

PSCC Subcommittee Meeting Minutes

Designation: P0	Name: PROTOCOLS AND COMMUNICATION ARCHITECTURE SUBCOMMITTEE			
Meeting Location: Jacksonville, FL – In-person and virtual	Meeting Time: 4:15 pm EST	Meeting Date: 2023/01/11	Minutes Revised: YYYY/MM/DD	Minutes Approved: 2023/05/10
Presiding Officer(s): Tom Dahlin - Chair; Jim Michaelis - Vice Chair		Recorded by: Jim Michaelis	Minutes Draft Number: 1.0	
Attendance:				
Name		Affiliation	Phone (P) / Web (W) / Local (L)	M/CM/G
Anthony Johnson	SCE	L	M	
Benton Vandiver	Hitachi Energy	L	M	
Brittany Chapman	CAI Engineering	W	M	
Chris Huntley	SEL	L	M	
Craig Palmer	PowerComm Solutions	L	M	
Craig Preuss	Black & Veatch	L	M	
Dan Nordell	Xcel Energy	L	M	
Dave McGuire	Hubbell-RFL	W	M	
Ed Cenzone	SEL	W	M	
Eric Thibodeau	Hydro Quebec	W	M	
Eugenio Carvalheira	Omicron	L	M	
Galina Antonova	Hitachi Energy	W	M	
James Bougie	Albireo Energy	L	M	
James Formea	EATON	L	M	
Jason Lombardo	S&C Electric Company	W	M	
Jay Anderson	SEL	L	M	
Jim Michaelis – Vice Chair	Commonwealth Associates, Inc.	L	M	
Ken Fodero	SEL	W	M	
Ken Martin	EPG	W	M	
Mike Dood	SEL	W	M	
Nicholas Kraemer	NuGrid Power	W	M	
Ron Farquharson	Mount Victoria Consulting Ltd	L	M	
Ryan Newell	TRC	W	M	
Scott Mix	PNNL	L	M	
Shane Haveron	Ametek	L	M	
TW Cease	Consultant	W	M	
Tom Dahlin – Chair	SEL	L	M	
Yi Hu	Quanta Technology	W	M	
Daniel Freeman	Schneider Electric	L	G	
David Dolezilek	SEL	W	G	
Gayle Nelms	SEL	W	G	
Hugo Monterrubio	Hubbell / Beckwith	L	G	
Jay Herman	EPRI	W	G	
Jeff Pack	Power Engineers	W	G	
Justin Turner	GE	L	G	
Mario Jardim	Schneider Electric	W	G	

Markus Epting	S&C Electric	W	G
Priyanka Nadkar	SEL	W	G
Tom Thompson	IEEE SA	L	G
Tony Bell	Ametek	L	G
M:Member CM: Corresponding Member			

Minutes of meeting (continued)

Item no.	Notes	Action by
CALL TO ORDER		TD
INTRODUCTIONS AND QUORUM	Member roll call taken. A quorum was met. There were 28 of 40 members present. There were also 12 guests.	TD
AGENDA APPROVAL	The motion was passed. Motion: Anthony Johnson; Second: Scott Mix Approved - Yes (28).	TD
APPROVAL OF PREVIOUS MINUTES	The motion was passed. Motion: Jay Anderson; Second: Jim Bougie Approved - Yes (28).	TD
CHAIR'S REMARKS	<p>Announcements</p> <p>Thank you to Benton Vandiver for his service</p> <p>New officers starting this meeting:</p> <ul style="list-style-type: none"> • Chair – Tom Dahlin • Vice Chair – Jim Michaelis <p>Remembering Dennis Holstein</p> <p>If you need a PAR extension, please get it in / approved.</p> <p>RevCom submission by 02/17/2023, 04/04/2023 NesCom submission by 02/17/2023, 04/04/2023</p> <p>Policy changes now require Officer training and Behavior slides covered at each WG meeting.</p> <p>Membership:</p> <p>Welcome: Jason Lombardo accepted an invite to the P0 SC as a new member and is also stepping up as the P16 SG Chair</p> <p>WG minutes, PLEASE, get them in to Jim within 1 week after your meeting. If not, we cannot complete our SC report to the MC.</p>	TD
OLD BUSINESS	<p>Update on MC guidance on P2 (and other WGs) terminology request (diversity).</p> <ul style="list-style-type: none"> • P3400 WG is very active, working on identifying alternative terms • They are also working to establish some liaisons with specific active working groups impacted by this guidance 	TD

