

EPRI | U FOR - INFORMATION, COMMUNICATION TECHNOLOGY & CYBER SECURITY (ICCS)

Cyber Security

Applications





for DER & Grid

Edge

Topics covering the breadth of ICCCS

Cyber Security

for Transmission

& Distribution

PROJECT HIGHLIGHTS

Management

- Improve performance knowledge for new and early-in-career engineers and other staff
- Focus areas Utility Focused Information, Communication Technology & Cyber Security (ICCS)
- Unlimited Access to high-quality, selfpaced technical training
- Available on-demand 20+ video computer-based training courses
- Facilitates professional development hours (PDH) for certifications, licenses, etc.
- Provide a system of record to track completed training high-quality, technically based training
- New Courses added each year

Background, Objectives, and New Learnings

Employee training and education are ongoing needs for utilities, especially as many experienced engineers and subject matter experts are retiring. As the digital transformation and cyber security create new challenges, utilities see a need to train existing employees. Crossfunctional training is crucial for developing a well-rounded and cohesive workforce, which in turn accelerates staff productivity.

The objective of this project is to provide high-quality, foundational technical training on Information, Communication Technology & Cyber Security (ICCS) related topics for engineers and other staff. Furthermore, it aims to establish a system of record for both the utility and the individual to track and manage their professional development and training progress.

Benefits

The project includes a combination of training on demand and distance learning training to better meet utility needs by providing instruction on a variety of utility-specific ICCS related topics.

Participants get unlimited access to on-demand computer-based training and videos, as well as distance learning (i.e., virtual instructor-led training) geared toward engineers and other technical staff.

The training material uses EPRI's state-of-the-art learning management system (LMS), which also maintains individual training records.

Professional development hours (PDH) granted upon completion of the training will help engineers, and others meet the requirements for certifications and career advancement upon successful completion of certain courses.

Project Approach and Summary

The training program leverages EPRI's deep subject matter expertise, including its guidebooks, and ongoing research and development (R&D) results. Experts in course design and adult education collaborate with EPRI staff to produce relevant, timely, useful, and effective training, with new material added annually.

Each funding organization has representation on an Advisory Committee that helps EPRI identify and prioritize training needs.

Deliverables

Project deliverables are expected to include access to Information, Communication Technology & Cyber Security (ICCS) related training through the EPRI | U for-ICCS LMS, such as:

- Computer-based training modules (unlimited number of seats)
- Videos (unlimited number of seats)
- Distance learning (i.e., virtual instructor-led)

New deliverables are added each year, increasing the amount of training to which project members have access. Project membership is required to access any of the training material during a given calendar year.

Price of Project

The price of participation is a function of metrics as measured by a combination of transmission and distribution capacity.

Tier 1: \$15k/yearTier 2: \$25k/yearTier 3: \$35k/year

Contact your Technical Advisor for specific pricing for your organization. The project qualifies for co-funding or self-directed funding (SDF).

Project Status and Schedule

This project will be offered as an annual, subscriptionbased, supplemental project, with access running from January 1 to December 31 each calendar year.

Training Modules are expected to include over 40 PDHs including, but not limited to the following courses:

- Al in the Electric Industry: An Introduction for Managers
- 2. Digital Transformation in the Electric Utility Industry
- 3. Introduction to Data Analytics
- 4. Business Capability Models and How to Create Them
- 5. Geospatial information Systems (GIS) Datasets
- Information and Communication Technologies (ICT) for Distributed Energy Resources (DER) and Systems
- 7. Interoperability Requirements in IEEE 1547-2018
- 8. Introduction to Enterprise Architecture
- 9. <u>Telecommunications Technologies for Utility</u> <u>Operations</u>
- 10. Cloud Security for Utilities
- 11. Cyber Security Fundamentals for Procurement Professionals - Role-based Training
- 12. <u>DER Cyber Security Energy Storage Systems and EV Charging Infrastructure</u>

- 13. <u>Developing a Cyber Security Culture in the</u> <u>Operational Technology (OT) Environment</u>
- 14. Embedded System Penetration Testing
- 15. <u>Enabling Digital Transformation: Application</u>
 <u>Integration Leveraging Common Information Model</u>
- 16. Insider Threat
- 17. <u>Integrated Security Operations Center (ISOC) Human</u>
 Assets Impacts
- 18. <u>Introduction to Cyber Security for Transmission and</u>
 <u>Distribution Control Center Operators</u>
- Introduction to Intrusion Detection Systems (IDS)
- 20. Introduction to Security Automation
- 21. OT Cyber Security Basics in Power Delivery Systems for IT Cyber Security Resources
- 22. <u>Position, Navigation and Timing (PNT) Vulnerabilities</u> and Mitigations
- 23. <u>Secure Remote Access A Functional Architecture</u> for Grid Operations Procurement Decisions

Who Should Join

The information and instruction accessed through this project are applicable to engineers and other utility staff — typically new to industry or early career - seeking to advance their education and increase their in-depth knowledge of various Information, Communication Technology & Cyber Security (ICCS) related topics.

Contact Information

For more information, contact the EPRI Customer Assistance Center at 800.313.3774 (askepri@epri.com).

Technical Contact

Greg Drewry at 865.218.5916 (gdrewry@epri.com)

To Join Contact Your Information, Communication Technology & Cyber Security (ICCS) Technical Advisor

West: Brian Dupin at bdupin@epri.com

Northeast: Barry Batson at bbatson@epri.com

Southeast: Chuck Wentzel at cwentzel@epri.com