



## PSCCC Subcommittee Working Group P19 Meeting Minutes

Designation: P19	Name: Working Group on Universal Utility Data Exchange (UUDEX)
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Meeting Location: Las Vegas, NV / Web-conference	Meeting Time: 8:00 AM PDT	Meeting Date: 2023/05/09	Minutes Revised: [YYYY/MM/DD]	Minutes Approved: [2023/09/19]
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PAR Output: n/a	PAR Output: n/a	PAR Approval Date: 2022/03/24	PAR Expiration Date: 2026/12/31	Target Sponsor Ballot Date: 2023/09/30	Target Completion Date: 2025/12/31
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Presiding Officer: Scott Mix, Chair	Recorded by: Jim Michaelis, Vice-Chair	Draft Number: n/a
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Attendance:

Name	Affiliation	Attending via Phone (P) / Web (W) or Local (L)	M/NVM/G
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Scott Mix	PNNL	L	M
Jim Michaelis	Commonwealth Associates, Inc.	L	M
Jim Bougie	Albireo Energy		M
Mike Dood	SEL	L	M
James Formea	Eaton	L	M
Tom Hofstetter	NERC	W	M
Jeff Pack	Power Engineers	L	M
Eric Thibodeau	Hydro Quebec		M
Mark Adamiak	Adamiak Consulting	L	NVM
J Richie Carroll	GPA	L	NVM
Larry Collier	NERC	L	NVM
Peiman Dadkhah	NuGrid Power		NVM
Dan Goodlett	NERC	L	NVM
Ali Ipakchi	OATI		NVM
Anthony Johnson	SCE	L	NVM
Theo Laughner	Lifescale Analytics	W	NVM
Deepak Maragal	Eureka Power Solutions, LLC		NVM
Craig Rieger	INL		NVM
Nathan Wallace	Cybirical	W	NVM
Byungtae Jang	KEPCO	W	G
Eugenio Carvauteira	Omicron		G
Ed Cenzone	?????	W	G
Shane Haveron	Ametek Power Instruments		G
Yi Hu	Quanta Technology		G
Tom Thompson	IEEE	L	G

M: Member  
 NVM: Non-Voting Member  
 G: Guest

Item no.	Notes	Action by
<b>CALL TO ORDER</b>	The chair called the meeting to order at 8:00 AM PDT	Chair
<b>INTRODUCTIONS AND QUORUM</b>	This meeting of the P19 Working Group was welcomed by Scott. Attendee introductions were handled for those in the room and online, with 6 Members, 7 Non-Voting Members, and 3 Guests. The quorum was met.	Chair
<b>AGENDA APPROVAL</b>	Agenda for the meeting was reviewed, motion to approve by Mike Dood, second by Theo Laughner, passed without objection.	Chair
<b>APPROVAL OF PREVIOUS MINUTES</b>	Meeting minutes from the January meeting were reviewed, motion to approve by Mike Dood, second by Mark Adamiak, passed without objection.	Chair
<b>CALL FOR PATENTS</b>	Post-par patent slides were shown.	Chair
<b>Review of Copyright</b>	IEEE SA copyright policy slides were reviewed.	Chair
<b>Review of Behavior</b>	IEEE SA participant behavior policy slides were reviewed.	Chair
<b>Old Business</b>	<p>Reviewed the current state of the draft UUDX standard, referencing the following characteristics.</p> <ul style="list-style-type: none"> <li>• Version D0-E10 is posted to iMeet                             <ul style="list-style-type: none"> <li>○ Accessible to Members and Non-Voting Members</li> </ul> </li> <li>• There has been no change to the GITHUB implementation                             <ul style="list-style-type: none"> <li>○ There are several updates in process at PNNL</li> <li>○ There is ongoing discussion on using the existing location versus moving this to the IEEE Open Source Initiative GITLab implementation</li> <li>○ Part of this discussion relates to who will manage the reference implementation after the standard is published</li> </ul> </li> </ul> <p>Current work is focused on the following:</p> <ul style="list-style-type: none"> <li>• Identifying existing gaps and holes</li> <li>• Identifying open items</li> <li>• Implementing control capabilities</li> <li>• UML diagram updates</li> </ul> <p>Minimum operational Power System element data exchanges</p> <ul style="list-style-type: none"> <li>• Discussed using ICCP Emulation at a minimum</li> <li>• Potential for extensions beyond what ICCP supports</li> <li>• Areas under evaluation include                             <ul style="list-style-type: none"> <li>○ Transmission</li> <li>○ Generation                                     <ul style="list-style-type: none"> <li>▪ Review and verify with NERC Functional Model</li> </ul> </li> <li>○ Distribution</li> <li>○ DER information models                                     <ul style="list-style-type: none"> <li>▪ Scott is involved in a separate project specifically looking at the model needs for solar (2030.5)</li> </ul> </li> <li>○ Other information models                                     <ul style="list-style-type: none"> <li>▪ PSAP</li> <li>▪ CalFire experiences</li> <li>▪ Others?</li> </ul> </li> </ul> </li> </ul>	Chair