Minutes of meeting (continued)

NEW BUSINESS	<p>P18WG with Anthony Johnson as chair has been working on IEEE 2030 in support of SCC21, the sponsor. SCC21 has been promoted to full committee status as SC21 and in this new role might not be able to continue as the lead committee on this project. P18 is asking the PSCC MC to proactively agree to take over as the responsible standards committee for IEEE 2030 if SC21 can no longer be the lead committee.</p> <p>Motion: Anthony Johnson; Second: Craig Preuss Approved - Yes (28).</p> <p>P15WG with Eric Thibodeau as chair is requesting a PAR extension for the Standard Profile for Communications with DERs Using IEEE Std 1815 (DNP).</p> <p>A1, the Awards and Technical Paper Recognition TF, is looking for a volunteer from each subcommittee. The subcommittee chair and vice chair are automatically part of this committee, so it would increase the number of people each subcommittee provides from two to three.</p> <p>Liaison Report PSRC WG D47: Revision of C37.243 IEEE Guide for Application of Digital Line Current Differential Relays Using Digital Communication Galina Antonova gave update.</p> <p>Liaison Report PSRC WG H41: Revision of IEEE P1646 Standard for Power System Communication Delivery Time Performance Requirements Tom Dahlin gave update.</p> <p>Liaison Report P1547.10: Recommended Practice for Distributed Energy Resources (DER) Gateway Platforms Benton Vandiver gave update.</p>	TD
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Minutes of meeting (continued)

Item no.	Notes	Action by
REPORTS	Please include what you need for the next meeting (room size, sessions) and revision of the document (draft #); Requirements for Next Session (RNS).	
P1WG	<p>Standard Profile for Use of IEEE 1588 Precision Time Protocol in Power System Applications. Amendment 1: Adding a TLV to indicate the latest IERS-specified UTC Leap Second Event</p> <p>Chair: Chris Huntley</p> <p>Draft 3.02</p> <p>Re-circulation ballot is complete. The WG continued discussion of a revised draft and comment disposition file with focus on areas of agreement. The WG accepted many of the comments; details were recorded in the revised draft. The officers will send out the revised document that was worked on today and requested that any comments to address the Disposition Comments be returned by no later than one week before the next meeting.</p> <p>RNS: 20 people, 1 session, HDMI projector, WiFi, teleconferencing</p> <p>Conflicts: P12, P14, H41 and H49</p>	Chris Huntley
P2WG	<p>Electric Power Systems Communications – Distributed Network Protocol (DNP3)</p> <p>Chair: Ron Farquharson</p> <p>P2 is focused on 1815 (DNP3) – and collaborating with the DNP Technical Committee to develop the next release of 1815. The last release was 1815-2012. Met in a double session.</p> <ul style="list-style-type: none"> Ron Farquharson provided an update on the PAR status, with an extension approved to Dec. 31, 2025, but significant progress is being made Presentations by Grant Gilchrist on the latest revisions to DNP3 Sav6, under development as an update to DNP3 Sav5 Presentation by and discussion led by Andrew West, Vice-Chair of the WG and Chair of the Tech Committee (TC) and the Test Procedure Committee (TPC) (Brisbane) <p>RNS: 25 people, 2 session, HDMI projector, WiFi, teleconferencing</p> <p>Conflicts: S5 – C37.240</p>	Ron Farquharson
P3SG	<p>Exchanging Information Between Networks Implementing IEC 61850 and IEEE Std. 1815.1 (DNP3)</p> <p>Chair: Ron Farquharson</p> <p>(no meeting). P2WG took up this time slot.</p>	Ron Farquharson

