IEEE-SA Standards Board New Standards Committee (NesCom) Meeting Minutes
4 December 2018
9:00 a.m. - 2:30 p.m.
IEEE Operations Center, Piscataway, New Jersey, USA

Members Present:
Ted Burse, Chair
Travis Griffith
Richard Holub
Michael Janezic
David Law
Hung Ling
Kevin Lu
Damir Novosel
Jingyi Zhou

Members Absent:
Stephen Dukes
Dong Liu

Guests:
Chuck Adams
Michael Atlass
Jean-Philippe Faure
Alex Gelman
Victor Huang
John Kulick
Meghna Mudgal
Paul Nikolich
Kishik Park
Serafin San Juan Vera
Dorothy Stanley
Constance Weise
Don Wright

Staff:
Julie Alessi
Melissa Aranzamendez
Christy Bahn
Christina Boyce
Kim Breitfelder
Sri Chandrasekaran
Lloyd Green
Konstantinos Karachalios
Soo Kim
Christopher Krysa
Victoria Kuperman-Super
Greg Marchini
Daniella Martinez
Adam Newman
Mary Lynne Nielsen
Nicholas Orlando
Dave Ringle
Pat Roder
Jennifer Santulli
Sam Sciacca
Alpesh Shah
Erin Spiewak
Ravi Subramaniam
Tom Thompson
Lisa Weisser, Administrator
Meng Zhao

[Unless otherwise noted, all votes are unanimous]

1 CALL TO ORDER

Chair Burse called the meeting to order at 9:00 a.m. There was a round of introductions by all present.

2 REVIEW OF AGENDA
A motion was made to approve the 4 December 2018 NesCom meeting agenda. The motion was unanimously approved.

2.1 Consent Agenda

2.1.1 Withdrawal Requests

IEEE Computer Society/Learning Technology

P1484.11.3
Standard for Learning Technology Extensible Markup Language (XML) Schema Binding for Data Model for Content Object Communication
Recommendation: Approve PAR withdrawal

IEEE Communications Society/Mobile Communication Networks Standards Committee

P1933.1
Hybrid Automatic Repeat reQuest for High Throughput Applications
Recommendation: Approve PAR withdrawal

IEEE Instrumentation and Measurement Society/TC9 - Sensor Technology

P1451.4a
Standard for a Smart Transducer Interface for Sensors and Actuators - Mixed-Mode Communication Protocols and Transducer Electronic Data Sheet (TEDS) Formats - Amendment
Recommendation: Approve PAR withdrawal

2.1.2 PARs to be Administratively Withdrawn

P802.15.4r (C/LM)
Standard for Local and metropolitan area networks--Part 15.4: Low-Rate Wireless Personal Area Networks (LR-WPANs) Amendment for Radio based Distance Measurement Techniques
(New PAR)

P1363.3-2013/Cor 1 (C/MSC)
Standard for Identity-Based Cryptographic Techniques Using Pairings - Corrigendum 1: Corrections to Citations
(New PAR)

P2409 (C/SAB)
Trial Use Recommended Practice for Design Process Documentation Template (DPDT)
(New PAR)
**P1680.6** (C/SAB)
Standard for Environmental Assessment of Complex Set Top Boxes
(New PAR)

**P1911.3** (COM/Access-Core-SC)
Standard for HDBaseT 5Play
(New PAR)

**P11073-20101** (EMB/11073)
(Revision PAR)

**P3004.4** (IAS/ICPS TBCC)
Recommended Practice for the Application of Medium- and High-Voltage Fuses in Industrial and Commercial Power Systems
(New PAR)

**P1719** (PE/EM)
Guide for Evaluating Stator Cores of AC Electric Machines Rated 1 MVA and Higher
(New PAR)

**P1189** (PE/ESSB)
Guide for Selection of Batteries for Standby Applications
(Revision PAR)

**P1879** (PE/IC)
Trial-Use Guide for Extending the Life of Power Cables in the Field
(New PAR)

**P1613-2009/Cor 1** (PE/SUB)
Standard Environmental and Testing Requirements for Communications Networking Devices Installed in Electric Power Substations - Corrigendum 1: Corrected definition of "communications port"
(New PAR)

**P1032** (PE/SUB)
Guide for Protecting Transmission Static Var Compensators
(New PAR)

**P1613.1** (PE/SUB)
Standard Environmental and Electromagnetic Compatibility (EMC) Testing Requirements for Intelligent Electronic Devices (IEDs) Installed in Transmission and Distribution Facilities
(Revision PAR)

