be under the same open source license as indicated on the repository. If the type of open source license is changed on the PAR, updated CLAs shall be obtained from all Contributors to the IEEE Open Source Project prior to indicating a change in the license on the IEEE Open Source Platform.

6.5.2.2 Application of patent policy

The IEEE-SA patent policy applies to Open Source that is incorporated in a standard, even if a CLA has been submitted. IEEE does not determine whether there is consistency between Letters of Assurance and CLAs. A call for patents notice shall be posted on the IEEE Open Source Platform in the area where CLAs are submitted for all Open Source developed by the Working Group that is incorporated normatively or informatively in a draft or approved standard.

The IEEE Open Source Platform, in the area where CLAs are submitted, shall have a pointer to Accepted Letters of Assurance, as well as the appropriate sections of the *IEEE-*

SA Standards Board Bylaws and *IEEE-SA Standards Board Operations Manual* relating to intellectual property.

The IEEE Standards website shall make available information about all Accepted CLAs for IEEE Open Source Projects incorporated in an IEEE standard, and information about Accepted CLAs shall also be available where Accepted Letters of Assurance are posted on the website.

6.5.2.3 Incorporation of Open Source in standards

IEEE standards may incorporate the use of Open Source in two ways:

— Normatively, where use of the Open Source is required when implementing the standard
— Informatively, where the Open Source is provided for information only, and not required for implementation

All IEEE standards that incorporate Open Source shall identify the appropriate use (normative or informative) of the Open Source for compliance with the standard, and the location of the software code and documentation in the IEEE Open Source repository.

Open Source that is incorporated normatively without a specific version shall not be included in the text of the draft standard unless it is marked as an Example.

Informative documentation shall be included in the published standard (e.g., as an Annex) explaining how to access and run the Open Source. The form of this documentation shall comply with the *IEEE Standards Style Manual*, and files provided to IEEE Standards editorial staff shall be compliant with requirements for standards publication.

IEEE Open Source incorporated in a draft IEEE standard that is published prior to approval of the standard by the IEEE-SA Standards Board shall include IEEE-SA disclaimer text (see the *IEEE Standards Style Manual*) on the IEEE Open Source Platform and in all IEEE Open Source in the IEEE Open Source repository for the IEEE Open Source Project.

The guidance on references listed in the *IEEE Standards Style Manual* applies to normative and informative references to Open Source. A reference shall specify one or more source code libraries within a specified project in a specified code repository. A reference may specify one or more specific versions, including “the most current version,” of each library.

Normative use of Open Source is discouraged, unless required for accuracy, functionality, safety, security, or compatibility. Open Source that is incorporated normatively without referencing specific version(s) (i.e., it is undated) shall be made available and maintained on the IEEE Open Source Platform. This restriction does not apply to informative references.

If an IEEE standard normatively references a specific version of the Open Source (i.e., it is a dated reference), the version can be changed only through a revision of the standard, or an amendment or corrigendum to the standard. The restriction on published

amendments (see 8.1.2) does not apply for amendments that are intended only to update Open Source or references to Open Source.

For normatively referenced Open Source that does not have a specific version, the Standards Committee or Working Group shall review updates to the Open Source during the standards development process and should review updates to the Open Source after IEEE-SA Standards Board approval to determine if the software continues to align with the standard, and if not, to take appropriate action (e.g., determine whether a dated reference should be noted in the standard instead).

6.5.3 Mandatory coordination

During mandatory coordination, the Standards Committee shall include all Open Source developed by the Working Group and incorporated in the draft. All applicable CLA identifiers shall be submitted during Mandatory Editorial Coordination. The IEEE Open Source Community Manager and IEEE-SA IPR Staff shall review the Open Source, CLAs, and associated documentation prior to initial ballot. Mandatory coordination comments by the IEEE Open Source Community Manager and IEEE-SA IPR Staff shall be addressed prior to initial ballot.

6.5.4 Standards Association ballot and public review

All IEEE draft standards that incorporate Open Source developed by an IEEE Working Group shall provide notification during the invitation to ballot and on the public review site that (a) the IEEE draft standard incorporates Open Source, (b) applicable CLA(s) are required for any Contributions to IEEE Open Source incorporated in an IEEE standard, and (c) template CLAs are available, with links to the applicable CLA templates.

