

PSCC Subcommittee S0 Meeting Minutes					
Designation: S0		Name: PSCC Cybersecurity Subcommittee Meeting			
Meeting Location: Virtual		Meeting Time: 9:10 AM CDT	Meeting Date: 2020/09/24	Minutes Revised: [YYYY/MM/DD]	Minutes Approved: 2021/01/14
PAR Output: N/A	PAR Output: N/A	PAR Approval Date: N/a	PAR Expiration Date: N/a	Target Sponsor Ballot Date: N/A	Target Completion Date: N/a
Presiding Officer: Scott Mix – Vice Chair			Recorded by: Scott Mix	Draft Number: Final	
Attendance:					
Name		Affiliation		Attending via Phone (P) / Web (W) or Local (L) M/CM/G	
Scott Mix		PNNL		W	M
James Bougie		GPT		W	M
Mike Dood		SEL		W	M
Herb Falk		Outside the Box Consulting		W	M
James Formea		Eaton		W	M
Chris Huntley		SEL		W	M
Tony Johnson		SCE		W	M
Marc Lacroix		EMCREY Canada		W	M
Theo Laughner		Powergrid-RX		W	M
Ralph Mackiewicz		Sisco		W	M
Deepak Maragal		NYPA		W	M
Craig Preuss		B&V		W	M
Eric Thibodeau		Gentec		W	M
Nathan Wallace		Ampirical		W	M
Shane Haveron		Ametek		W	M
Jeff Pack		Power Engineers		W	M
Nicholas Kraemer		Nugrid Power		W	G
Benjamin Kazimier		Beckwith		W	G
Jay Anderson		ComEd		W	G
Dennis Holstein		OCG		W	G
Bharat Nalla		SEL		W	G
Chamara Devanarayana		University of Manatoba		W	G
Chris Reidinger		White River Electric Association		W	G
Colin Gordon (SEL)		Schweitzer Engineering Laboratories, Inc.		W	G
Craig Palmer		PowerComm Solutions		W	G
David Dolezilek		SEL		W	G
david paul		Lipscomb		W	G
Deryk Yuill		iS5 Communications		W	G
Hugo Monterrubio		Beckwith Electric		W	G
Jalal Gohari		WSP		W	G
Jessica Harris		NERC		W	G

Kevin Easley	Independent	W	G
Luke Hebert	Cybirical	W	G
Murty Yalla	Beckwith Electric	W	G
Shashi Sastry	Hitachi Power Grid	W	G
Tom Hofstetter	NERC	W	G
Tony Bell	AMETEK Power Instruments - Pulsar	W	G
Tony Montoya	Centauri	W	G
Wayne Stec	Distregen, LLC	W	G
Xiangyu Ding	S&C Electric Company	W	G
M: Member CM: Corresponding Member G: Guest			

Item no.	Notes	Action by
CALL TO ORDER	Called to order at 9:10 AM CDT.	
INTRODUCTIONS AND QUORUM	Attendance with first and last names was noted on the WebEx Participants list. Attendance was 40 – with 16 members and 24 guests. Quorum Achieved: Yes! (16 of 22 members)	
CALL FOR PATENTS	N/A Not a standards meeting	
CHAIR'S REMARKS	The chair welcomed the participants to SC meeting.	
AGENDA APPROVAL	Agenda: <ol style="list-style-type: none"> 1. Introduction 2. Roll Call/Quorum <ol style="list-style-type: none"> a. (note – Bill Dickerson has announced his departure from PSRC activities) 3. Approval of Agenda 4. Approval of Previous Minutes 5. S0 Group Minutes and Roster Reminder 6. S0 SC Working Group/Study Group/Task Force Summary & Status 7. Old Business 8. New Business 9. Announcements 10. Adjournment <p>Preuss moved to approve the agenda as prepared; Laughner seconded. No dissent; the agenda was approved.</p>	
APPROVAL OF PREVIOUS MINUTES	January 2020 meeting minutes were briefly reviewed. Johnson moved to approve the minutes as prepared; Thibodeau seconded. No dissent; minutes were approved.	
S0 Group Minutes and Roster Reminder	<ol style="list-style-type: none"> a) Summary minutes to be provided to SC officers immediately after this meeting. b) Detailed minutes to be provided to SC officers within 2 weeks after your group meeting. c) Meeting notice and WG/TF/SG agenda to be sent to S0 Chair 2 weeks prior. 	
S0 SC Working Group/Study Group/Task Force Summary & Status	Note: room sizes and conflicts were not captured. Conflicts will be collected in December when the January JTCM schedule is being developed.	