**PC135.100** (PE/T&D)
Standard for Line Hardware for Overhead Line Construction
(New PAR)

2.1.3 Sponsor Change Request for P2030.4 'Guide for Control and Automation Installations Applied to the Electric Power Infrastructure'
P2030.4 Current Sponsor: C/S2ESC; New Sponsor: SASB/SCC21

3 PARS FOR DISCUSSION

3.1 Modified PARs

IEEE Computer Society/LAN/MAN Standards Committee

P802.3ca
Standard for Ethernet
Amendment: Physical Layer Specifications and Management Parameters for 25 Gb/s and 50 Gb/s Passive Optical Networks
Recommendation: Approve modified PAR (7 approve, 1 recuse [Law])

IEEE Communications Society/Access and Core Networks Standards Committee

P1904.2
Standard for Universal Management Tunnel for Ethernet-based Subscriber Access Networks
Recommendation: Approve modified PAR

IEEE Industry Applications Society/Petroleum & Chemical Industry

P303
Recommended Practice for Auxiliary Devices for Rotating Electrical Machines in Class I, Division 2 and Zone 2 Locations and Class II, Division 2 and Zone 22 Locations
Recommendation: Approve modified PAR

IEEE Power and Energy Society/Power System Communications and Cybersecurity

P1711
Standard for a Cryptographic Protocol for Electric Power System (EPS) Communications Links
Recommendation: Approve modified PAR

IEEE Power and Energy Society/Power System Relaying and Control

PC37.92
Standard for Analog Inputs to Protective Relays from Electronic Voltage and Current Transducers
Recommendation: Approve modified PAR
IEEE Power and Energy Society/Transmission and Distribution

**P1806**
Guide for Reliability Based Placement of Overhead and Underground Switching and Overcurrent Protection Equipment Up to and Including 38 kV
**Recommendation: Approve modified PAR**

IEEE Vehicular Technology Society/Intelligent Transportation Systems

**P1609.12**
Standard for Wireless Access in Vehicular Environments (WAVE)-Identifiers
**Recommendation: Approve modified PAR**

### 3.2 Extension Requests

IEEE Computer Society/LAN/MAN Standards Committee

**P802.3ca**
Approved Draft Standard for Ethernet Amendment: Physical Layer Specifications and Management Parameters for 25 Gb/s, 50 Gb/s, and 100 Gb/s Passive Optical Networks
**Recommendation: Approve request for an extension until December 2020 (7 approve, 1 recuse [Law])**

**P802.22**
Standard for Information Technology - Local and Metropolitan Area Networks - Specific Requirements - Part 22: Cognitive Radio Wireless Regional Area Networks (WRAN) Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Policies and Procedures for Operation in the Bands that Allow Spectrum Sharing where the Communications Devices may Opportunistically Operate in the Spectrum of the Primary Service
**Recommendation: Approve request for an extension until December 2019 (7 approve, 1 recuse [Law])**

**P802.22.3**
Standard for Spectrum Characterization and Occupancy Sensing
**Recommendation: Approve request for an extension until December 2019 (7 approve, 1 recuse [Law])**

IEEE Computer Society/Software & Systems Engineering Standards Committee

**P982.1**
Standard for Measures of the Software Aspects of Dependability
**Recommendation: Approve request for an extension until December 2020**

IEEE Computer Society/Test Technology

**P1838**
Standard for Test Access Architecture for Three-Dimensional Stacked Integrated Circuits  
**Recommendation:** Approve request for an extension until December 2019

IEEE Communications Society/Access and Core Networks Standards Committee

**P1904.2**  
Standard for Management Channel for Customer-Premises Equipment Connected to Ethernet-based Subscriber Access Networks  
**Recommendation:** Approve request for an extension until December 2020

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

**P11073-10101**  
Standard for ISO/11073-10101:2004, Health Informatics - Point-of-Care Medical Device Communication - Nomenclature  
**Recommendation:** Approve request for an extension until December 2019

IEEE Electromagnetic Compatibility Society/Standards Development Committee

**P1302**  
Guide for the Electromagnetic Characterization of Conductive Gaskets in the Frequency Range of DC to 40 GHz  
**Recommendation:** Approve request for an extension until December 2019

IEEE Industry Applications Society/Technical Books Coordinating Committee

**P3002.7**  
Recommended Practice for Conducting Motor-Starting Studies in Industrial and Commercial Power Systems  
**Recommendation:** Approve request for an extension until December 2019

**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 2019

**P3004.7**  
Recommended Practice for the Protection of Conductors Used in Industrial and Commercial Power Systems  
**Recommendation:** Approve request for an extension until December 2019

**P3004.11**  
Recommended Practice for Bus and Switchgear Protection in Industrial and Commercial Power Systems  
**Recommendation:** Approve request for an extension until December 2019
IEEE Industry Applications Society/Petroleum & Chemical Industry

