

## PSCC S16 SG Meeting Notes

Designation: S16		Name: Application of IDS and IPS to Electric Power Systems			
Meeting Location: Webex		Meeting Time: 11:00AM EST	Meeting Date: 2021/09/02	Minutes Revised: --	Minutes Approved: 2021/09/21
PAR Output: N/A	PAR Output:	PAR Approval Date: N/A	PAR Expiration Date: N/A	Target Sponsor Ballot Date: N/A	Target Completion Date: N/A
Presiding Officer: Eugenio Carvalheira, Chair			Recorded by: Eric Thibodeau		Draft Number:
Attendance:					
Name		Affiliation		Attending via Phone (P) / Web (W) or Local (L) M/CM/G	
Jason Lombardo		S&C		W M	
Mickey Schultz		Black and Veatch		W M	
Sakis Meliopoulos		GA Tech		W M	
Priyanka Nadkar		SEL		W M	
Gayle Nelms		SEL		W M	
James Bougie		Global Power Technologies		W M	
Eugenio Carvalheira		OMICRON		W M	
Shane Haveron		Ametek		W M	
Colin Gordon		SEL		W M	
Steel McCreery		OMICRON		W M	
Eric Thibodeau		Hydro-Quebec		W M	
M: Member CM: Corresponding Member G: Guest					

Item no.	Notes	Action by
<b>CALL TO ORDER</b>	Called to order at 11:05 EST by Eugenio Carvalheira.	
<b>INTRODUCTIONS AND QUORUM</b>	11 attendees to the meeting	
<b>CALL FOR PATENTS</b>	Informal meeting, no slides shown	
<b>COPYRIGHT SLIDES</b>	Informal meeting, no slides shown	
<b>CHAIR'S REMARKS</b>	No remarks	
<b>AGENDA APPROVAL</b>	Informal meeting, no agenda shown	
<b>APPROVAL OF PREVIOUS MINUTES</b>	Informal meeting, no minutes approved	

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<p><b>RECAP OF THE LAST MEETING</b></p>	<p>Eugenio recaps the discussions from the last meeting, going through the May meeting minutes.</p> <p>Consensus was that we were not close to a standard yet, but there is room for exploration leading to a technical report.</p> <p>For the next meeting, we must reach out to vendors of IDS solutions to help with this effort. Example of vendors that could be interested in our group (member that will contact them in parentheses) :</p> <ul style="list-style-type: none"> <li>• Nozomi (Eric)</li> <li>• Dragos (Mickey)</li> <li>• VMWare Carbon Black (Mickey)</li> <li>• PaloAlto (Mickey)</li> <li>• Netnix (Mickey)</li> <li>• Clarity (?)</li> <li>• Fortinet (Eugenio)</li> </ul>	
<p><b>PRESENTATION</b></p>	<p>Steel McCreery gives a presentation about IDSes.</p> <ul style="list-style-type: none"> <li>• Challenges of substation LANS</li> <li>• IT vs OT security priorities</li> <li>• Substation attack vectors</li> <li>• What is an IDS</li> </ul>	
<p><b>DISCUSSION ABOUT THE OUTCOME OF THE STUDY GROUP</b></p>	<p>Eugenio reminds that at the last meeting, the group was inclined to go towards a task force that will output a report. This report should be more of a tutorial report than a technical one. Like an academic survey of what exists.</p> <p>Proposed report title: Systems for Preventing and Detecting Network Intrusions in Electric Power Systems</p> <p>Brainstorm for scope:</p> <ul style="list-style-type: none"> <li>• IDS</li> <li>• IPS</li> <li>• Explore the different existing methods to perform detection</li> <li>• Also methods for preventing intrusion</li> <li>• Exclude the prevention concepts already well covered like firewalls, diodes, etc...</li> <li>• Issues that may arise during legit but unusual events <ul style="list-style-type: none"> <li>○ Temporary access (e.g. firewall configuration change)</li> <li>○ Maintenance work</li> <li>○ Firmware updates</li> <li>○ Controls on temporary equipment (e.g. emergency busbar)</li> </ul> </li> <li>• Remote access policy</li> <li>• IoT – devices calling back home for software updates</li> <li>• Microgrids / renewable energy → increases need for interconnection, increases surface of attack</li> <li>• Domain of application: Location/topology of the network to monitor (inside the substation, between subs, distribution?)</li> <li>• How to address alarms (Security Operating Center?)</li> <li>• Alarm information from OT devices (IEEE 1686, IEC 62351-14)</li> </ul>	
<p><b>TIME OF FINAL ADJOURNMENT</b></p>	<p>Meeting adjourned at 12:32 EST.</p>	

Item no.	Notes	Action by
<b>NEXT FACE TO FACE MEETINGS</b>	September PSCC meeting during the week of Sept 20.	
<b>FUTURE MEETING ROOM REQUIREMENTS</b>		