

FUNDAMENTALS OF CYBER SECURITY FOR UTILITIES

September 15-16, 2020
Online | Central Time

EUCI ONLINE COURSE

EUCI is pleased to offer this course on our online interactive platform. Enjoy a valuable learning experience with a smaller impact on your time and at reduced cost. You will gain new knowledge, skills, and hands-on experience from the comfort of your remote location.

“

“Made a dry subject come alive and clarified the technical procedures/best practices. He puts everyone at ease, and I think everyone enjoyed the experience.”

Director,
Dubriansly Consulting

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 EUCI is authorized by IACET to offer 1.0 CEUs for the course

OVERVIEW

Like other parts of critical infrastructure, utilities face advancing cyber security threats to their corporate and field environments. Regulators, such as NERC and FERC, have mandated in their jurisdictions that these threats be addressed ultimately through compliance with NERC CIP requirements. However, because of the complex nature of control systems, utility cyber security programs face much greater challenges in providing needed cyber security controls for BES Cyber Assets (BCA) and BES Cyber Systems (BCS). Further complicating the situation are newer digital components being implemented that are challenging many preconceived notions of how technology is used in power generation and delivery.

As the options for access and control become more complicated, cyber security becomes more important to the overall safety of the environment. Threats are rapidly evolving, and the industry is struggling to balance asset availability with cyber security to keep malicious actors at bay. Regulators continue to refine their guidance, and the industry is racing to keep up. Notwithstanding growing questions and concerns from Utility Boards of Directors over cyber security, each audit of compliance requirements yields new insight into regulator concerns over cyber security in the energy industry.

This course is an in-depth introduction to cyber security issues facing utilities today. It is meant as a primer to give the necessary background for all staff to understand the concepts and complexities of cyber security and compliance with NERC CIP Standards.

LEARNING OUTCOMES

- Review current value at risk from cyber security threats facing electric utilities
- Analyze cyber threats and vulnerabilities
- Define, assess, and manage security risk for smart grid
- Discuss NERC CIP, key implementation strategies, and current events
- Discuss the convergence of IT and cyber security departments, internal and external communication strategies and building cross-functional teams
- Discuss practical techniques for risk management and data protection
- Articulate holistic cyber security program strategies focused on prevention

WHO SHOULD ATTEND

Utility and energy company staff from the following departments:

- Any Directors and C-Suite Executives
- Compliance and Regulatory Managers
- Legal and Regulatory Staff
- Information Technology and Information Security
- Operations and Engineering
- Administrative and Support Staff
- Control Systems Maintenance Staff

As well as:

- Attorneys and Regulators
- NERC Regional Entity staff
- Contractors and Vendors



“Excellent training to gain understanding of cybersecurity, applicable to utility companies”

Director Operations, NiSource

AGENDA

TUESDAY, SEPTEMBER 15, 2020

8:45 – 9:00 am **Log In**

9:00 am – 4:30 pm **Course Timing**

12:30 – 1:15 pm **Lunch Break**

Threats to Energy Infrastructure - Understanding the Cyber Threat Landscape and Value at Risk

- Introduction to cyber attacks and defenses
- Current cyber security threats facing electric utilities
- Common vulnerabilities and consequences

Continuation of Value at Risk: Threats to Energy Infrastructure

- Threat impacts to control systems
- Upcoming cyber security challenges for utilities

12:30 – 1:15 pm **Lunch Break**

Security of Smart Grids: How Cyber Security is Affecting its Future

- Definition, assessing, and managing security risks affecting smart grid
- Compliance and distribution systems
- NIST standards
 - o Existing standards and those in development
 - o Practical impacts to utility cyber security practices
- Cyber threats and vulnerabilities to communication networks
 - o Field maintenance and test equipment
 - o Wide Area Network communications
 - o Field communication with Internal IT assets

NERC CIP: Implementation and Preparing for Subsequent Versions

- Definition and review of the current version of NERC CIP and key differences from previous versions
- Introduction and description for each of the NERC CIP standards
- Review of common violations and root causes

WEDNESDAY, SEPTEMBER 16, 2020

8:45 – 9:00 am **Log In**

9:00 am – 12:00 pm **Course Timing**

Continuation of NERC CIP Discussion and Resolving Implementation Challenges

- Brief coverage of the regulatory landscape around NERC CIP
- Discuss key factors of each NERC CIP version along with implementation strategies
- Identify what to expect from future NERC CIP versions