P303
Recommended Practice for Auxiliary Devices for Rotating Electrical Machines in Class I, Division 2 and Zone 2 Locations and Class II, Division 2 and Zone 22 Locations
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Energy Development & Power Generation

P1010
Guide for Control of Hydroelectric Power Plants
Recommendation: Approve request for an extension until December 2020

P1147
Guide for the Rehabilitation of Hydroelectric Power Plants
Recommendation: Approve request for an extension until December 2020

P1248
Guide for the Commissioning of Electrical Systems in Hydroelectric Power Plants
Recommendation: Approve request for an extension until December 2019

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

P1491
Recommended Practice for Battery Monitoring in Stationary Applications
Recommendation: Approve request for an extension until December 2021

IEEE Power and Energy Society/Insulated Conductors

P1406
Guide for the Use of Gas-in-Fluid Analysis for Paper and Laminated Paper-Polypropylene Insulated Cable Systems
Recommendation: Approve request for an extension until December 2019

P1407
Guide for Accelerated Aging Tests for 5 kV to 46 kV Extruded Electric Power Cables Using Water-Filled Tanks
Recommendation: Approve request for an extension until December 2020
(7 approve, 1 abstain [Ling])

IEEE Power and Energy Society/Power System Communications and Cybersecurity

P1711
Standard for a Cryptographic Protocol for EPS Serial Links
Recommendation: Approve request for an extension until December 2020

P1711.2
Standard for Secure SCADA Communications Protocol (SSCP)
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Power System Relaying and Control

PC37.91
Guide for Protecting Power Transformers
Recommendation: Approve request for an extension until December 2019

PC37.230
Guide for Protective Relay Applications to Distribution Lines
Recommendation: Approve request for an extension until December 2019

PC37.247
Standard for Phasor Data Concentrators for Power Systems
Recommendation: Approve request for an extension until December 2019

PC37.249
Guide for Categorizing Security Needs for Protection and Automation Related Data Files
Recommendation: Approve request for an extension until December 2020

PC37.250
Guide for Engineering, Implementation, and Management of System Integrity Protection Schemes
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Substations

P1615
Recommended Practice for Network Communication in Electric Power Substations
Recommendation: Approve request for an extension until December 2019

PC37.2
Standard Electrical Power System Device Function Numbers, Acronyms, and Contact Designations
Recommendation: Approve request for an extension until December 2020

IEEE Power and Energy Society/Switchgear

PC37.20.9
Metal Enclosed Switchgear Rated 1 kV to 52 kV Incorporating Gas Insulation Systems
Recommendation: Approve request for an extension until December 2019

PC37.66
Standard Requirements for Capacitor Switches for AC Systems (1 kV to 38 kV)
Recommendation: Approve request for an extension until December 2020
IEEE Power and Energy Society/Transmission and Distribution

P516
Guide for Maintenance Methods on Energized Power Lines
Recommendation: Approve request for an extension until December 2020

P563
Guide on Conductor Self-Damping Measurements
Recommendation: Approve request for an extension until December 2019

P664
Recommendation: Approve request for an extension until December 2019

P751
Guide for Wood Structures Used for Overhead Electric Transmission Lines
Recommendation: Approve request for an extension until December 2019

P1036
Guide for the Application of Shunt Power Capacitors
Recommendation: Approve request for an extension until December 2019

P1071
Application Guide for an Engineered Restoration Program for Failed Transmission Structures
Recommendation: Approve request for an extension until December 2019

P1806
Guide for Reliability Based Placement of Overhead and Underground Switching and Overcurrent Protection Equipment Up to and Including 38 kV
Recommendation: Approve request for an extension until December 2020

P1882
Recommendation: Approve request for an extension until December 2019

IEEE Power and Energy Society/Transformers

P1276
Guide for the Application of High-Temperature Insulation Materials in Liquid-Immersed Distribution, Power and Regulating Transformers
Recommendation: Approve request for an extension until December 2020

P60214-2
Tap-Changers - Part 2: Application Guide
Recommendation: Approve request for an extension until December 2019

PC57.12.23
Standard for Submersible Single-Phase Transformers: 250 kVA and Smaller; High Voltage 34 500GrdY/19 920V and Below; Low Voltage 600 V and Below
Recommendation: Approve request for an extension until December 2019

PC57.12.51
Guide for Mechanical Interchangeability of Ventilated Dry Type Transformers
Recommendation: Approve request for an extension until December 2020

PC57.21
Standard Requirements, Terminology, and Test Code for Shunt Reactors Rated Over 500 kVA
Recommendation: Approve request for an extension until December 2020