Minutes of meeting (continued)

<p>P5WG</p>	<p>Recommended Practice for Network Communications in Substations (Revision of IEEE P1615) Chair: James Bougie Draft 1.1</p> <p>James Bougie reported that the 5 main areas of discussion were:</p> <ol style="list-style-type: none"> 1. Terminal / Port servers 2. Communication impact / interaction with the work starting in P21 3. Converting property tables to text 4. Including information on TIA-422/423 as a communication network 5. Impacts from Software Defined Networks <p>RNS: 20 people, 1 session, HDMI projector, WiFi Conflicts:</p>	<p>James Bougie</p>
<p>P9WG</p>	<p>Revision of C37.118.2 Chair: Vasudev Gharpure</p> <p>Working on joint revision of C37.118.2 standard, (with C40 – C37.247) The balloting will run until February 2nd, so no meeting this time.</p>	<p>Vasudev Gharpure</p>
<p>P10WG</p>	<p>IEEE Standard for Streaming Telemetry Transport Protocol Chair: Ken Martin Draft 2.97</p> <p>The WG continued reviewing the many edits since the last meeting.</p> <p>The WG went through the document accepting edits that were previously reviewed. Ken will contact the definitions coordinator for the PSCC regarding the definitions given in this draft.</p> <p>Scott reviewed the edits he had made changing many of the Tables to Figures to conform to IEEE guidelines.</p> <p>The WG completed review of edits through figure 30 in clause 5.5.6. At the next meeting the WG can accept changes to there and take up discussion on the following parts.</p> <p>RNS: 20 people, 1 session, HDMI projector Conflicts: P9, C23, C46, C41, H50, PSRC-SC-C, PSCC SC-P</p>	<p>Ken Martin</p>
<p>P12TF</p>	<p>Analog Leased Line End of Life and Migration Report Chair: Marc Benou (no meeting).</p> <p>Report editing is in progress with next meeting slated for when these edits are ready for review.</p>	<p>Marc Benou</p>

Minutes of meeting (continued)

P13TF	<p>Beginners guide to IEC61850 Chair: Eugenio Carvalheira</p> <p>Reviewed the contribution submitted on “related standards”.</p> <p>Discussed additional resources and key documents to be referenced in the roadmap section.</p> <p>Agreement to add R-GOOSE and R-SV to the outline of the document.</p> <p>RNS: 30 people, 1 session, HDMI projector, WiFi Conflicts: H45, H27, H31, H30, H6, H44, TFH47,</p>	Eugenio Carvalheira
P14WG	<p>Review of C37.236, IEEE Guide for Power System Protective Relay Applications Over Digital Communication Channels Chair: Tom Dahlin Draft 5.0</p> <p>Most of the meeting was spent reviewing the newly reorganized Section 6 for flow and content.</p> <p>Specific assignments were made to address areas of Section 6 that still need attention.</p> <p>General assignment to review Section 6 and provide feedback for the next meeting.</p> <p>RNS: 30 people, 1 session, HDMI projector Conflicts: P12, H41, H49, C1, C2, D47</p>	Tom Dahlin
P15WG	<p>Standard Profile for Communications with Distributed Energy Resources (DERs) using IEEE Std 1815 [Distributed Network Protocol (DNP3)] Chair: Eric Thibodeau</p> <p>Since the last meeting, we were able to get MESA-DER people to join our group as corresponding members. Work on our draft continues during biweekly meetings.</p> <p>Concerns were raised this Fall about the copyright ownership of the base material for the draft that might be shared between the DNP Users Group and MESA-DER. This is currently being discussed between the two organizations and the IEEE.</p> <p>The WG requested a two-year PAR extension to compensate for time lost in earlier copyright discussions between IEEE and the DNP User’s Group.</p> <p>RNS: 20 people, 1 session, HDMI projector, WiFi Conflicts: S1, P2, P3, K25</p>	Eric Thibodeau