Integrating Cyber Security Across the Utility

- Internal cyber security strategy
- Cyber Security integration across the utility
 - o Cross-functional teams
 - o Roles and responsibilities
- End-to-end cyber security from back office to core business

12:00 pm **Course Adjourns**

COURSE INSTRUCTOR

Rob Schuler

Cyber Strategy Manager, Accenture Security

Mr. Schuler is a Cyber Security Strategy Manager and Technical Thought Leader with Accenture Security in the United States. He has 20 years of cyber security risk management and systems security engineering experience across multiple industries. Over this period, he has become a recognized expert in cyber security guidance for utility control systems.

Mr. Schuler has key expertise in helping clients to define their needs and translate them into actionable program goals. He has a strong history of identifying and unifying technical teams of diverse backgrounds and delivering program excellence.

Mr. Schuler's industry outreach activities have included frequent speaking engagements delivering control system cyber security courses and speaking on industry panels, where his technical knowledge and interactive style is helping key industry participants reach a shared understanding of cyber security threats, compliance standards, and how to build secure, best-practice architectures while meeting compliance objectives.



"Excellent course, well organized, up to date and pertinent to today's changing environment. EUCI courses are on the mark!"

Director, Indiana State Government



"Excellent presenter! Approachable and relatable!"

General Manager, Guam Power Authority



"Very engaging and knowledgeable speaker."

Electrical Engineer, ExxonMobil



"This is my 1st time at an EUCI conference. I would definitely come to additional conferences if I come across something with appropriate content."

Consultant, NREL



"I really enjoyed how Rob integrated real world examples with the course content."

Project Manager, Lockheed Martin/TRC

REQUIREMENTS FOR SUCCESSFUL COMPLETION

You must be logged in for the entire presentation and send in the evaluation after the online course is completed.

INSTRUCTIONAL METHODS

PowerPoint presentations, interactive group exercise, and group discussion will be used during this course.

ONLINE COURSE DELIVERY & PARTICIPATION DETAILS

We will be using Microsoft Teams to facilitate your participation in the upcoming event. You do not need to have an existing Teams account in order to participate in the broadcast – the online course will play in your browser and you will have the option of using a microphone to speak with the room and ask questions, or type any questions in via the chat window and our on-site representative will relay your question to the instructor.

- You will receive a meeting invitation which will include a link to join the meeting.
- Separate meeting invitations will be sent for the morning and afternoon sessions of the online course.
 - o You will need to join the appropriate meeting at the appropriate time.
- If you are using a microphone, please ensure that it is muted until such time as you need to ask a question.
- The remote meeting connection will be open approximately 30 minutes before the start of the online course. We encourage you to connect as early as possible in case you experience any unforeseen problems.

IACET CREDITS



EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

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COURSE RECORDING

A recording of this program will be available for three days from either the end of the program (or three days from the date of purchase, if you purchase the recording after the session ends). It is presented in four-hour sessions and can be watched an unlimited number of times for three days (for the registrant). There is no additional cost beyond the registration fee.

To Register Click Here, or

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Energize Weekly is EUCI's free weekly newsletter, delivered to your inbox every Wednesday. We provide you with the latest industry news as well as in-depth analysis from our own team of experts. Subscribers also receive free downloadable presentations from our past events.

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PLEASE SELECT

- FUNDAMENTALS OF CYBER SECURITY FOR UTILITIES ONLINE COURSE:**
SEPTEMBER 15-16, 2020: US \$1195 (Single Connection)
- PACK OF 5 CONNECTIONS:** US \$5,375
- PACK OF 10 CONNECTIONS:** US \$8,965

Online Course Delivery & Participation Details

See page 5 for information

How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

Print Name

Job Title

Company

Address

City

State/Province

Zip/Postal Code

Country

Phone

Email

CREDIT CARD INFORMATION

Name on Card

Billing Address

Account Number

Billing City

Billing State

Exp. Date

Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)

Billing Zip Code/Postal Code

OR Enclosed is a check for \$ _____ to cover _____ registrations.

Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before August 14, 2020 in order to be refunded and will be subject to a US \$195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices .

EUCI reserves the right to alter this program without pr