IEEE Power Electronics Society/Standards Committee

P389
Recommended Practice for Testing Transformers and Inductors for Electronics Applications
Recommendation: Approve request for an extension until December 2020

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

P2030.2.1
Recommendation: Approve request for an extension until December 2019

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

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: Approve request for an extension until December 2019

IEEE Vehicular Technology Society/Rail Transportation Standards Committee

P1791
Recommended Practice for Terminology Used for Direct Current Electric Transit Overhead Contact Systems
Recommendation: Approve request for an extension until December 2019
P2406
Standard for Design and Construction of Non-Load Break Disconnect Switches for Direct Current Applications on Transit Systems
Recommendation: Approve request for an extension until December 2020

3.3 New PARs

IEEE-SA Board of Governors/Corporate Advisory Group

P2418.7
Standard for the Use of Blockchain in Supply Chain Finance
Recommendation: Approve new PAR until December 2022 (7 approve, 1 recuse [Law – Bucket motion])

IEEE Computer Society/LAN/MAN Standards Committee

P802.3cp
Standard for Ethernet
Amendment: Bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs
Recommendation: Approve new PAR until December 2022 (7 approve, 1 recuse [Law])

P802.3cs
Standard for Ethernet
Amendment: Physical Layers and management parameters for increased-reach point-to-multipoint Ethernet optical subscriber access (Super-PON)
Recommendation: Approve new PAR until December 2022 (7 approve, 1 recuse [Law])

P802.11bc
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 Broadcast Service
Recommendation: Approve new PAR until December 2022

P802.11bd
Standard for Information technology--Telecommunications and information exchange between systems Local and metropolitan area networks--Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications
Amendment: Enhancements for Next Generation V2X
Recommendation: Approve new PAR until December 2022

P802.19.3
Recommended Practice for Local and Metropolitan Area Networks - Part 19: Coexistence Methods for 802.11 and 802.15.4 based systems operating in the Sub-1 GHz Frequency Bands

**Recommendation:** Approve new PAR until December 2022

IEEE Computer Society/Learning Technology

**P3652.1**
Guide for Architectural Framework and Application of Federated Machine Learning

**Recommendation:** Approve new PAR until December 2022

IEEE Consumer Electronics Society/Standards Committee

**P2140.1**
Standard for General Requirements for Cryptocurrency Exchanges

**Recommendation:** Approve new PAR until December 2022

IEEE Communications Society/Access and Core Networks Standards Committee

**P1936.1**
Standard for Drone Applications Framework

**Recommendation:** Approve new PAR until December 2022

**P1937.1**
Standard Interface Requirements and Performance Characteristics for Payload Devices in Drones

**Recommendation:** Approve new PAR until December 2022

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

**P1934.1**
Nomenclature and Taxonomy for Distributing Computing, Communications and Networking along the Things-to-Cloud Continuum

**Recommendation:** Approve new PAR until December 2022 (7 approve, 1 abstain [Zhou])

IEEE Communications Society/Mobile Communication Networks Standards Committee

**P1914.3a**
Standard for Radio over Ethernet Encapsulations and Mappings Amendment 1: Encapsulation Enhancements and Elaborations, Additional Operation, Administration, and Maintenance (OAM) Functions, Management Model, Clarification on Relationships between Parameters

**Recommendation:** Approve new PAR until December 2022

IEEE Engineering in Medicine and Biology Society/Standards Committee
P2801
Recommended Practice for the Quality Management of Datasets for Medical Artificial Intelligence
Recommendation: Approve new PAR until December 2022

P2802
Standard for the Performance and Safety Evaluation of Artificial Intelligence Based Medical Device: Terminology
Recommendation: Approve new PAR until December 2022

IEEE Power and Energy Society/Energy Storage & Stationary Battery Committee
P1679.3
Draft Guide for the Characterization and Evaluation of Flow Batteries in Stationary Applications
Recommendation: Approve new PAR until December 2022

IEEE Power and Energy Society/Transmission and Distribution
P2747
Recommendation: Approve new PAR until December 2022

P2797
Guide for Forecast and Early Warning of Icing on Overhead Transmission Lines in Micro-topographic Areas
Recommendation: Approve new PAR until December 2022

IEEE-SASB Coordinating Committees/SCC39 - International Committee on Electromagnetic Safety
P62704-1a
IEC/IEEE International Standard for Determining the Peak Spatial Average Specific Absorption Rate (SAR) in the Human Body from Wireless Communications Devices, 30 MHz - 6 GHz. Part 1: General Requirements for using the Finite Difference Time Domain (FDTD) Method for SAR Calculations Amendment 1 Extension of the SAR Spatial Averaging Algorithm for Equivalence to the Procedure Defined in the IEEE 1528 and IEC 62209-1 Standards
Recommendation: Approve new PAR until December 2022

