# EPRI (ICT) Innovators Forum

# Advancing the Integration of Innovative Technology for the Electric Grid



# Background, Objectives, and New Learning

Information & Communication Technology (ICT) is evolving at an ever-increasing rate. This rapid evolution highlights the importance of accelerating the adoption of standards, both to minimize the risk of obsolescence and to create more opportunities for innovation.

The EPRI **ICT** Innovators Forum is designed to increase the alignment and application of research priorities between electric utilities and industry solution providers. This forum will include innovators and vendors working to accelerate the commercialization of standards-based integration technology solutions, based on the priorities of electric utilities and forum members.

Forum members can gain improved visibility into electric utilities' "needs and wants" – technical requirements that can help solution providers make next-generation ICT investments that have the potential for broad industry adoption. The forum also can help electric utilities better understand the "capability landscape" offered by the solution providers' products, to better inform their purchasing decisions.

A primary activity of the forum will be annual surveys that assess the needs and wants of utilities and current market offerings. The surveys can help utilities identify the capabilities of existing solutions and reveal gaps in which objective and unbiased research is needed.

One key aspect of the prioritization of research is the development of common electric industry ICT requirements that can be applied to standard communication technologies, protocols, and cyber

# **Engagement Highlights**

- Gain unique insights into high-priority ICT needs, wants, and requirements of electric utilities
- Make your capabilities and innovations more visible to electric utilities
- Accelerate commercialization of ICT products and solutions
- Provide input on prioritization of research
- Coordinate with EPRI utility programs ICT (161) and Cyber Security (183)

security. These enabling technologies can accelerate the adoption of standardized solutions while enabling innovation and preserving the intellectual property (IP) of solution providers.

The new learnings associated with this project will be documented in surveys and reports as well as through participation in webcasts and face-to-face meetings.

# **Benefits**

By gaining an understanding of utilities' needs, wants, and requirements, solution providers can develop standards-based solutions, communication technologies, and cyber-security solutions better suited for the electric power industry. Electric utilities can benefit from a broader range of solution providers equipped to meet their requirements.

The benefits of this project include:

- Improved utility awareness of innovative products and solutions that leverage standards;
- Identification of gaps in standards and technologies that solution providers and EPRI may use to guide existing or new research activities;
- Knowledge of standardized functional requirements and enterprise integration methods, tools, and algorithms that can help utilities reduce their need for customization and development efforts; and
- Solution provider coordination with EPRI ICT and

Cyber Security members.

# **Approach and Summary**

An advisory committee will set annual research priorities. The forum will have one annual face-to-face meeting at the EPRI Smart Distribution and Power Quality Conference and one advisory engagement at an EPRI advisory meeting. Technology transfer will occur via webcasts, project updates, and periodic deliverables that are agreed to by the advisory committee.

Topics that may be included in the surveys will be aligned with the EPRI ICT (161) and Cyber Security (183) programs and related demonstrations including:

- ICT for Transmission (161B)
- ICT for Distribution (161C)
- ICT for Distributed Energy Resources (DER) (161D)
- Enterprise Architecture (161E)
- Advanced Metering Systems (161F)
- Cyber Security Technologies (183B)
- Cyber Security Information Assurance (183D)
- Data analytics (Distribution Modernization Demo, Transmission Modernization Demo, various programs)

# **Deliverables**

For each topic prioritized by the advisory committee, surveys will be produced and analysis conducted that will include:

- An electric utility "ICT needs, wants, and requirements" survey;
- A solution provider "ICT capability landscape" survey; and
- Gap analyses between utility and solution provider surveys.

Additional deliverables will include:

- Periodic newsletters and/or webcasts;
- Annual face-to-face meetings at EPRI conferences;
- Optional discounted exhibitor space; and

 Identification of potential collaborative R&D projects.

# **Price of Project**

Membership in the Forum costs \$10,000 per year.

# **Project Status and Schedule**

The EPRI ICT Innovators Forum offers annual membership with deliverables evenly spread throughout the year. The project will begin once five members have joined and has an anticipated start date at the end of 2014 or beginning of 2015.

#### Who Should Join

Solution providers, vendors, and others with a stake in developing and applying solutions that leverage enabling communication technologies, standards, and security in the electric utility industry could benefit from participation in this forum.

# **Contact Information**

EPRI Customer Assistance Center at 800.313.3774 (askepri@epri.com).

# **Technical Contact**

Walt Johnson, Ph.D., EPRI Technical Executive 650.855.2013 (<u>hwjohnson@epri.com</u>).

Product ID: 3002004802

Project Number: 106738

#### **Electric Power Research Institute**

3420 Hillview Avenue, Palo Alto, California 94304-1338 • PO Box 10412, Palo Alto, California 94303-0813 USA 800.313.3774 • 650.855.2121 • askepri@epri.com • www.epri.com

© 2014 Electric Power Research Institute (EPRI), Inc. All rights reserved. Electric Power Research Institute, EPRI, and

TOGETHER...SHAPING THE FUTURE OF ELECTRICITY are registered service marks of the Electric Power Research Institute, Inc.