

CREDC PACIFIC NORTHWEST INDUSTRY WORKSHOP NOVEMBER 28-29, 2017

PACIFIC NORTHWEST NATIONAL LABORATORY
SYSTEMS ENGINEERING BUILDING (3820)
RICHLAND, WASHINGTON

Tuesday, November 28, 2017


Systems Engineering Building (SEB) – 820 Horn Rapids Road, Richland, WA
Electricity Infrastructure Operations Center (EIOC) - East (117)

7:30 a.m.	Registration Desk Opens – SEB Foyer Light meeting refreshments provided
8:30 a.m. - 9:00 a.m.	Welcome and Opening Remarks <ul style="list-style-type: none"> • Steven Ashby, Laboratory Director, Pacific Northwest National Laboratory • Paul Skare, Chief Cyber Security Program Manager, EIOC, Pacific Northwest National Laboratory
9:00 a.m. - 9:30 a.m.	DOE Cybersecurity for Energy Delivery Systems Update Carol Hawk, Program Manager, Cyber Security for Energy Delivery Systems in the Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy
9:30 a.m. - 10:00 a.m.	CREDC Overview & Update David Nicol, PI CREDC, Director of Information Trust Institute, University of Illinois at Urbana-Champaign
10:00 a.m. - 10:15 a.m.	Break
10:15 a.m. - 10:30 a.m.	Goals & Structure of Workshop Paul Skare, Chief Cyber Security Program Manager, EIOC, Pacific Northwest National Laboratory
10:30 a.m. - 12:00 p.m.	Panel Discussion 1: Cybersecurity Research Needs - an Energy Sector-Perspective Session Chair: Shabbir Shamsuddin, Argonne National Laboratory <ul style="list-style-type: none"> • Al Rivero, ANG Consulting • Kyle Hussey, Grant County PUD • Bheshaj Krishnappa, ReliabilityFirst
12:00 p.m. - 1:15 p.m.	Working Lunch - (Lunch is provided) Power System Resilience in the Pacific Northwest , Eduardo Cotilla-Sanchez, Assistant Professor, Electrical Engineering & Computer Science, Oregon State University
1:15 p.m. - 1:25 p.m.	Overview of Upcoming Sessions Rakesh Bobba, Assistant Professor, Electrical Engineering & Computer Science, Oregon State University



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<p>1:25 p.m. - 3:00 p.m.</p>	<p>Panel Discussion 2: Emerging Cybersecurity Technologies and Power System Applications Session Chair: Rakesh Bobba, Oregon State University</p> <ul style="list-style-type: none"> • Blockchain, Annabelle Lee, Nevermore Security • Keyless Signature Infrastructure Applications to Grid Security and Interoperability, Randy Bishop, GuardTime • Data Analytics for the Smart Grid, Vignesh Venkata Gopala Krishnan, WSU • Software Defined Networking, Dennis Gammel, SEL
<p>3:00 p.m. - 3:15 p.m.</p>	<p>Break</p>
<p>3:15 p.m. - 4:30 p.m.</p>	<p>CREDC Emerging Research Projects Showcase Session Chair: Rakesh Bobba, Oregon State University</p> <ol style="list-style-type: none"> 1. Evaluating Effectiveness of an Embedded System Endpoint Security Technology on EDS OT: Defeating the Hackers of IIoT Devices, Weilian Chu, Massachusetts Institute of Technology 2. Assured Cyber Supply Chain Provenance Using Permissioned Blockchain, Sachin Shetty, Old Dominion University 3. Metrics and Tools for Measuring Cyber Resiliency of Electric Grids, Adam Hahn, Washington State University 4. Network Function Insertion for Reliable and Secure Control Messaging Over Commodity Transport, Deniz Gurkan, University of Houston
<p>4:30 p.m. - 4:45 p.m.</p>	<p>Day 1 – Wrap-up Jud Virden, Associate Laboratory Director, Energy & Environment Directorate, Pacific Northwest National Laboratory</p>
<p>4:45pm - 5:30 pm</p>	<p>SEB and EIOC Tour Meet in SEB lobby to break into groups</p>
<p>5:30 p.m. - 7:30 p.m.</p>	<p>Poster Session, Job Fair, Demos & Networking Reception SEB Lobby, Current, and Voltage Conference Rooms</p> <p>Sponsored by OSIsoft</p> <div style="display: flex; align-items: center;">  <div> <p>OSIsoft. Thank you OSIsoft for sponsoring the poster session, job fair, demos and networking reception!</p> </div> </div>



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8:00 a.m.	Registration Desk Opens – SEB Foyer Networking with light meeting refreshments provided
8:30 a.m. - 8:45 a.m.	Day 2 – Welcome Paul Skare, Chief Cyber Security Program Manager, EIOC, Pacific Northwest National Laboratory
8:45 a.m. - 9:00 a.m.	Overview of Upcoming Sessions Adam Hahn, Professor, Washington State University
9:00 a.m. - 10:30 a.m.	CREDC Transitioning Research Projects Showcase Session Chair: Adam Hahn, Professor, Washington State University <ul style="list-style-type: none"> 1. Online, Context-aware, Intelligent Anomaly Detection, Causality and Consequence Analysis, and Response Suggestion for Supervisory board Control and Data Acquisition (SCADA) Systems in Energy Distribution Systems, Tim Yardley, University of Illinois Urbana-Champaign 2. Remote Management of EDS Experiments, Jeremy Jones, University of Illinois Urbana-Champaign 3. Increasing Cyber-Resilience of Large-Scale and Long-Lived Energy Delivery Infrastructure, J. Peter Brady, Dartmouth College 4. Resilient Framework with Authentication, Key Management, and Data Collection for Energy Sensors in Energy Distribution Networks, Tianyuan Liu, University of Illinois Urbana-Champaign 5. Lightweight, Delay-Aware and Scalable Cryptographic Services for Smart-Grid Systems, Ozgur Ozmen, Oregon State University
10:30 a.m. - 10:45 a.m.	Break
10:45 a.m. - 12:00 p.m.	Lightning Talks Session Chair: Lori Ross O’Neil, Energy Cyber Security Project Manager, Pacific Northwest National Laboratory
12:00 p.m. - 1:15 p.m.	Working Lunch – (Lunch is provided) CREDC V&V Approach - Seemita Pal and Kevin Glass, Pacific Northwest National Laboratory



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1:15pm. - 2:30 p.m.	How to Ensure CREDC Becomes Self-sustaining Session Chair: Pete Sauer, University of Illinois Urbana-Champaign
2:30 p.m. - 2:45 p.m.	Break
2:45 p.m. - 4:15 p.m.	Panel Discussion 3: Cybersecurity Research Needs - Vendor Perspective Session Chair: Scott Mix, Pacific Northwest National Laboratory <ul style="list-style-type: none"> • Dennis Gammel, Schweitzer Engineering Laboratories • Bryan Owen, OSIsoft • Benjamin Justus, Siemens Corporation • Scott Neumann, Open Access Technology International, Inc. • Mark Feasel, Telvent/Schneider
4:15 p.m. - 4:30 p.m.	Closing Remarks – Workshop Ends
4:30 p.m. - 5:30 p.m.	Optional Tour of the Volpentest Hazardous Materials Management and Emergency Response Federal Training Center (Board 47 passenger motorcoach bus outside the SEB to begin the tour. The bus will return to the SEB following the tour and then to the Tri-Cities Airport if needed)

Thank you for attending!

Workshop archives will be available online at <https://cred-c.org/pnw-iw2017/archives>

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