EUCI COURSE

FUNDAMENTALS OF CYBER SECURITY FOR UTILITIES

AUTHORIZED IACET PROVIDER

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, FERC, and the Canadian National Energy Board, 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

- Identify current cyber security threats facing electric utilities
- Analyze cyber threats and vulnerabilities
- Define, assess and manage security risk for smart grid
- Discuss NERC CIP version 5 and key implementation strategies
- Identify international efforts surrounding protection for critical infrastructure
- Discuss the convergence of IT and cyber security departments, internal communication strategies and building cross-functional teams
- Analyze risk management and data protection strategies

> ***"I am very glad I attended this course. I am looking forward to digging deeper into this topic. This course gave me a good starting point for additional study."***
>
> Sr. Risk Engineer, Zurich Services

> ***"After participating in this course I feel better equipped to add value for my organization. The topics covered address the questions around cyber security risk that continue to be a topic of discussion among senior management and throughout the company. Thank you EUCI for hosting this relevant and engaging seminar!"***
>
> IT Auditor, TECO Energy

AGENDA

MONDAY, APRIL 24, 2017

8:00 – 8:30 am **Registration and Continental Breakfast**

8:30 – 10:00 am **Threats to Energy Infrastructure - Understanding the Cyber Threat Landscape**
- Current cyber security threats facing electric utilities
- Common vulnerabilities and consequences
- Upcoming cyber security challenges for utilities

10:00 – 10:30 am **Networking Break**

10:30 am – 12:00 pm **Security of Smart Grids: How Cyber Security is Affecting its Future**
- Defining, assessing, and managing security risks affecting smart grid
- Compliance and distribution systems
- NIST standards
  - Existing standards and those in development
  - Practical impacts to utility cyber security practices
- Cyber threats and vulnerabilities to communication networks
  - Field maintenance and test equipment
  - Wide Area Network communications
  - Field communication with internal IT assets

12:00 – 1:00 pm **Group Luncheon**

1:00 – 2:30 pm **NERC CIP: Implementing Version 5 and Subsequent Versions**
- Definition and review of version 5 and key differences from previous versions
- Discuss key factors of version 5, 6, and 7 along with implementation strategies
- Identify what to expect from future CIP versions

2:30 – 3:00 pm **Networking Break**

3:00 – 5:00 pm **Continuation of NERC CIP Discussion and Resolving Implementation Challenges**

TUESDAY, APRIL 25, 2017

8:00 – 8:30 am **Continental Breakfast**

8:30 – 10:00 am **Integrating Cyber Security across the Utility**
- Internal cyber security strategy
- Cyber security integration across the utility
  - Cross-functional teams
  - Roles and responsibilities
- End-to-end cyber security from back office to core business

> ***"Excellent training to gain understanding of cybersecurity, applicable to utility companies"***
>
> Director Operations, NiSource

AGENDA

TUESDAY, APRIL 25, 2017 (CONTINUED)

10:00 – 10:30 am **Networking Break**

10:30 am – 12:00 pm **Bringing it all Full-Circle: IT to OT**
- Practical techniques and lessons learned from cyber security program implementations across IT (Information Technology) and OT (Operational Technology)
- Group discussions or mini-exercises based on cyber scenarios

12:00pm **Course Adjourns**

INSTRUCTOR

Robert Schuler

Manager, Cyber Security Strategy, Accenture

Mr. Schuler is a Cyber Security Strategy and Technical Thought Leader with Accenture Strategy in the United States. He has over 19 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 control systems, including Nuclear Energy Institute (NEI) 08-09 and NEI 13-10.

Mr. Schuler has key expertise in helping industry clients define their needs and translate them into actionable program goals. He has a strong history of guiding teams toward shared agreement, facilitating process refinement, and aligning organizational culture with program expectations.

Mr. Schuler's industry outreach activities have included frequent speaking engagements delivering nuclear and utility 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 enhance security architectures while meeting regulatory objectives.

REQUIREMENTS FOR SUCCESSFUL COMPLETION OF PROGRAM

Participants must sign in/out each day and be in attendance for the entirety of the course to be eligible for continuing education credit.

INSTRUCTIONAL METHODS

This course will use PowerPoint presentations and group discussions.

PROCEEDINGS

The proceedings of the course will be published, and one copy will be distributed to each registrant at the course.

EVENT LOCATION

A room block has been reserved at the Hilton Baltimore, 401 W Pratt St, Baltimore, MD 21201, for the nights of April 23-25, 2017. Room rates are $229 plus applicable tax. Call **1-443-573-8700** for reservations and mention the EUCI event to get the group rate. The cutoff date to receive the group rate is March 23, 2017 but as there are a limited number of rooms available at this rate, the room block may close sooner. ***Please make your reservations early.***

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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REGISTER 3, SEND THE 4TH FREE

Any organization wishing to send multiple attendees to these courses may send 1 FREE for every 3 delegates registered. Please note that all registrations must be made at the same time to qualify.

> ***"Very useful course. Learned a lot and will take it to application at my work."***
>
> Manager, IT, Enersource

Please make checks payable to: "PMA"

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PLEASE REGISTER

○ **FUNDAMENTALS OF CYBER SECURITY FOR UTILITIES** COURSE:
APRIL 24-25, 2017: US $1395
EARLY BIRD on or before APRIL 7, 2017: US $1195

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

Print Name | Job Title

Company

What name do you prefer on your name badge?

Address

City | State/Province | Zip/Postal Code | Country

Phone | Email

List any dietary or accessibility needs here

CREDIT CARD INFORMATION

Name on Card | Account Number

Billing Address | Billing City | Billing State

Billing Zip Code/Postal Code | Exp. Date | Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)

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 March 24, 2017 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 at (201) 871-0474.