

# INFORMATION, COMMUNICATION & CYBER SECURITY NEWSLETTER

Dear EPRI ICCS Members and Stakeholders,

Is everyone ready for a long weekend? There has been a lot of activity the past month, including the DMD/TMD Advisory Meeting in Chattanooga, 161 Project set and Enterprise Architecture webcasts, deliverable updates, ICCS Executive Committee calls, and more.

Still to come, in late June we have the EPRI Smart Distribution and Power Quality 2016 Conference and Exhibition at the Georgia Tech Hotel and Conference Center in Atlanta. [Click here to Register](#) and book your hotel by June 6 to receive the discounted EPRI room rate.

This year's conference focus is on ***Embracing the Grid of the Future*** and includes two tracks. Track 1 sessions include Microgrids & DER Challenges, Advanced Regulation Techniques, Power Quality and Distributed Energy Resources Standards, Case Studies in Power Quality, Power Quality Data Measurements and Analytics, and Innovations in Data Visualization. Track 2 sessions include Managing Distribution with Smart Grid Technology, Integrating Customer-side Energy Storage, Economic Framework for the Integrated Grid, Information, Communication and Cyber Security for Integrating Distributed Energy Resources, Architecture for an Integrated Grid, and Sensors and Data Analytics to Support the Modern Distribution System.

In September we have the EPRI Power Delivery and Utilization Advisory and Sector Council Meeting in Hollywood, FL. Invitations were emailed on May 24 and you can [click here to register](#).

With all the hard work everyone has been doing, I'd like to express my hope that you will have to the opportunity to slow down, relax, unwind, and enjoy the upcoming Memorial Weekend.

Sincerely,



Matt Wakefield  
Director, Information, Communication and Cyber Security Research

May 2016

## In this Newsletter

[ICT Program \(161\)](#)

[Cyber Security Program \(183\)](#)

[Data Analytics \(DMD & TMD\)](#)

[Upcoming Events](#)



## ICT Team Industry Contributions and Collaborations

Hot off the presses of the EPRI Journal – [Field Demonstrations Show Effectiveness of Communications Language, Reveal New Applications](#) - Computer operating systems, web browsers, and even breweries have tapped the open-source process to enhance product design through collaboration. Now EPRI has completed an open-source collaboration to improve how grid operators manage energy demand and supply.

John Simmins, EPRI, Aleksandar Vukojević and Chet Johnson, Duke Energy, contributed a column to [T&D World, Duke Augments Reality](#), about their collaboration on augmented reality research and how it may be used to improve grid resiliency.

### ICT / IntelliGrid (161) & Related Demonstration Deliverables

#### **EPRI Enterprise Architecture Guiding Principles Workshop Summary: 2016**

*The EPRI Workshop on Enterprise Architecture Guiding Principles featured discussion and presentations on the development and implementation of guiding principles in utility companies. Guiding principles define the fundamental values that guide business and information technology (IT) decision-making and are the foundation of enterprise architecture.*

#### **Integrated Grid Pilot Projects Quarterly Update: Q1 2016**

*The Integrated Grid Initiative pilot projects will enable EPRI experts to engage with individual members to add value to new technology demonstrations in the areas of project design, integration, and scaling requirements, interoperability standards, and economic assessment. The projects' results will help teams identify gaps associated with new technologies and their applications, and drive toward a more optimally integrated electric power system.*

Upcoming Meetings/Webcasts	Date
<b>Enterprise Architecture Collaboration Group Weekly Webcast</b>	31-May-2016
	07-Jun-2016
	14-Jun-2016
	21-Jun-2016
	28-Jun-2016
	05-Jul-2016
<b>ICT for Distributed Energy Resources for Project Set 161D</b>	16-Jun-2016