During the Standards Association ballot, balloters shall be granted access to view any referenced Open Source. After the initiation of the Standards Association ballot process, the IEEE Open Source incorporated in an IEEE standard shall only be updated to reflect changes approved by the ballot group or required by IEEE for the secure and productive operation of the IEEE Open Source Platform.

The IEEE Open Source Project Lead and at least one Maintainer shall be members of the comment resolution group.

Any comments that provide modifications to IEEE Open Source may not be implemented in the IEEE Open Source or the draft standard and may not be considered unless an applicable CLA was previously submitted to IEEE. The IEEE Open Source Project Lead and Maintainer are responsible for obtaining all CLAs prior to the start of initial ballot, and prior to the next recirculation ballot if the Open Source Contribution is inserted during comment resolution.

Once the Standards Association ballot is completed for a draft standard, any IEEE Open Source developed by the Working Group that is incorporated shall not be updated until after IEEE-SA Standards Board approval, and then only if the Open Source is undated.

Public review commenters shall be granted access to view the IEEE Open Source developed by the Working Group. Any public review comments that provide modifications to the IEEE Open Source may not be implemented in the IEEE Open Source or in the

draft standard and may not be considered unless an applicable CLA was previously submitted to IEEE.

6.5.5 Release and maintenance of Open Source

Release of Open Source incorporated into an IEEE standard shall occur only after approval of the standard by the IEEE-SA Standards Board, and the IEEE Open Source Project shall be included in the official IEEE listing. After the standard is approved, only Open Source that does not have a specific version (undated) may be updated without requiring a revision of the standard, or an amendment or corrigendum (see 8.1.2). Normatively referenced Open Source that is undated may be updated only with approval from the Standards Committee, Working Group, or a subgroup delegated with that responsibility, unless the changes are required by IEEE for the secure and productive operation of the IEEE Open Source Platform.

SASB OpMan RE: Working Group Draft Sharing List

There was a motion (from ProCom) to approve the following updates to the *IEEE-SA Standards Board Operations Manual*. In the absence of objection, the motion was approved.

IEEE-SA Standards Board Operations Manual

7.2.4 Technical Contributions

If a liaison organization external to IEEE makes a technical Contribution to an IEEE draft standard, the liaison organization thereby agrees to comply with IEEE-SA's policies and procedures related to Contributions (e.g., the IEEE-SA Copyright Policy, outlined in Clause 7 of the *IEEE-SA Standards Board Bylaws* and subclause 6.1 of the *IEEE-SA Standards Board Operations Manual*; the IEEE-SA Patent Policy in regards to disclosure of potential essential patent holders, outlined in Clause 6 of the *IEEE-SA Standards Board Bylaws* and subclause 6.3 of the *IEEE-SA Standards Board Operations Manual*).

If a liaison organization submits one of its copyrighted documents to a Standards Committee/Subgroup for coordination, the document shall not be considered to be a Contribution and shall not be used in any IEEE document without prior permission from the organization external to IEEE. Prior to distributing the organization's document, the Standards Committee/Subgroup shall reference the Working Group Draft Sharing List to determine if guidance is required from the IEEE-SA Program Manager.

5.5.1 Update from SASB Ad Hoc on Open Source Implementation

Robby Robson, OSCom Chair, reported.

5.6 Standards Review Committee (RevCom)

Travis Griffith, RevCom Chair, reported.

Travis thanked Karen Evangelista for her assistance in keeping the RevCom Chair informed and on track.

6 Standards Coordinating Committee Reports

6.1 SCC Coordinator's Report

This item occurred prior to item 5.5

Howard Wolfman, SCC Coordinator, reported.

There was a motion to accept the SCC39 report.
In the absence of objection, the motion was approved.

Howard thanked Pat Roder for her assistance in working with the SCC39 Chair to obtain the report.

6.2 Scheduled Reports Due in November:

6.2.1 SCC39 – International Committee on Electromagnetic Safety (*Jafar Keshvari)*

7 Old Business

7.1 SCC18 Oversight Committee Report

John Kulick, SCC18 Oversight Committee Chair, reported.

