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| Project | **Interfacing Cyber and Physical World Working Group**  <<https://sagroups.ieee.org/2888/>**>** |
| Title | **02-Dec\_2020 IEEE-SA NesCom Recommendations** |
| DCN | **2888-20-0044-00-0000** |
| Date Submitted | **November 19, 2020** |
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| Re: |  |
| Abstract | This document is the summary of the NesCom meeting held on December 02, 2020. It contains the list of projects submitted to NesCom for PAR approval and the recommendations from IEEE-SASB. Among the list, IEEE 2888.2, 2888.3 and 2888.4 PAR approvals are included |
| Purpose | The purpose of this document is to review the new PARs submitted to NesCom and the feedback provided by the committee so IEEE 2888 WG participating members gain the insight on how to approach to NesCom for future new projects |
| Notice | This document is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. |
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**NesCom - 02 December 2020**

Agenda Version: 1

Time: 8:30 a.m. - 12:30 p.m. ET (UTC-5)

Location: Teleconference

1. CALL TO ORDER
2. REVIEW OF AGENDA
   1. CONSENT AGENDA
      1. WITHDRAWAL REQUESTS
      2. PARS FOR ADMINISTRATIVE WITHDRAWAL
      3. PROJECT NUMBER CHANGE REQUEST FOR P2880 'STANDARD FOR HIGH VOLTAGE DIRECT CURRENT CIRCUIT BREAKERS ABOVE 3200 VDC'

* PAR number change request\_P2880.pdf

1. APPROVAL OF MINUTES FROM THE 21 SEPTEMBER 2020 MEETING
2. PARS FOR DISCUSSION
   1. MODIFIED PARS

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

**1. P1904.2**

Standard for Control and Management of Virtual Links in Ethernet-based Subscriber Access Networks

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

**2. P802.16t**

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

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

**3. P62395**

Electrical Resistance Trace Heating Systems for Industrial and Commercial Applications – Part 1: General and testing requirements

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

**4. P2800**

Standard for Interconnection and Interoperability of Inverter-Based Resources (IBR) Interconnecting with Associated Transmission Electric Power Systems

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

**5. P1613**

Standard for Environmental and Testing Requirements for Devices with Communications Functions used with Electric Power Apparatus

**6. PC37.1.2**

Guide for Databases Used in Utility Automation Systems

**7. PC37.90**

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

**8. PC37.90.2**

Power Apparatus – Radiated Electromagnetic Interference Withstand Capability Requirements and Tests

**IEEE Power and Energy Society/Switchgear**

**9. PC37.09-2018/Cor 1**

Standard Test Procedures for AC High-Voltage Circuit Breakers with Rated Maximum Voltage above 1000V - Corrigendum 1

**10. PC37.20.3**

Standard for Metal-Enclosed Interrupter Switchgear Rated Above 1 kV ac up to and Including 52 kV ac

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

**11. P1453**

Standard for Measurement and Limits of Voltage Fluctuations and Associated Light Flicker on AC Power Systems

**IEEE SA Board of Governors/Corporate Advisory Group**

**12. P2418.1**

Standard for the Framework of Blockchain Use in Internet of Things (IoT)

**13. P2418.5**

Standard for Blockchain in Energy

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

**Safety**

**14. PC95.7**

Standard for Electromagnetic Energy Safety Programs, 0 Hz to 300 GHz

* 1. EXTENSION REQUESTS

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

**1. P1904.2**

Standard for Universal Management Tunnel for Ethernet-based Subscriber Access Networks

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

**2. P1900.5.1**

Standard Policy Language for Dynamic Spectrum Access Systems

**3. P1900.6b**

Standard for Spectrum Sensing Interfaces and Data Structures for Dynamic Spectrum Access and other Advanced Radio Communication Systems. Spectrum Database Interfaces Amendment

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

**Standards Committee**

**4. P1913**

Software-Defined Quantum Communication

**5. P1930.1**

Recommended Practice for Software Defined Networking (SDN) based Middleware for Control and Management of Wireless Networks