Item no.	Notes	Action by
<p><b>Old Business (cont.)</b></p>	<p>Other development initiatives include:</p> <ul style="list-style-type: none"> <li>• Scott has started writing an introduction for the standard</li> <li>• Need to verify the API</li> <li>• Follow up discussion on AVRO as a potential compression option                             <ul style="list-style-type: none"> <li>○ AVRO was discussed early on</li> <li>○ This has not been worked on yet</li> <li>○ Suggesting that this option be dropped, at least for now</li> </ul> </li> <li>• Introduced potential to use the “REST” interface description like used in 2030.5                             <ul style="list-style-type: none"> <li>○ &lt;add link from agenda&gt;</li> </ul> </li> <li>• Shared the following list of US Centric or “American” language sections as areas needing further evaluation and discussion                             <ul style="list-style-type: none"> <li>○ NERC</li> <li>○ &lt;pull list from agenda&gt;</li> </ul> </li> <li>• Reviewed some of the sections that are missing UML diagrams</li> <li>• Discussed topics that may be overkill in the current version                             <ul style="list-style-type: none"> <li>○ Quality Codes</li> <li>○ Compression Algorithms                                     <ul style="list-style-type: none"> <li>▪ Theo provided the information that PQ Diff uses G-Zip</li> </ul> </li> <li>○ Encoding Algorithms                                     <ul style="list-style-type: none"> <li>▪ UUDX currently references both 64 and 84 ???</li> <li>▪ It might not need to support both</li> </ul> </li> </ul> </li> <li>• Tony asked about PMU data                             <ul style="list-style-type: none"> <li>○ Scott has been asked to include this topic</li> <li>○ Discussion on whether this topic should not be included since it is a subject that is covered by other standards</li> <li>○ There was general agreement to not include this topic</li> </ul> </li> </ul>	
<p><b>New Business</b></p>	<p>Discussion of the IEEE SA Open-Source Project has moved forward</p> <ul style="list-style-type: none"> <li>• We recently had a webinar in the IEEE Open Source Initiative                             <ul style="list-style-type: none"> <li>○ The slide set is available                                     <ul style="list-style-type: none"> <li>▪ Discussed possibly posting this to the P19 iMeet site, but this might not be considered acceptable</li> <li>▪ Several people offered to forward the slide set to anyone who is interested</li> </ul> </li> </ul> </li> </ul> <p>Review writing assignments from last meeting</p> <ul style="list-style-type: none"> <li>• None have been worked on yet</li> <li>• Nathan and Deepak need iMeet access                             <ul style="list-style-type: none"> <li>○ Will elevate to NVM status</li> </ul> </li> </ul> <p>Other topics of discussion</p> <ul style="list-style-type: none"> <li>• Tony suggested that the CalFire discussion is probably a subset of the larger PSAP application in the control room</li> <li>• Mark asked about SKIP                             <ul style="list-style-type: none"> <li>○ Simple Key-Management for Internet Protocol</li> <li>○ James brought up that the next generation of SKIP is being developed</li> </ul> </li> </ul>	<p>Chair</p>

Item no.	Notes	Action by
<b>Discussion on document development</b>	<p>Additional discussion on standard development</p> <ul style="list-style-type: none"> <li>• US Centric language                             <ul style="list-style-type: none"> <li>○ Is using NERC and the NERC Functions Model OK?                                     <ul style="list-style-type: none"> <li>▪ Maybe not since it is not applicable to international users?</li> <li>▪ It might be OK to reference these as an example of using UUDX to meet these requirements (Tony)</li> </ul> </li> </ul> </li> </ul> <p>Missing UML needing work</p> <ul style="list-style-type: none"> <li>• Remove PMU data</li> <li>• Define COMTRADE interface</li> <li>• Operations planning data                             <ul style="list-style-type: none"> <li>○ Maybe define minimum data needs</li> </ul> </li> <li>• Asset Management                             <ul style="list-style-type: none"> <li>○ Is this possibly related to Dynamic Line Rating?</li> <li>○ Or is DLR more operations planning data?</li> </ul> </li> </ul> <p>References to IEC standards</p> <ul style="list-style-type: none"> <li>• How do we interface with this since this is not a joint standards development?</li> <li>• What discussions need to be initiated with IEC?</li> </ul>	Chair
<b>Upcoming meetings</b>	<p>Plan on virtual meetings in June and early August</p> <ul style="list-style-type: none"> <li>• Scott will send out Doodle poles to set meeting schedules</li> </ul> <p>The next two in-person meetings will be:</p> <ul style="list-style-type: none"> <li>• Fall meeting September 18-21 in Myrtle Beach, SC</li> <li>• JTCM January 7-11, 2024 in New Orleans, LA</li> </ul>	
<b>[AGENDA ITEM 4]</b>		
<b>[AGENDA ITEM 5]</b>		
<b>[AGENDA ITEM 6]</b>		
<b>[AGENDA ITEM 7]</b>		
<b>ITEMS REPORTED OUT OF EXECUTIVE SESSION</b>	n/a	
<b>TIME OF FINAL ADJOURNMENT</b>	9:05 AM PDT	
<b>NEXT FACE TO FACE MEETINGS</b>	Fall PSRCC/PSCCC Meetings September 18-21, scheduled in person and hybrid in Myrtle Beach, SC.	
<b>FUTURE MEETING ROOM REQUIREMENTS</b>	Room Size for 20, Projector, web conference support, avoid P20 and P21	