

INFORMATION, COMMUNICATION & CYBER SECURITY NEWSLETTER

Dear EPRI ICCS Members and Stakeholders,

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Happy St. Patrick's Day! Wow, it's hard to believe, but we're already half-way through the month of March. The past several weeks have been very busy. In early February, EPRI participated in DistribuTech. Thank you to

those who stopped by our booth. Later in February we held the 2016 Winter PDU Advisory and Sector Council Meetings in Austin, TX. Thanks to all those who attended. The links for the program sessions can be found in their respective sections of the newsletter. Follow this link for the ICCS Sector Council meeting material.

A special highlight of every winter meeting is the presentation and celebration of EPRI's Technology Transfer Awards. Congratulations to the Technology Transfer Award winners who were recognized at the meeting and also to Duke Energy for being recognized with the

March 2016

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Interoperability Leadership Award for their Leadership in the CEA-2045 and OpenFMB Standards. EPRI's awards recognize the leaders and the innovators who have transferred EPRI's research into applied results. The 2015 award winners have shown exceptional application of EPRI research and technology to solve a problem of size and significance, to champion a technology both within their companies and across the industry, to drive progress in the electricity sector, and to provide meaningful benefits for stakeholders and for society. For a complete list of winners, follow this link.

Also wanted to let you know that select member center features are now available for your mobile device! To access the EPRI **Mobile** Member Center, visit *mmc.epri.com*, login, and access products, event information, contacts and more. If you are struggling on how to use the member center, there is a slideshow available on the <u>member center homepage</u>.

Finally, I want to let you know EPRI.com, the EPRI Member Center, and other subscriber sites will be unavailable from 5 p.m. EDT, Friday, March 18, through Midnight EDT, Sunday, March 20. Access may continue to be limited for some users until Monday, March 21.

Read on for more highlights about the latest in ICCS research, and please don't hesitate to contact us with questions.

As always, thank you for your membership, collaboration and interest.

Sincerely,

Matt Wakefield

Director, Information, Communication and Cyber Security Research

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Information and Communication Technology (ICT) (161)



Industry Contributions and Collaborations

Intelligent Utility <u>posted a Gerald Gray commentary</u> about EPRI's work establishing the Common Information Model and a call to action for testers of the model.

<u>John Simmins was quoted</u> in this **Forbes** article about research underway to understand how augmented reality (AR) could be used to improve utility workforce operations. The story notes that EPRI has begun a large-scale experiment with some of the biggest utilities around the world to see how AR could fit into the industry's workforce.

<u>Walt Johnson was quoted</u> in an **EnergyBiz** article about the role the Open Automated Demand Response Alliance is playing in pushing for more effective energy standards. "There is tremendous value in standardized connectivity," he said. "We are pleased that the alliance is taking this step as we continue to strive toward interoperability and to bring lower cost technology to the market."

John Simmins collaborated on an article published in T&D World on the Outage Data Initiative.

The **Knoxville News Sentinel** reported that EPRI and the KEPCO Research Institute signed an <u>agreement</u> to share research and collaborate on projects, focusing on cyber security, and also on other areas of energy research such as demand response and augmented reality.

ICT / IntelliGrid (161) & Related Demonstration Deliverables

Call to Action: The Case for CIM Certification Testing

This publicly available white paper makes the case to address CIM certification issues. Written in conjunction with EPRI CIM experts, DNV/GL and the CIM Users Group.

Smart Grid Communications Intelligencer, Issue 14, Winter 2016

Smart Grid Communications ("Comms") Intelligencer is a triannual newsletter published by EPRI's Information and Communications Technology (ICT) Program. This newsletter highlights issues of relevance and interest to utility communications engineers and managers. The focus is on developments in communication technologies and standards, and business issues that can affect the design, deployment, or operation of utility communications infrastructure.