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

**6. P1516**

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

**7. P1516.1**

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

**8. P1516.2**

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

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

**9. P2675**

DevOps - Standard for Building Reliable and Secure Systems Including Application Build, Package

and Deployment

**10. P7000**

Model Process for Addressing Ethical Concerns During System Design

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

**11. P1820**

Guide on the Selection of Transmission and Distribution Insulators with Respect to Cold Weather

Conditions

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

**12. P473**

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

**13. P1897**

Recommended Practice for the Resolution of Power-Line Gap-Noise Reports

**14. P2710**

Electromagnetic Shielding Performance of Enclosures for Portable Electronic Devices

**15. P2715**

Guide for the Characterization of the Shielding Effectiveness of Planar Materials

**16. P2716**

Guide for the Characterization of the Effectiveness of Printed Circuit Board Level Shielding

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

**17. P3333.2.2**

Standard for Three-Dimensional (3D) Medical Visualization

**18. P3333.2.3**

Standard for Three-Dimensional (3D) Medical Data Management

**19. P3333.2.4**

Standard for Three-Dimensional (3D) Medical Simulation

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

**20. P3004.7**

Recommended Practice for the Protection of Conductors Used in Industrial and Commercial Power Systems

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

**21. 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

**22. P841**

Standard for Petroleum and Chemical Industry--Premium-Efficiency, Severe-Duty, Totally Enclosed Squirrel Cage Induction Motors--0.75-370 kW (1-500 hp)

**23. P841.1**

Standard for Process Industry--IE3, Severe-Duty, IP 56 Squirrel Cage Induction Motors--Up to and Including 370 kW

**24. P1580**

Recommended Practice for Marine Cable for Use on Shipboard and Fixed or Floating Facilities

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

**25. P1451.99**

Standard for Harmonization of Internet of Things (IoT) Devices and Systems

**IEEE Power Electronics Society/Standards Committee**

**26. P1573**

Recommended Practice for Electronic Power Subsystems: Parameters, Interfaces, Elements, and Performance

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

**27. P421.1**

Standard Definitions for Excitation Systems for Synchronous Machines

**28. P421.5**

Recommended Practice for Excitation System Models for Power System Stability Studies

**29. P665**

Guide for Generating Station Grounding

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

**30. P450**

Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for

Stationary Applications

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

**31. P400.3**

**Guide for Partial Discharge Field Diagnostic Testing of Shielded Power Cable Systems**

**32. P495**

Guide for Testing Faulted Circuit Indicators

**33. P532**

Guide for Selecting and Testing Jackets for Power, Instrumentation, and Control Cables

**34. P1120**

Guide for the Planning, Design, Installation, and Repair of Submarine Power Cable Systems

**35. P1617**

Guide for Assessment, Mitigation, and Control of Corrosion of Metallic Shields in Extruded Dielectric Cables rated 5 kV to 46 kV

**36. P2412**

Standard Test for Determining Circuit Integrity Performance of Fire Resistive Cable Systems in Passenger Rail and Road Tunnels

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

**37. P2425**

Standard for Electromagnetic Compatibility Testing of Electrical and Instrumentation and Control Equipment at Nuclear Power Generating Stations and Other Nuclear Facilities

**38. P63113**

Nuclear Facilities - Instrumentation Important To Safety - Spent Fuel Pool Instrumentation

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

**39. P1711**

Standard for a Cryptographic Protocol for Electric Power System (EPS) Communications Links

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

**40. P510**

Guide for Electrical Safety in High-Voltage Testing

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

**41. PC37.1.2**

Recommended Practice for Databases Used in Utility Automation Systems

**42. PC37.91**

Guide for Protecting Power Transformers

**43. PC37.249**

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

**44. PC37.251**

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

**IEEE Power and Energy Society/Substations**

**45. P998**

Guide for Direct Lightning Stroke Shielding of Substations

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

**46. PC62.230**

Guide for Surge Protection of Electric Vehicle Infrastructure

**IEEE Power and Energy Society/Switchgear**

**47. PC37.30.1**

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

**48. PC37.66**

Standard Requirements for Capacitor Switches for AC Systems (1 kV to 38 kV)

