

 EUCI COURSE

NERC CIP: A DEEPER DIVE

May 10-11, 2017
EUCI Offices
4601 DTC Blvd.
Denver, CO



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. In addition a detailed overview of each standard, its fundamental purpose, and the intent of each requirement will be provided.

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. Organizational structures for successful implementation and their experiences will be discussed.

This course provides 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
- Discuss the scope and purpose of the NERC Critical Infrastructure Protection (CIP) Standards
- Examine the NERC CIP requirements: Current version and upcoming revisions
- Review the confidentiality provisions of the CIP Standards
- Explain how violations are determined and identify which CIP standards are the most violated and why
- Review 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

WEDNESDAY, MAY 10, 2017

12:30 – 1:00 pm

Registration

1:00 – 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

THURSDAY, MAY 11, 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.

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

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

EUCI Offices

4601 DTC Blvd.
Denver, CO 80237

NEARBY HOTELS

Hyatt Regency Denver Tech Center

7800 E. Tufts Ave
Denver, CO 80237
Phone: 303-779-1234
0.3 miles away

Hampton Inn & Suites

5001 S Ulster Street
Denver, CO 80237
Phone: 303-804-9900
0.5 miles away

Hilton Garden Inn Denver Tech Center

7675 E. Union Ave
Denver, CO 80237
Phone: 303-770-4200
0.7 miles away

Denver Marriott Tech Center

4900 S. Syracuse St
Denver, CO 80237
Phone: 303-779-1100
0.7 miles away

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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View nearby hotels on page 5.

PLEASE REGISTER

BOTH NERC COMPLIANCE FUNDAMENTALS AND NERC CIP: A DEEPER DIVE:

MAY 9-11, 2017: US \$2195,
 Early bird on or before April 21, 2017: US \$1995

NERC CIP: A DEEPER DIVE COURSE ONLY:

MAY 10-11, 2017: US \$1395,
 Early bird on or before April 21, 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 April 7, 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.