

IEEE Power System Communication & Cybersecurity Committee

CYBERSECURITY SUBCOMMITTEE – S0

Chair: Steven Kunsman

Vice chair: Jim Bougie

S0 website: <http://sites.ieee.org/pes-pscc/cybersecurity-subcommittee-s0/>

AGENDA/Minutes – January 16, 2019, Garden Grove, CA

1. Introductions
2. Count of S0 members for quorum – S0 had 24 attendees with 11 of 18 members present – quorum achieved.

First Name	Last Name	Affiliation	Role	Comment (WG/TF/SG Membership_	2019/01/16
Steve	Kunsman	ABB	S0 Chair	all	R
James	Bougie	GPT	S0 Vice-chair	S5	L
TW	Cease	Consultant	S0 Member	S5	
Ed	Cenzon	SEL	S0 Member	S4,S5	
Mike	Dood	SEL	S0 Member	all	
Herb	Falk	Sisco	S0 Member	S5	
James	Formea	Eaton	S0 Member	S1, S3, S5, S6, S7, S8	L
Didier	Giarratano	Schnieder	S0 Member	S5	L
Anthony	Johnson	SCE	S0 Member	S5	L
Marc	Lacroix	EMCREY Canada	S0 Member	S1, S5, S6	L
Theo	Laughtner	Powergrid-RX	S0 Member		L
Ralph	Mackiewicz	Sisco	S0 Member		L
Deepak	Maragal	NYPA	S0 Member		L
Scott	Mix	PNNL	S0 Member		L
Ryan	Newell	TRC	S0 Member	S5	
Craig	Preuss	B&V	S0 Member	all	
Eric	Thibodeau	Gentec	S0 Member	S5	L
Nathan	Wallace	Ampirical	S0 Member	S5, S7, S8	

S0 Garden Grove Sign in sheet

S0

-PSCCC WG S1 (17110) Meeting Sign-In Sheet 01

By choosing to attend and sign in to this meeting, you acknowledge and agree that your personal data will be documented for IEEE standards development or case and evaluation of patent claims by patent offices. IEEE must capture your personal data for these purposes, and will provide information about activities related to coordination participation as documented through various methods, e.g., rosters, submission documents, email reflections, records of meeting attendance, response. Privacy Policy at <https://www.ieee.org/security-privacy.html>.

Name	Employer	Other Affiliations	eMail updated
Ralph Mackiewicz	SISCO		ralph
James Bourque	SPY		JAMES
JAMES FORMBA	EATON		JAC
MARC LACROIX	ALCANTARA		C.H.
Chris Huntley	SEL		eric
Eric Thibodeau	GenTec		eric
Anthony Johnson	SCZ		anth
MIRIAM SWIDERS	SEL		miriam
SHANE HAYGREN	AMETEK		shane
Tony Bell	AMETEK		tony
DEEPAK MARGAAL	NYP&A		deep
Silvio Koesler	Siemens		silvio
Nicholas Kramer	Nulrid Power		nich
didier Garatano	Schneider electric		didier
Theo LANGNER	PowerCorp-Rc		theo
DOUSTY MVO	PNNL		dousty
BILL DICKERSON	ARBITER SYSTEMS		bill
Takaya Sheno	TOSHIBA		takaya
Harry Zapata	DUKE		harry
Paul Thompson	Duke		paul
Keith Gray	POWER ENGINEERS, Inc.		keith
RICHARD MACLEAN	UIUC		rich
TW CRASE	CONSULTANT		tw

3. Approval of September Minutes of Meeting – minutes approved.
4. Subcommittee membership, requirements, and sign up list
 - a. Requirements for SC membership
 - i. Be a member of IEEE PES
 - ii. Be an active member of S SC working group(s)
 - iii. Be willing to regularly attend and participate in the S SC
5. Working Group, Task Force and Study Group Minutes (will be posted online)
 - a. Summary minutes to be provided to SC officers after your meeting.
 - b. Detailed minutes to be provided to SC officers within 2 weeks after your group meeting.
6. S SC Working Group/Study Group/Task Force Summary & Status

WG S1: Revision of IEEE 1686 IED Cybersecurity Capabilities

Chair: Marc Lacroix **Vice-chair:** Éric Thibodeau

Scope: The standard defines the functions and features to be provided in intelligent electronic devices (IEDs) to accommodate cybersecurity programs. The standard addresses security regarding the access, operation, configuration, firmware revision and data retrieval from an IED. Confidentiality, integrity and availability of external interfaces of the IED is also addressed.