**IEEE Power and Energy Society/Transformers**

**49. PC57.16**

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

**50. PC57.18.10**

Standard Practices and Requirements for Semiconductor Power Rectifier Transformers

**51. PC57.21**

Standard Requirements, Terminology, and Test Code for Shunt Reactors Rated Over 500 kVA

**52. PC57.162**

Guide for the Interpretation of Moisture Related Parameters in Dry, Gas Insulated and Liquid Immersed Transformers and Reactors

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

**53. P18**

Standard for Shunt Power Capacitors

**54. P519.1**

Guide for Applying Harmonic Limits on Power Systems

**55. P957**

Guide for Monitoring, Managing and Cleaning of Contaminated Insulators

**IEEE SA Board of Governors/Corporate Advisory Group**

**56. P1858**

Standard for Camera Phone Image Quality (CPIQ)

**IEEE Vehicular Technology Society/Intelligent Transportation Systems**

**57. P2020**

Standard for Automotive System Image Quality

**58. P7001**

Transparency of Autonomous Systems

**IEEE Vehicular Technology Society/Rail Transportation Standards Committee**

**59. P1653.3**

Guide for Rail Transit Traction Power Systems Modeling

**60. P2406**

Standard for Design and Construction of Non-Load Break Disconnect Switches for Direct Current Applications on Transit Systems

**61. P2720**

Rail Potential Management Guide for Direct Current Traction Electrification Systems

**IEEE-SASB Coordinating Committees/SCC14 - Quantities, Units, and Letter Symbols**

**62. P260.1**

Standard Letter Symbols for Units of Measurement (SI Units, Customary Inch-Pound Units, and Certain Other Units)

**63. P280**

Standard Letter Symbols for Quantities Used in Electrical Science and Electrical Engineering

**IEEE-SASB Coordinating Committees/SCC31 - Automatic Meter Reading and Energy Management**

**64. P1704**

Standard for Utility Industry End Device Communications Module

* 1. NEW PARS

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

**1. P2965**

Standard for Consensus Framework for Blockchain System

**2. P2968**

Standard for Blockchain Service Capability Evaluation

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

**3. P2978**

Standard for Quantum Risk Management for the Board of Directors

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

**4. P802.1DP**

Time-Sensitive Networking Profile for Aerospace Onboard Ethernet Communications

**5. P802.15.4aa**

Standard for Low-Rate Wireless Networks Amendment: Higher data rate extension to IEEE 802.15.4 Smart Utility Network (SUN) Frequency Shift Keying (FSK) Physical layer (PHY)

**IEEE Computer Society/Learning Technology**

**6. P2955**

Standard for Creating Spoken Tutorials Enabling Self-learning in Local Language

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

**7. P2971**

Standard for Test Requirements and Methods for Time Sensitive Networking Gateway In the Field of Industrial Internet of Things

**8. P2972**

Standard for General Requirements of Gateway Supporting Time Sensitive Networking in Factory Environments

**9. P2975**

Standard for Industrial Artificial Intelligence (AI) Data Requirements

**IEEE Computer Society/Standards Activities Board**

**10. P2888.2**

Standard for Actuator Interface for Cyber and Physical World

**11. P2888.3**

Standard on Orchestration of Digital Synchronization between Cyber and Physical World

**12. P2888.4**

Standard on Architecture for Virtual Reality Disaster Response Training System with Six degrees of

Freedom (6 DoF)

**13. P2945**

Standard for Technical Requirements for Face Recognition System

**IEEE Consumer Electronics Society/Digital Finance and Economy Standards Committee**

**14. P2976**

Standard for Consortium Chain Traceability Application

**15. P2977**

Standard for Consortium Chain Certificate Application

**IEEE Consumer Electronics Society/Smart Devices Standards Committee**

**16. P2953**

Standard for Technical Requirements for Industrial Smart Terminal Devices

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

**17. P11073-10101c**

Standard for Health informatics--Point-of-care medical device communication - Part 10101: Nomenclature Amendment 3: Additional definitions

**18. P11073-20601b**

Health informatics--Personal health device communication - Part 20601: Application profile-- Optimized Exchange Protocol Amendment