Open Enabling Platform for Enterprise Wide Interoperability

Open Enabling Platform for Enterprise Wide Interoperability and the Integrated Grid | Year One Update, Product ID 3002007428, to learn more about work being done to develop a secure, open enabling platform that supports enterprise-wide integration of information and communications technologies. The open enabling platform is being designed to facilitate the interoperability of grid devices and systems. The project is being led by ICT and Cyber Security staff and is part of a multi-year effort of the EPRI Technology Innovation <u>Breakthrough Technologies</u> program.

ICT Program Meeting/Webcast Materials Available

<u>Power Delivery & Utilization Winter 2016 Advisory Council Meeting: Information and Communication Technology</u>

GIS Interest Group Webcast, held February 25, 2016

Cyber Security and Privacy Program (183)



Cyber Security Team Industry Contributions and Collaborations

Foreign Affairs <u>published an article about the suspected cyber attack</u> in February on the Ukraine electric grid. Jason Christopher was quoted in the story describing the level of difficulty that is required to penetrate utility operating systems.

Cyber Security (183) Program Demonstration Deliverables

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Cyber Security Program Meeting/Webcast Materials Available

Power Delivery & Utilization Winter 2016 Advisory Council Meeting: Cyber Security and Privacy

Distribution and Transmission Modernization on Data Analytics



DMD/TMD Program Demonstration Deliverables

Third-Party Resources for Data-Analytics Activities: Distribution System Analytics – Revision 2

Data Analytics Initiative for Transmission and Distribution: Year Three Update

DMD/TMD Program Upcoming Meetings/Webcasts	Date
EPRI Distribution Modernization Demonstration and Transmission Modernization Demonstration Spring Advisory Meeting 2016, EPB, Chattanooga, TN	May 11-12, 2016

Smart Grid Demonstration



Smart Grid and Related Demonstration Deliverables

JUMPSmartMaui Demonstration Project Phase 1 Assessment: EPRI Smart Grid Demonstration Initiative

Phase 1 included tests of electric vehicle load shifting, direct load control of water heaters, bulk battery operation, and power quality control of solar photovoltaic installations for a group of volunteer residential customers. Tools for visualization and control by operators were also demonstrated.

Smart Grid Meeting/Webcast Material Available

<u>Power Delivery & Utilization Winter 2016 Advisory Council Meeting: (D-DG) Smart Grid</u> Demonstration

Field Area Network Demonstration (FAN)



FAN Demo and Related Demonstration Deliverables

<u>Field Area Network Demo – November 2015 Advisors Meeting: Presentations and Minutes (San Diego Gas & Electric)</u>

This project includes a series of meetings among project participants for the dissemination of information, experience, and results. Meetings have been held at host sites to gain hands-on experience in high-reliability FAN design, implementation, and operation. The eighth meeting was hosted by San Diego Gas & Electric (SDG&E) in San Diego, CA, November 17-18, 2015. The meeting presentations and discussions included updates on FAN pilot status from SDG&E, Salt River Project, Great River Energy, United Illuminating, and Ameren. The vendor forum included presentations from Schweitzer Engineering Laboratories and Nuage Networks.

FAN Demo Upcoming Meetings/Webcasts	Date
EPRI Field Area Network Demonstration Advisory Meeting	March 18, 2016
CIGRE Next Generation Network Webinar: How to Write a Technical Synopsis/Paper and Get it Accepted by CIGRE	March 19, 2016
Telecom Initiative Member Meeting, Denver, CO in Conjunction with the UTC Annual Summit. Contact Tim Godfrey for more information (tgodfrey@epri.com)	Week of May 2 nd , 2016

Upcoming Events	Dates
EPRI European ICCS Engagement Summit, Dublin, Ireland	April 19-20, 2016
EPRI Distribution Modernization Demonstration and Transmission Modernization Demonstration (DMD/TMD) Spring Advisory Meeting 2016, EPB, Chattanooga, TN	May 11-12, 2016
ELECTRIC POWER RESEARCH INSTITUTE	Register Here



Save the Date: EPRI Power Delivery and Utilization Advisory Meetings, Hollywood, FL

Sept. 19-22, 2016

Together...Shaping the Future of Electricity

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