



EUCI presents a conference on:

T&D ASSET MANAGEMENT: INTEGRATED APPROACH TO REDUCE COSTS AND IMPROVE EFFICIENCIES

March 1-2, 2012 • Hyatt Regency Atlanta • Atlanta, GA

TESTIMONIALS FROM PAST ATTENDEES

"I found the conference to be informative and very enlightening."

– Lead Electrical Engineer,
Western Area Power Administration

"This was a great opportunity to meet peers within the industry, and I gained insight and discovered ideas that I would never have thought of through the case studies."

– Lead Engineer - Infrastructure Planning,
United Illuminating

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EUCI is authorized by IACET to offer 1.0 CEUs for this program.

T&D ASSET MANAGEMENT: INTEGRATED APPROACH TO REDUCE COSTS AND IMPROVE EFFICIENCIES

March 1-2, 2012

OVERVIEW

Developing a focused asset-management strategy permits utilities to maximize their current assets and plan for future expansion, as well as replacement due to age, condition, and failure.

Asset management is an integrated approach for utilities to reduce cost and improve efficiency of transmission and distribution systems. Utilities can achieve optimal efficiency of their assets by effectively planning, analyzing data, and executing operations within the framework of sound T&D asset management strategies.

This conference will provide attendees with detailed strategies to better manage their transmission and distribution assets. Topics include:

- Designing asset-management methodologies and plans
- Incorporating data from multiple sources into asset-management plans
- Implementing new technologies to improve asset management
- Condition assessment and replacement methodologies
- Utilizing asset-management software platforms

LEARNING OUTCOMES

- Review strategy-focused asset management methodologies, including asset condition assessment, health indexing, and asset-management plan components
- Develop processes and cost-effective methodology for evaluating asset management strategies
- Apply asset condition assessment (ACA) to support rate-case applications for T&D capital expenditures
- Discover how utilizing smart-grid technologies can improve asset-management strategies
- Incorporate asset condition data from multiple sources and asset classes to support scientific-based analytic decision-making
- Examine how to use Customer Interruption Cost (CIC) as a basis for prioritizing replacement decisions
- Discuss the impact that distributed generation sources are having on distribution systems
- Examine processes and strategies for testing and monitoring underground cable infrastructure
- Review technological advancements for testing conductor strength and condition
- Compare capabilities of T&D asset-management software platforms

WHO SHOULD ATTEND

- Managers, engineers, planners, and professionals involved in capital and strategic planning for electric utilities
- Professionals responsible for the analysis, planning, and management of the T&D asset base's aging, condition, and condition management
- T&D equipment vendors
- Reliability engineers and managers
- Risk managers

IACET



EUCI has been approved as an

Authorized Provider by the International Association for Continuing Education and Training (IACET), 1760 Old Meadow Road, Suite 500, McLean, VA 22102. In obtaining this approval, EUCI has demonstrated that it complies with the ANSI/IACET Standards, which are widely recognized as standards of good practice internationally.

As a result of its Authorized Provider membership status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standards.

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Requirements for Successful Completion of Program

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

Instructional Methods

PowerPoint presentations will be used in this conference.

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PROGRAM AGENDA

THURSDAY, MARCH 1, 2012

8:00 – 8:30 a.m. Registration and Continental Breakfast

8:30 – 9:15 a.m. Making the Business Case and Risk Analysis for Reliability Expenditures

This presentation will describe how Black Hills leverages the data from its OMS, SCADA, and AMI systems to make a risk-based business case for reliability improvements on its distribution system. The business case keeps regulators in mind, knowing that senior management will be much more comfortable approving expenditures if they are confident the expenditures will survive regulatory scrutiny. The presentation will cover the process of identifying circuits that need attention and how the most cost-effective mitigation plans are chosen. Black Hills has consistently maintained top-quartile rank in reliability benchmarking studies.

– *Dave Lankutis, PE, Manager - Planning and Reliability, Black Hills Corporation Utilities*

9:15 – 10:30 a.m. Strategy-Focused Asset-Management Methodology

This presentation will introduce the concepts of asset condition assessment (ACA) and describe the strategy-focused aspects of T&D asset management. Performance metrics, asset management plans, and prioritization strategies will be introduced. Topics include:

- Asset-management overview
- Equipment-focused and business-planning-focused asset management
- Defining asset condition assessment (ACA) and the ACA process
 - Health index
 - Condition parameters, grades, and criteria
- Components of asset management plans
- Real-world examples of prioritizing projects

– *Yury Tsimberg, Director - Asset Management, Kinectrics*

– *Katrina Lotho, Senior Engineer, Kinectrics*

10:30 – 11:00 a.m. Networking Break

11:00 – 11:45 a.m. A Cost-Effective Method for Evaluating Asset-Management Strategies

Electric utilities are faced with critical asset performance for system reliability, cost containment, and regulatory strategy. This presentation reviews asset-management best practices and presents an example of asset-investment options for optimal aging-asset replacement decisions. Mr. Delaney will also demonstrate how different replacement strategies affect future capital replacement and maintenance costs, as well as the impact on overall system reliability. The probabilistic nature of failures and strategies including run-to-fail, proactive replacement, and preventive maintenance will be discussed. A final topic is how modeling for both distribution and transmission assets will affect the decision-making process for employing different strategies, based upon an individual company's priorities and characteristics.