The agenda for this webcast will include a brief update on the status of 2016 research. On this webcast, we will see a deeper dive into utilization of the **DER Group-Level Integration** functions development applicable to scalable utility DER deployment. The results of this working group can apply to DER aggregation such as a DMS or DERMS and the communication protocols needed for a scalable system of DER. One of our utility members, who is working in the DERMS space, is also gearing up for a presentation on their related projects. Questions – contact Gale Horst [ghorst@epri.com](mailto:ghorst@epri.com)

## Meeting/Webcast Materials Available

[ICT for Transmission Project Set 161B](#)

[ICT Emerging Technologies and Technology Transfer Project Set 161A](#)

[EPRI Enterprise Architecture Guiding Principles Workshop Summary: 2016](#)

Cyber Security and Privacy Program (183)



## Cyber Security (183) Program New Project

### Timing Security Assessment and Solutions

*This project is a progressive approach for addressing cyber security vulnerabilities in precision timing systems used in mission-critical utility operations. The results will provide significant power industry and public benefits, particularly focused on improved power grid reliability and resiliency.*

## Upcoming Meetings/Webcasts

Date

[Threat Management and Incident Response - Birds of a Feather Workshop](#)

20-Jul-2016

Distribution and Transmission Modernization on Data Analytics



## DMD/TMD 2016 Advisory meeting – EPB Chattanooga



Tiffany Gibby, TVA, received a recognition award for her leadership as the Chairman of the ICT for Transmission Advisory Group from Paul Myrda (right) and Matt Wakefield (left).



EPB Welcome – David Wade



TVA Welcome – Joe Hoagland



DMD/TMD 2016 Advisors Meeting – EPB Chattanooga

## DMD/TMD Deliverables

### **Data Analytics Cases for System Awareness and Grid Optimization: A Product of the Distribution Modernization Demonstration Project**

*This document is a progress report of the data analytics cases that have been developed for the Data Mining Initiative, a sub-project of the Distribution Modernization Demonstration project. The report is blend of stand-alone data analytics cases that are categorized by a single topic area, system awareness and grid optimization.*

**Data Analytics Cases for Asset Awareness: A Product of the Distribution Modernization Demonstration Project**

*This document is a progress report of the data analytics cases that have been developed for the Data Mining Initiative, a sub-project of the Distribution Modernization Demonstration project. The report is a blend of stand-alone data analytics cases that are categorized by a single topic area, asset awareness.*

**Data Analytics Cases for Load and Distributed Energy Resource Awareness: A Product of the Distribution Modernization Demonstration Project**

*This document is a progress report of the data analytics cases that have been developed for the Data Mining Initiative, a sub-project of the Distribution Modernization Demonstration project. The report is a blend of stand-alone data analytics cases that are categorized by a single topic area, load and distributed energy resource (DER) awareness.*

**Data Analytics Cases for Outage Awareness: A Product of the Distribution Modernization Demonstration Project**

*This document is a progress report of the data analytics cases that have been developed for the Data Mining Initiative, a sub-project of the Distribution Modernization Demonstration project. The report is a blend of stand-alone data analytics cases that are categorized by a single topic area, outage awareness.*

**Case Study: Demonstration of the Quantum Weather Storm-Prediction Model and Application**

*Two significant weather-related Ameren Missouri outage events in 2006 highlighted a need for a storm-prediction system that could improve an electric utility's ability to anticipate and respond to weather-related damage. The Quantum Weather system leverages numerical weather-prediction models, well-placed sensor network, and high-performance computing to optimize predictions and resolve fine-scale weather features, resulting in a more accurate forecast than commodity services.*

Upcoming Events	Dates
<a href="#">EPRI Smart Distribution and Power 2016 Quality Conference and Exhibition</a> , Atlanta, GA	June 28-30, 2016
<a href="#">EPRI Power Delivery and Utilization Advisory Meetings</a> , Hollywood, FL	Sept. 19-22, 2016
<a href="#">Save the Date: Advanced Metering Infrastructure (AMI) Summit, Charlotte, NC</a>	October 18, 2016

Save the Date: EPRI Power Delivery and Utilization Advisory Meetings,  
Huntington Beach, CA

Feb. 13-16, 2017

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