Summary:

The S1 WG meeting was held on Monday, January 14 with 26 attendees (13 members). The goal of this meeting was to continue working on the revision of IEEE 1686 standard. The working group is revising the existing IEEE 1686 standard to integrate the latest cybersecurity technologies in order to defines the functions and features to be provided in IEDs to support cybersecurity programs.

Next Meeting Requirements: [Room Size=40][Projector=Yes][Telecom=No][Conflicts= all S]

WG S2: P1711.1 Serial SCADA Protection Protocol (SSPP)

Chair: Ed Cenzone

Scope: This standard defines the Substation Serial Protection Protocol (SSPP), a cryptographic protocol to provide integrity, and optional confidentiality, for cyber security of substation serial links. It does not address specific applications or hardware implementations, and is independent of the underlying communications protocol.

Summary:

<Need Mike's Summary>

Next Meeting Requirements: [Room Size=20][Projector=Yes][Telecom=No][Conflicts= all S]

WG S3: P2030.102.1 Standard for Interoperability of IPSEC Utilized within Utility Control Systems

Chair: Jim Bougie **Vice-chair:** Marc Lacroix **Secretary:** James Formea

Scope: This standard specifies requirements for interoperability of devices utilized within utility control systems which implement the Internet Protocol Security (IPsec) protocol suite within an IPv4 environment.

Summary:

7 of 10 members present and 15 guests. Proposal to try to create a new draft by the May meeting, and then get MEC review done by the September meeting. Then can decide in September whether or not to request a PAR extension.

Next Meeting Requirements: [Room Size=25][Projector=Yes][Telecom=Yes][Conflicts= all S, H38, H40, H50]

WG S4: P1711.2 Trial-Use Standard for Secure SCADA Communications Protocol (SSCP)

Chair: Scott Mix

Scope: This trial use standard defines a cryptographic protocol to provide integrity with optional confidentiality for cyber security of substation serial links. It does not address specific applications or hardware implementations and is independent of the underlying communications protocol.

Summary:

WG S4 met on Thursday 1/16 at 11:00 AM with 4 members and 10 guests. Quorum was not achieved IT was announced that the PAR extension to 12/2020 was approved
The initial ballot completed on 12.18 with 90% approval, and 75 comments
The chair presented an initial comment response for a majority of the comments.

The chair has a goal of resolving all the remaining comments, and proceeding with the second round ballot in time to be in comment resolution at the May meeting. Several teleconference meetings and email votes will be conducted to accomplish this.

Next Meeting Requirements: [Room Size=25][Projector=Yes] [Telecom=No][Conflicts= all S, P10]

WG S5: Revision of IEEE C37.240 Cybersecurity Requirements for Power System Automation, Protection and Control Systems

Chair: Steve Kunsman **Vice-chair:** TW Cease

Scope: Revision of IEEE C37.240 to include new technical requirements for power system cyber security. Based on sound engineering practices, requirements can be applied to achieve high levels of cyber security of automation, protection and control systems independent of voltage level or criticality of cyber assets.

Summary:

- As many new participants, the group focused on the review the security requirements and features as they map to the NERC CIP requirements
- Section 6 of the document contribution by Chris Huntley was presented
- Writing assignments have been slow to be complete and need to place a priority make progress towards the completed standard.

Next Meeting Requirements: [Room Size=40][Projector=Yes][Telecom=Yes][Conflicts= all S, P10, H22]

TF S6: IoT for connected home - Communication and cybersecurity requirements

Chair: Marc Lacroix **Vice-chair:** James Formea

Scope: To produce a report that describes the different use cases that make use of the Connected Homes concept, presents a security risk analysis and propose requirements for telecommunication (Volume, frequency, speed) and cybersecurity. Guidelines for utilities experts will be listed.

Summary:

The latest version is being reviewed will be uploaded to iMeet after this meeting. Note: the chair has been the only contributor to the document to date.

The chair presented an overview of the structure and format of the document. The chair then walked through some key sections of the report in more detail.

Next Meeting Requirements: [Room Size=40][Projector=Yes] [Telecom=No][Conflicts= all S activities]

WG S7: Cyber Services and Cybersecurity Function Designations

Chair: Nathan Wallace **Vice-chair:** Mike Dood

Scope: This working group explores the need for and creation of cyber device function numbers, acronyms, and designations for cyber devices and functions used in electrical power systems. This work focuses on identifying and providing a means for documenting enabled cyber related services and cybersecurity functions and measures.