IEEE Vehicular Technology Society/Intelligent Transportation Systems
P1609.4-2016/Cor 1
Standard for Wireless Access in Vehicular Environments (WAVE) -- Multi-Channel Operation
- Corrigendum 1: Miscellaneous corrections
Recommendation: Approve new PAR until December 2022
3.4 PARs for the Revision of Standards

IEEE Computer Society/Design Automation

P1801
Approved Draft Standard for Design and Verification of Low Power, Energy Aware Electronic Systems
Recommendation: Approve PAR for the revision of a standard until December 2022

IEEE Computer Society/Software & Systems Engineering Standards Committee

P26514
Systems and Software Engineering--Design and development of information for users
Recommendation: Approve PAR for the revision of a standard until December 2022

IEEE Industry Applications Society/Petroleum & Chemical Industry

P1584.1
Guide for the Specification of Scope and Deliverable Requirements for an Arc-Flash Hazard Calculation Study in Accordance with IEEE Std 1584
Recommendation: Approve PAR for the revision of a standard until December 2022

P62395
Electrical Resistance Trace Heating for Industrial and Commercial Applications
Recommendation: Approve PAR for the revision of a standard until December 2022

IEEE Power and Energy Society/Power System Communications and Cybersecurity

P1591.1
Standard for Testing and Performance of Hardware for Optical Ground Wire (OPGW)
Recommendation: Approve PAR for the revision of a standard until December 2022

IEEE Power and Energy Society/Power System Relaying and Control

PC37.90
Standard for Relays and Relay Systems Associated with Electric Power Apparatus
Recommendation: Approve PAR for the revision of a standard until December 2022

4 OLD BUSINESS

4.1 Ad Hoc Report - Review IEEE-SA Numbering Policy for Potential Enhancements - Jingyi Zhou

Jingyi Zhou reported on the discussions from the ad hoc regarding the current numbering policy. Consensus was reached on an updated version of the document with no substantive changes to the numbering policy, but with changes to the layout of the information to provide more clarity.

A motion was made (Zhou) and seconded (Griffith):

Motion: Approve the ad-hoc consensus version of “IEEE Standards Development Project Authorization Request (PAR) Numbering Policy Endorsed by NesCom on 20 September 1995 Revised 8 December 2009 Revised 4 December 2018”; Grant editorial rights to IEEE-SA staff to make final required format changes. Upon vote, the motion passed.

The ad hoc was disbanded with thanks.

4.2 Open Source Ad Hoc Report to NesCom - Dorothy Stanley

Dorothy Stanley reminded NesCom that the SASB OSS Framework and process flow diagram was shared with NesCom in November, and that these are still IEEE Confidential. She asked NesCom to review the documents and explained that there will be an impact to the PAR form and potentially to other aspects of NesCom as OS plans are further developed and rolled out.

4.3 Proposal for Continuous Revision PAR Request Process – Staff

Jonathan Goldberg represented a staff team to describe a process to create Continuous Revision PARs that was originally discussed at the June 2018 NesCom meeting. The process to generate the PARs is primarily an internal process, with Sponsors only needing to indicate that they plan to use this option. Among the potential benefits shown in the presentation, it would allow Working Groups to remain active with no lapse in standards development in continuously evolving areas of technology and could reduce the number of amendment/corrigendum projects.

A motion was made (Law) and seconded (Griffith):

Motion: Move to support the process for Continuous Maintenance PARs as described in the presentation. Upon vote, the motion passed.
5 NEW BUSINESS

5.1 myProject Walkthrough - Greg Marchini

Greg Marchini provided a demonstration of the updated myProject and he and Adam Newman replied to questions and took feedback from attendees. Among the user features that were noted as important but will need to be added in the next phase of the project were the ability to attach a document in a comment reply and the ability for NesCom members to sort and maintain the sort by those PARs on the NesCom agenda that they have already (preliminarily) voted to approve.

5.2 New Discussion Topic - Damir Novosel

With time left in the meeting, Damir Novosel introduced the topic of how to get multiple voices represented in developing standards. There was a discussion about current practices that encourage this, and further discussion about whether it is more important to look for quantity of people involved or quality of a small number of subject matter experts, and it was agreed that this is standard dependent.

6 NEXT MEETING

The next meeting of NesCom will take place on 25 January 2019 by teleconference.

7 ADJOURNMENT

There being no further business, the meeting was adjourned at 11:55 a.m.