Item no.	Notes	Action by
<p>WG S1</p>	<p>Revision of IEEE 1686 IED Cyber Security Capabilities</p> <p>Chair: Marc Lacroix Vice-chair: Éric Thibodeau Secretary:</p> <p>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.</p> <p>Status: PSCC S1 met on Monday with 10 members and 29 guests. During the meeting, changes in the new version were described. The introduction should describe the reasons for the modifications. Final version of the document for comment will be ready end of September. The existing PAR will terminate in December 2021 and a PAR extension is required. (see new business)</p>	
<p>WG S2</p>	<p>P1711.1 Serial SCADA Protection Protocol (SSPP)</p> <p>Chair: Ed Cenzone Vice-chair: Secretary:</p> <p>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.</p> <p>Status: <i>Did not meet</i></p>	
<p>WG S3</p>	<p>P2030.102.1 Standard for Interoperability of IPSEC Utilized within Utility Control Systems</p> <p>Chair: Jim Bougie Vice-chair: Marc Lacroix Secretary: James Formea</p> <p>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.</p> <p>Status: <i>Did not meet. Standard has passed SA balloting, and is moving to the final publish phase.</i></p>	

Item no.	Notes	Action by
<p>WG S5</p>	<p>Revision of IEEE C37.240 Cybersecurity Requirements for Power System Automation, Protection and Control Systems</p> <p>Chair: Steve Kunsman Vice-chair: TW Cease Secretary:</p> <p>Scope: Revision of IEEE C37.240 to included 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.</p> <p>Status: WG met on Tuesday at 4:30 central with a quorum 15 of 27 members. We discussed the status of the draft, PAR expiring on 12/21 and the need to be ready for ballot by the January. If we don't progress, PAR extension will be required.</p> <p>The group also discussed some of the recent Supply Chain Initiatives (NERC CIP-013, Executive Order 13920, Dept of Energy RFI supporting EO 13920 and the recent FERC request for comment on prohibiting certain telecom technologies). We discussed whether the Supply Chain should be included in the standard and there were mixed opinions.</p> <p>Craig Preuss recommended to look at the structure being used in IEEE 1547.3 as the format is following the NIST Framework, and volunteered to reformat the standard to follow that format.</p> <p>WG S5 will meet monthly starting in October to review the results of the restructuring and decide if a PAR extension will be required. S5 will require a double session for January's meeting.</p>	
<p>TF S6</p>	<p>IoT for connected home - Communication and cybersecurity requirements</p> <p>Chair: Marc Lacroix Vice-chair: James Formea Secretary:</p> <p>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.</p> <p>Status: <i>Report complete and will be sent out to S0 membership for approval</i></p>	
<p>WG S7</p>	<p>Cyber Services and Cybersecurity Function Designations</p> <p>Chair: Nathan Wallace Vice-chair: Mike Dood Secretary: Deepak Maragal</p> <p>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.</p> <p>Status: S7 Std P2808 Cyber Services and Cybersecurity Function Designations - Had a quorum with 8 members and 9 guests on the call. Biweekly WebEx meetings are scheduled and will start on Oct 23. Discussed a new representation approach allowing the identified designations to be represented on engineering drawings and in other literature. Member suggested harmonizing designations with COMSET WG. An Introduction call with COMSET Chair has been scheduled for next week. Deepek volunteered and is now the Secretary of the S7 WG.</p>	

Item no.	Notes	Action by
<p>WG S8</p>	<p><u>WG S8: P2658 Guide for Cybersecurity Testing in Electric Power Systems</u></p> <p><u>Chair:</u> Nathan Wallace <u>Vice-chair:</u> Deepak Maragal <u>Secretary:</u></p> <p><u>Scope:</u> 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.</p> <p><u>Status:</u> S8 Std P2658 Guide for Cybersecurity Testing in Electric Power Systems - No Quorum was achieved. Had 7 members and 16 guests on the call. Four guests expressed an interest in becoming contributing members. Biweekly WebEx meetings are scheduled and will start on Oct 23. Several volunteered for writing assignments.</p>	
<p>TF S9</p>	<p><u>TF S9: Task Force on Utility IT-OT Cybersecurity challenges in roles and terminology</u></p> <p><u>Chair:</u> Theo Laughner <u>Vice-chair:</u> Brian Smith <u>Secretary:</u></p> <p><u>Scope:</u> 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</p> <p><u>Status:</u> Discussions included an updated status for each section of the proposed document sections. Group members in attendance provided status updates for each specific section of the report. The chair requested any outreach functions to socialize the IT/OT topic and requested a Utility Executive sponsor. Additional monthly calls will be scheduled to continue updating report.</p>	
<p>TF S10</p>	<p><u>TF S10: Utility & Municipality Challenges on Analyzing and Implementing Cybersecurity Standards and Best Practices</u></p> <p><u>Chair:</u> Jeff Pack <u>Vice-chair:</u> Steve Mark <u>Secretary:</u></p> <p><u>Scope:</u> 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.</p> <p><u>Status:</u> <i>Did not meet</i></p>	
<p>TF S11</p>	<p><u>Task Force on Roadmap Development</u></p> <p><u>Chair:</u> Theo Laughner <u>Vice-chair:</u> Ralph Mackiewicz <u>Secretary:</u></p> <p><u>Scope:</u> Develop a roadmap for activities that S Subcommittee should undertake related to communication security issues.</p> <p><u>Status:</u> Work is complete, TF finalizing report for approval by S0 and recommendation for PSCCC MC approval prior to posting on website.</p>	