Summary:

- PAR Submitted
- First meeting as Working Group
- Reviewed S4x19 ICS conference slides

- Formalizing list of cyber services and cybersecurity functions that will be covered in the standard

Next Meeting Requirements: [Room Size=20][Projector=Yes] [Telecom=Yes] [Conflicts= all S, P11]

WG S8: P2658 Guide for Cybersecurity Testing in Electric Power Systems

Chair: Nathan Wallace **Vice-chair:** Deepak Maragal

Scope: This task force explores the need for and creation of policies and procedures for the testing and commissioning of cybersecurity controls and measures used in electrical power systems.

Summary:

- Third Meeting as Working Group
- Have solid outline for Guide document
- Reviewed S4x19 ICS conference slides

Next Meeting Requirements: [Room Size=20][Projector=Yes] [Telecom=No] [Conflicts= all S, P11]

SG S9: Study Group on Utility IT-OT Cybersecurity challenges in roles and terminology

Chair: Steve Kunsman **Vice-chair:** Brian Smith

Scope: Assess the IT-OT challenge in Utility Cybersecurity roles. Determine if a Task Force is required to create a report to assist in building organizational understanding and collaboration

Summary:

- Third and final meeting as Study Group
- Two of SCE's IT cyber security attend and validated the need for IT-OT security. There challenge is finding the time to support activities like S9.
- SG decided to move into a TF. Theo Laughner will lead the new task force commencing in May 2019.

Next Meeting Requirements: [Room Size=40][Projector=Yes][Telecom=Yes][Conflicts= all S activities]

SG S10: Challenges on Analyzing and Implementing Cybersecurity Standards and Best Practices

Chair: Nathan Wallace **Vice-chair:** James Formea

Scope: Assess the challenge in utilities & municipalities with limited resources on the applicability and relevance of the cybersecurity standards and create a report to assist summarizing the relevant cybersecurity standards.

Summary:

- Updated Title and Scope description
- Scope to focus on small utilities, municipalities, and co-ops
- Will conduct a survey via PSCCC's website and working on question pool via iMeet.

Next Meeting Requirements: [Room Size=20][Projector=Yes] [Telecom=No][Conflicts= all S, P11]

TF S11: Task Force on Roadmap Development of Cyber Security Services standard document

Chair: Theo Laughner **Vice-chair:** Ralph Mackiewicz

Scope: Develop a roadmap for activities that S Subcommittee should undertake related to communication security issues.

Summary:

- Inaugural meeting on 1/15/2019 at 11 am with 18 attendees.
- Activity Summary -
 - Change Name of Task Force - “Roadmap Development TF for S0 Subcommittee”
 - Reviewed list of topics to be included in a survey for prioritization.
 - Will schedule conference call for mid-March to finalize topics.
 - Survey to launch May 2019.

Next Meeting Requirements: [Room Size=25][Projector=Yes][Telecom=No][Conflicts= all S, H44, C28, P11]

NEW SG S12: Study Group Virtual IED cyber security requirements

Chair: Marc Lacroix **Vice-chair:** Bill Dickerson

Scope: TBD by SG in May 2019

Next Meeting Requirements: [Room Size=25][Projector=Yes][Telecom=No][Conflicts= all S]

7. Old Business

a.

8. New Business

a. New Study Groups to explore:

- i. SG S9 Study Group on Utility IT-OT Cybersecurity challenges in roles and terminology request to move forward as a Task Force. Theo Laughner to chair this new group. Tony Johnson will check with SCE IT cybersecurity to vice-chair.

Decision: S0 SC approved the TF S9 to proceed

- ii. SG S12 on Virtual IED requirements and to evaluate whether the requirements need to be included into an IEEE 1686-1 or another standard. Marc Lacroix will chair, Bill Dickerson vice-chair

Decision: S0 SC approved SG S12 to proceed

b. Other items

9. Announcements:

- a. Thank you to Farel Becker who has been our S0 secretary. He has taken a new role and will no longer be able to attend PSCC.
- b. We need our OT participants to engage the IT organization and inform of our activities.
- c. Second IEEE Utilities Cybersecurity Workshop is being planned. Intent is to host the workshop in Atlanta adjacent to the December NERC

CIPC meeting. If interested in participating, please contact Steve Kunsman.

- d. Chairs must provide an updated roster with the meeting within 2 weeks.
- e. WG, TF, SG Chairs to provide your 2018 group highlight of accomplishments by January 24, 2019. Subcommittee chairs need to summarize for PSCC officers by January 31, 2019.
- f. All S groups PAR, Assignments must be voted on by the Main Committee.

10. Adjourn`