

NERC CIP: A DEEPER DIVE

December 12-13, 2017
Andaz Scottsdale
6114 N. Scottsdale Road
Scottsdale, AZ

RELATED EVENT:

NERC COMPLIANCE FUNDAMENTALS
December 11-12, 2017 | Scottsdale, AZ



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

OVERVIEW

The electric grid in North America is at the top of the list of critical infrastructures maintained by Presidential Directive by the Department of Homeland Security and it is recognized that the remaining critical infrastructures will not function without a reliable supply of electricity. As a result, cyber and physical security for electric utilities is at the forefront of the legislators and regulators agenda following recent cyber and physical attacks in the US and elsewhere in the world.

To address these risks, the North American Electric Reliability Corporation (NERC) has developed and maintained a set of Critical Infrastructure Protection standards that are mandatory and enforceable. These standards have undergone significant change since they were first adopted in FERC Order 706. These standards have been extended to include all Bulk Electric System Assets and their related Cyber Assets each categorized as High, Medium, and Lower Risk assets thereby extending the program to all registered entities and all bulk electric system assets at some level.

This course will provide a deep fundamental understanding of the NERC CIP standards including a history of their development, an understanding of the present standards, and a view of what is coming in future standard development. The course will also provide a detailed overview of each standard, its fundamental purpose, and the intent of each requirement.

Developing programs to meet the intent of the standard is challenging since compliance with the standards requires disciplines from several key corporate functions including electric system operations, information technology, corporate security, and human resources at a minimum. This course will also review organizational structures for successful implementation and their experiences.

This course will also provide an overview of compliance and monitoring efforts that NERC will conduct for the CIP standards and is designed to give the necessary background for all staff to understand the concepts and complexities of NERC compliance in order to communicate and build a culture of compliance and reliability and prepare for upcoming CIP audits.

LEARNING OUTCOMES

- Review the background for the NERC Critical Infrastructure Standards and discuss major recent revisions
- Understand the Scope and Purpose of the NERC Critical Infrastructure Protection (CIP) Standards
- Examine the NERC CIP requirements: Current version and upcoming revisions
- Understand the confidentiality provisions of the CIP Standards
- Explain how violations are determined and identify which CIP standards are the most violated and why
- Discuss the challenges faced by utilities in defining a compliance program across the corporate functions necessary for CIP compliance (operations, information technology, corporate security, human resources, etc.)
- Define a culture of compliance and its importance in the compliance monitoring and enforcement process
- Examine strategies to build an internal CIP compliance program in such a diverse environment
- Analyze the audit process for CIP standards and demonstrate strategies for success before, during, and after an audit

WHO SHOULD ATTEND

- NERC registered entity administrative and support staff
- Compliance managers and directors
- Subject matter experts involved with the CIP standards (Operations, Information Technology, Human Resources, and Corporate/Physical Security)
- Generation owners and operators to include IPPs and renewable energy project developers
- Transmission owners and operators, including merchant transmission projects
- Attorneys and regulators
- Regional entity and RTO/ISO staff

AGENDA

TUESDAY, DECEMBER 12, 2017

12:30 – 1:00 pm Registration

1:00 pm – 5:00 pm Course Timing

History and Purpose of NERC Critical Infrastructure Protection Standards and Requirements

- o History of the CIP Standards
 - Urgent Action Standards
 - NERC vs. FERC vs. Congress
- o 706 Reliability Standards – The first enforceable standards
- o CIP Version 5 and Version 6 Reliability Standards
 - Review of the intent and purpose of each standard
 - Understanding each of the requirements
 - Departments involved in meeting the intent
- o Meeting the requirements with outside contractors/vendors
- o Confidentiality provisions
 - New requirements for managing the information
- o Analysis of most violated CIP standards: Hot spots to watch for

WEDNESDAY, DECEMBER 13, 2017

8:00 – 8:30 am Continental Breakfast

8:30 am – 5:00 pm Course Timing

12:00 – 1:00 pm Group Luncheon

History and Purpose of NERC Critical Infrastructure Protection Standards and Requirements - continued

- o Physical Security and CIP-014
 - Coordination with other Physical Security requirements
- o Audit processes and preparation for CIP standards
 - RSAW preparation
 - Data to provide and not to provide
 - Common pitfalls

CIP Compliance in Practice

- Define “culture of compliance ” across the responsible areas
 - o Communication of risk and strategies to build, communicate and demonstrate a culture of compliance, as mandated by NERC
- Organizing for compliance
 - o Decentralized vs. centralized corporate security
 - Options for organization
- The role of a culture of compliance in mitigation
- Confidentiality of the compliance process
- Recognize how NERC compliance fits with other enterprise compliance needs and risk management
- Managing documentation and evidence
- Demonstrating a culture of compliance to auditors for the CIP standards
- Emerging Issues and New Standards

INSTRUCTOR



David W. Hilt, P.E.

President and Owner of Grid Reliability Consulting

Mr. Hilt has nearly 40 years of experience in electric power system engineering, operation, and regulatory activities. He has been a manager responsible for the design, specification, and construction of electric substations from distribution to EHV including protective relaying. He has also managed transmission and resource planning activities for a major Midwestern electric and natural gas utility providing expert testimony before FERC and state regulators for transmission expansion and 20 year resource plans. Mr. Hilt has directed the development and installation of state estimation and OASIS systems for a Midwestern Reliability Coordination Center. As a Vice President at NERC, he led the development of the compliance monitoring and enforcement program for the bulk-power system reliability standards in North America working closely with the industry, FERC, and Canadian regulatory authorities. He also developed audit programs and event analysis and investigation preprocess. While at NERC he led the investigation of the August 2003 blackout in the Northeastern United States and Canada providing the technical input to the U.S. - Canada Power System Outage Task Force report. Mr. Hilt's recent experience includes assessment of risk from physical attack and grid resiliency.

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

The event is located at the Andaz Scottsdale, 6114 N. Scottsdale Road, Scottsdale, AZ 85253. A room block has been reserved for the nights of December 10-12, 2017. Room rates are US \$229. Call **1-480-368-1234** for reservations and mention the EUCI event to get the group rate. The cutoff date to receive the group rate is November 10, 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 this event may send 1 FREE for every 3 delegates registered. Please note that all registrations must be made at the same time to qualify.

REGISTRATION
to register [CLICK HERE](#) or

Call: 201 871 0474
fax: 253 663 7224
email: register@pmaconference.com
web: <http://pmaconference.com/>
Mail: POB 2303 Falls Church Va 22042

Please make checks payable to: "PMA"

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PLEASE REGISTER

BOTH NERC COMPLIANCE FUNDAMENTALS AND NERC CIP: A DEEPER DIVE
 DECEMBER 11-13, 2017: US \$2195,
 Early bird on or before November 17, 2017: US \$1995

NERC CIP: A DEEPER DIVE COURSE ONLY:
 DECEMBER 12-13, 2017: US \$1395,
 Early bird on or before November 17, 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 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 November 10, 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.