Item no.	Notes	Action by
<p>WG S13</p>	<p>Review 1547.3 Guide for Cybersecurity of DERs Interface with Electric Power Systems</p> <p>Chair: Tony Johnson Vice-chair: R. Benjamin Kazimier Secretary:</p> <p>Scope: To jointly develop 1547.3 with SCC21.</p> <p>Status: S13 met on Tuesday Sept 22nd by web meeting 11:30am. There were 5 members, 1 contributing member, and 16 non-members. Quorum was not met.</p> <p>The next 1547.3/S13 meeting is remote and scheduled for Tuesday, 6 October 2:30pm - 5:30pm EDT and Wednesday, 7 October 10:30 - 1:30pm EDT. The link to register for the Oct meeting will be posted in the meeting minutes.</p> <p>Calls to action were made for assistance with section 5 “Implementors of DER Technical Recommendations” and to get input and coordination regarding testing and commissioning with PSCC S8 / P2658. Other topics of discussion can be found in the S13 meeting minutes.</p>	
<p>SG S15</p>	<p>Study Group on Implementing IEC 62351-6</p> <p>Chair: Craig Preuss Vice-chair: Secretary:</p> <p>Scope: Investigate developing an IEEE Guide for Securing Generic Object Oriented System Events (GOOSE) and Sampled Values (SV) Protocols of IEC 61850 using IEC 62351-6 and IEC 62351-9</p> <p>Status: S15 Study Group met with its biggest attendance to date. The study group approved a report that was submitted to S0 for approval, approved making a request to S0 to approve the PAR per the report, and approved making a request to S0 to transition the SG to a WG with Chair: Jay Anderson and Vice-Chair: Shane Haveron.</p> <p>Work complete</p> <p>WG recommends approval or final report, approval of PAR, and elevation of SG to WG. (see new business)</p>	
<p>SG S16</p>	<p>SG S16: Study Group on Application of IDS and IPS to Electric Power Systems</p> <p>Chair: Michael Doak Vice-chair: Secretary:</p> <p>Scope:</p> <p>Status: <i>Did not meet</i></p>	
<p>Old Business</p>	<p>123Signup – Formea reports that rollout still in progress. He is working on privacy issues More information will be provided once 123Signup is formally rolled out</p>	

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New Business	<ol style="list-style-type: none"> 1. WG S1 Revision of IEEE 1686 IED Cyber Security Capabilities requires a PAR extension. Lacroix moved; Formea seconded. PAR extension was approved with no dissent 2. SG S15 Requests approval of S15 Report and recommend PSCCC approve and post on website. Motion made by Preuss, seconded by. Mackiewicz Passed with no dissent 3. Approve PAR request from S15 <ol style="list-style-type: none"> a. Title: IEEE Guide for Securing Generic Object Oriented System Events (GOOSE) and Sampled Values (SV) Protocols of IEC 61850 using IEC 62351-6 and IEC 62351-9 b. Scope: This guide provides information for suppliers and implementors on applying security from the most recently published versions of IEC 62351-6 and IEC 62351-9 to GOOSE (IEC 61850-8-1), R-GOOSE (IEC 61850-8-1), SV (IEC 61869-9), or R-SV (IEC 61850-9-2) protocols. c. Chair: Jay Anderson, Vice-Chair: Shane Haveron Motion by Preuss, seconded by Haveron, passed with no dissent 4. Transition S15SG to S15WG to develop the standard Motion by Preuss, seconded by Johnson, passed with no dissent 	
General Discussion	<p>Members briefly discussed the virtual meeting format. Observations include:</p> <ul style="list-style-type: none"> • Increased participation in working meetings • Registration process used was cumbersome, but required by specifics or WebEx, the need to capture full names and affiliations for attendance, and enforcement of the payment requirement • Use of commercial services (and other options) were briefly investigated, but IEEE SA procedures, cost, and timelines limited selection of options • Sever anomalies were noted, and they will be addressed if possible before January • Thanks and appreciation to Michael Thompson and James Formea and PSRCC/PSCCC officers for making the process as smooth as it could be. 	
Announcements:	<ol style="list-style-type: none"> 1. Chairs must provide an updated roster with the meeting minutes within 2 weeks. 	
ITEMS REPORTED OUT OF EXECUTIVE SESSION	N/A	
TIME OF FINAL ADJOURNMENT	Johnson motioned to adjourn; seconded by Laughner, No dissent. Meeting adjourned at 2:35 PM.	
NEXT FACE TO FACE MEETINGS	January 2021, most likely Virtual	
FUTURE MEETING ROOM REQUIREMENTS	[Room Size=40][Projector=YES][Conflicts=H SC, P SC]	