7.1.1 Review of Draft SCC18 P&P

Chair Hoffman reported.

There was a motion:
The SASB directs SCC18 to operate under draft 9.7 of the SCC18 P&P.
The motion was approved. [Vote: Yes=12, No=3 (Hunter, Koshy, Mohla), Abstain=5]

NOTE: SCC18 may propose revisions to its P&P at any time for SASB consideration.

7.2 Update from Ad Hoc on Dominance FAQs

Andrew Myles, Ad Hoc Chair, reported.

The ad hoc was disbanded with Thanks.

7.3 'Sponsor' Terminology Implementation Update

Dave Ringle, Director – IEEE Standards Association Governance, provided a brief verbal update.

Dave noted that some items are still in the process of being updated. It is expected that staff will complete all updates by end of Q1 2020.

7.4 Update from Ad Hoc on myProject Rollout

Annette Reilly, Ad Hoc Chair, reported.

7.5 Update from Ad Hoc on Global Representation in SASB Governance

Jingyi Zhou, Ad Hoc Chair, reported.

7.6 Update on Time Zone NesComs Proposal

[*After lunch there was recognition of the passing of Bruce McClung (former member of the SASB) with a moment of silence.*]

Jean-Philippe Faure, BOG TZ NesComs Ad Hoc Chair, reported.

There was discussion on agenda items 7.5 and 7.6.

The Chair was passed to SASB Vice Chair Ted Burse for this discussion.

IEEE-SA President Robert Fish asked the SASB to provide guidance on mitigating risks or to come up with a new proposal.

After discussion, the Chair was handed back to SASB Chair Hoffman.

Jean-Philippe stated that the BOG TZ NesComs ad hoc will review the risk analysis in detail.

7.7 Update RE: P802.11ax

Dorothy Stanley, 802.11 Working Group Chair, reported.

The SASB entered Executive Session at 2:40 p.m.

Remaining in the room: BOG Members, SASB Members, IEEE-SA Senior Directors, IEEE-SA Governance staff, IEEE-SA OPM staff, Yvette Ho Sang, and Claire Topp.

8 Executive Session Items

8.1 Follow-up on the SASB Ratification of the Actions Taken by IEEE 802 LMSC in Connections with the 802.11 TGax Complaint

8.2 Report from SASB Oversight Committee RE: Potential Dominance within a Specific WG

Executive Session concluded at 2:53 p.m.

9 New Business

None.

10 IEEE-SA Managing Director's Report

Konstantinos Karachalios, IEEE-SA Managing Director, reported.

11 Informational Reports

11.1 TAB Representative's Report

Stephen Dukes, TAB Representative to the SASB, reported.

11.2 CAG Report

Don Wright, SASB Liaison to the CAG, reported.

11.3 IEEE-SA President's Report

Robert Fish, IEEE-SA President, reported.

11.4 SASB Chair's Report

Chair Hoffman reported.

Chair Hoffman thanked the SASB + Standing Committee Members for their service this year.

11.5 Standards Education Committee Update

Robby Robson, Standards Education Committee Chair, reported

12 Next Meeting

The next SASB meeting is scheduled for Thursday, 05 March 2020, in New Delhi, India.

13 SASB Resolutions

The SASB noted that it would take action to inactivate the following Standards Committee (VT/RTSC) whose WG P&P was requested prior to 01 March 2019 if the Standards Committee has not submitted WG P&P by 29 February 2020.

The SASB directed SCC18 to operate under draft 9.7 of the SCC18 P&P. [NOTE: SCC18 may propose revisions to its P&P at any time for SASB consideration.]

The SASB recognized the Consumer Electronics Society/Smart Devices Standards Committee, to be abbreviated as CES/SDSC, as an official Standards Committee, in accordance with IEEE SASB Bylaws 5.2.2.

The SASB recognized the Vehicular Technology Society/Automated Vehicles Standards Committee, to be abbreviated as VT/AVSC, as an official Standards Committee, in accordance with IEEE SASB Bylaws 5.2.2.

14 Adjournment

There being no further business, the meeting was adjourned at 4:07 p.m.