Minutes of meeting (continued)

<p>P16WG</p>	<p>P1854 Review by PSCC for Communications and Cybersecurity Requirements Chair: Jason Lombardo Joint work w/T&D and PSRC H53. Xiangyu Ding leads the joint work. Draft 001</p> <p>Reviewed latest updates to P1854 starting with Section 4.2.2.1, discussing underground network protector relays and the use of certain words.</p> <p>RNS: 20 people, 1 session, HDMI projector, WiFi, Conflicts: I31, H46</p>	<p>Jason Lombardo</p>
<p>P18SG</p>	<p>Guide for Smart Grid Interoperability of Energy Technology and Information Technology Operation with the Electric Power System (EPS), End-Use Applications, and Loads Chair: Anthony Johnson</p> <p>Reviewed the status of the effort and issued a call for more volunteers. Discussed the possible impact of the SCC21 promotion to SC21 on this committee work.</p> <p>RNS: 25 people, 1 session, HDMI projector, WiFi Conflicts: S1</p>	<p>Anthony Johnson</p>
<p>P19WG</p>	<p>Working Group on Universal Utility Data Exchange (UUDEX) Chair: Scott Mix Draft 0, Edit 7</p> <p>The chair reviewed the current state of the draft UUDEX standard.</p> <ul style="list-style-type: none"> • Updates are progressing, with Edit 8 posted yesterday and now starting on Edit 9 • Biggest need is to identify existing gaps and holes • Expect to need additional help with writing UML code • Will need to verify the API • Discussed the use of compression and potential options • Discussed the IEEE Open Source Initiative and asked Tom for more info <p>Discussed upcoming assignments</p> <ul style="list-style-type: none"> • Four people volunteered for specific writing assignments • Each member asked to review the document <p>RNS: 20 people, 1 session, HDMI projector, WiFi Conflicts: P20</p>	<p>Scott Mix</p>

Minutes of meeting (continued)

P20WG	<p>Joint Revision of IEC 61850-9-3 Chair: Benton Vandiver Draft 4.0a</p> <p>Review of 9-3 draft v4.0a from the last DLMT mtg. Topics in discussion</p> <ul style="list-style-type: none">• Discussed the 9-3 peer delay response and Domain Number usage. Revised 6.2.2 back to an earlier version and then made some further adjustments.• Discussed the definitions and usage of “Grandmaster Clock” and “Master Clock” in this standard and 1588. Will eliminate “Master Clock” and differentiate grandmaster between the role and device usage.• Started discussing the response when a TC receives Pdelay_Req/Resp with a different domain number, but resolution was postponed. <p>RNS: 30 people, 1 session, HDMI Projector, WiFi Conflicts: H50, P19</p>	Benton Vandiver
P21SG	<p>System architectures supporting the virtualization of substation protection and control applications Chair: Craig Preuss</p> <p>P21 did not meet, but they had an informational session. The PSRC decided to support P21 via the I Subcommittee TF I49. Officer recruitment will happen after the JTCM with the intent to have the first PSCC P21 / PSRC I49 Joint Task Force meeting at the May Meetings.</p>	Craig Preuss

Minutes of meeting (continued)

Item no.	Notes	Action by
TIME OF FINAL ADJOURNMENT	5:24 pm EST.	TD
NEXT FACE TO FACE MEETINGS	May 2023 in Las Vegas, NV. In person / virtual meeting	TD
FUTURE MEETING ROOM REQUIREMENTS	For the next meeting we will need to meet for 1 session in a room for 40 people. We do not want to meet at the same time as the PSRC H SC or the PSCC S SC.	