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

**19. P62395-2**

Electrical Resistance Trace Heating Systems for Industrial and Commercial Applications Part 2: Application Guide for system design, installation and maintenance

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

**20. P1588g**

Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems Amendment: Master-slave optional alternative terminology

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

**21. P2885**

Standard for the Analysis of Data Collected from an Electricity Grid Sensing Layout, Aimed at its Management, Operation and Maintenance

**IEEE Power and Energy Society/Transformers**

**22. PC57.105-2019/Cor 1**

Guide for Application of Transformer Connections in Three-Phase Electrical Systems – Corrigendum 1Update Table 1—Application characteristics of connections

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

**23. P987**

Guide for Application of Composite Insulators for Overhead Electric Power Lines

**24. P2942**

Guide for In-Service Application, Care, Maintenance, and Testing of Insulating Flexible Sling for Live Working

**25. P2974**

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

**IEEE SA Board of Governors/Corporate Advisory Group**

**26. P2958**

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

**27. P2973**

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

**IEEE Vehicular Technology Society/Intelligent Transportation Systems**

**28. P2030.1.2**

Standard Technical Specifications for Ultra-High-Power Electric Vehicle Chargers

**IEEE Vehicular Technology Society/Rail Transportation Standards Committee**

**29. P2970**

Guide for Synchronous Monitoring of the Magnitude and Distribution of Stray Current in Urban Rail Transit’s Direct Current Traction System

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

**30. P62209-3**

Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 3: Vector measurement-based systems (Frequency range of 600 MHz to 6 GHz)

* 1. PARS FOR THE REVISION OF STANDARDS

**IEEE Computer Society/Test Technology**

**1. P1450**

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

**2. P1450.1**

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

**3. P1450.6**

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

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

**4. P45.2**

Recommended Practice for Electrical Installations on Shipboard -- Controls and Automation

**IEEE Power Electronics Society/Standards Committee**

**5. P393**

Standard for Test Procedures for Magnetic Cores

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

**6. P1511**

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

**7. P1511.1**

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

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

**8. PC37.98**

Standard for Seismic Qualification Testing of Protective Relays and Auxiliaries for Nuclear Facilities

**9. PC37.105**

Standard for Qualifying Class 1E Protective Relays and Auxiliaries for Nuclear Power Generating Stations and Other Nuclear Facilities

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

**10. P1615**

Recommended Practice for Network Communication for Electric Power Substation Monitoring and Control

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

**11. PC37.95**

Guide for Protective Relaying of Utility-Consumer Interconnections

**IEEE Power and Energy Society/Switchgear**

**12. PC37.10**

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

**13. PC37.20.1**

Standard for Metal-Enclosed Low-Voltage (1000 Vac and below, 3200 Vdc and below) Power Circuit Breaker Switchgear

**14. PC37.012**

Guide for the Application of Capacitance Current Switching for AC High-Voltage Circuit Breakers Above 1000 V

**15. PC37.100.2**

Standard for Common Requirements for Testing of AC Capacitive Current Switching Devices over 1000 V

**IEEE Power and Energy Society/Transformers**

**16. P259**

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

**17. PC57.131**

Standard Performance requirements and test methods for Tap-changers

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

**18. P1243**

Guide for Improving the Lightning Performance of Transmission Lines

**19. P1854**

Guide for Smart Distribution Applications

**IEEE SA Board of Governors/Corporate Advisory Group**

**20. P1863**

Guide for Overhead Alternating Current (AC) Transmission Line Design

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

**21. P62704-3**

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

1. OLD BUSINESS
   1. DISCUSSION - RECOMMENDATION ON REVIEW PERIOD COMMENT TIMEFRAMES
   2. COMMITTEE MEMBER INTERACTIONS/COMMENTS RE: MYPROJECT
   3. ADDITION TO PAR EXTENSION REQUEST FORM
   4. INFORMATION ITEM ON OSCOM
2. NEW BUSINESS
3. NEXT MEETING

The next meeting of NesCom will take place on or close to 26 January 2020 by teleconference.

1. ADJOURNMENT