– *Patrick Delaney, Vice President - Analytic Solutions, Davies Consulting*

11:45 a.m. – 12:30 p.m. Case Study: Asset-Management Implementation at PPL

Translating a T&D asset-management plan into actionable processes is a challenge for any utility. This presentation will detail PPL's recent experience with implementing its asset management plan and will discuss lessons learned throughout this process.

– *Brian O'Boyle, System Reliability & Distribution Asset Management Engineer, PPL*

12:30 – 1:30 p.m. Group Luncheon

1:30 – 2:30 p.m. Utility Case Study: Utilizing Customer Interruption Cost to Prioritize Projects

As assets age, the potential for failure and service interruption increases, and utilities must make difficult decisions on whether to replace or repair their T&D infrastructure. This presentation will detail Toronto Hydro's approach to addressing risks associated with aging infrastructure. Mr. Hjartarson explains Toronto Hydro's methodology, particularly showing how CIC is used to justify and prioritize capital projects.

– *Thor Hjartarson, Manager - System Reliability Planning, Toronto Hydro (Invited)*

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PROGRAM AGENDA

THURSDAY, MARCH 1, 2012 (CONTINUED)

2:30 – 3:15 p.m.

Case Study: Implementing and Evaluating Maintenance Plans

Understanding the effectiveness of an asset-maintenance plan is essential to justify continued expenditures for maintenance projects. This presentation will detail Progress Energy's experiences with implementing maintenance plans for its distribution assets. Topics discussed will include measuring the efficiencies of new processes as well as determining good measurements for maintenance practices.

– Kevin Price, Manager - Component Engineering and ROW, Progress Florida

3:15 – 3:45 p.m.

Networking Break

3:45 – 4:30 p.m.

Utility Case Study: Utilizing Asset Condition Assessments and Asset Management Plans to Support Rate Applications

One of the largest challenges for utilities is how to justify their capital expenditure plans to regulators. This presentation will explain how performing ACA and putting together a corporate asset-management plan are used in support of rate applications to local regulators.

– Tom Wasik, Director - Strategic Projects, Enersource Corporation

– Raymound Rauber, VP - Engineering & Operations, Enersource Corporation

4:30 – 5:30 p.m.

Integrating Data Information from Multiple Asset Classes to Feed Asset-Management Calculations

This presentation will discuss how utilities can computerize the consolidation of all data sources into a central repository where select data components are mapped to complex algorithmic formulas that calculate the health of assets within an index ranking model known as an Asset Health Index (AHI). Asset health can be indexed for an entire class of assets or for an individual asset location. Specific data (i.e., DGA readings, oil diagnostics, load peak data, equipment age, performance history, maintenance work order history, etc.) are linked to the appropriate place in the algorithm to produce scientific reports on a utility's assets. This enables utilities to better prioritize planning and scheduling of inspections and maintenance work-order activities.

Capabilities of this process include:

- A health index score for a class of assets (T&D: power transformers, network transformers, air magnetic circuit breakers, load tap changers, etc.)
- Health score for an individual asset at a specific location
- Data availability index produces a confidence factor about the percentage of data collected from the total ideal data that can or should be collected
- Asset risk score combines the probability of failure with an expected-life calculation and factors in the consequences of failure to determine relative risk

– Saxon Smith, Global Account Manager - Power Generation, Transmission, and Distribution, Ivara Corporation

5:30 – 6:30 p.m.

Networking Reception

FRIDAY, MARCH 2, 2012

8:00 – 8:30 a.m.

Continental Breakfast

8:30 – 9:15 a.m.

Utility Case Study: Impact of Distribution-Connected DG on Asset-Management Decisions

As utilities increase their adoption and incorporation of renewable generation sources, these newly connected renewable generation sites are uncovering unforeseen impacts to grid systems. Hydro One, the largest transmission and distribution utility in Ontario, has connected over 550 MW of new generation to its distribution system in the last decade, presenting capacity challenges, such as feeder distance limitations, short circuits, and voltage variation. This presentation will detail Hydro One's experiences with connecting distributed generation to its distribution system and will provide real-world experience on how to best prepare distribution systems for increases in distributed generation sites and interconnections.

– Ayesha Sabouba, Manager - Generation Connections, Hydro One

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PROGRAM AGENDA

FRIDAY, MARCH 2, 2012 (CONTINUED)

- 9:15 – 10:00 a.m.** **Using Smart Grid to Improve Asset-Management Techniques**
Technological innovations have the potential to dramatically improve asset-management decision-making. As new products for grid automation, remote sensing, voltage regulation, and renewable integration are incorporated into the power grid, utilities are presented with new opportunities to utilize these technologies to better manage their T&D assets. The presentation will briefly describe ACA methodology and give examples of how utilizing smart grid may improve it.
– Steve Cress, Manager - Transmission & Distribution, Kinectrics
- 10:00 – 10:30 a.m.** **Networking Break**
- 10:30 – 11:30 a.m.** **Determining Conductor Condition Utilizing Advanced Technologies**
Acquiring knowledge of the actual physical condition of a conductor's steel core is critical for utilities to avoid conductor failure, ensure reliability of service, and maintain public and worker safety. New non-intrusive approaches have been developed to determine condition of conductors, eliminating the need to cut out samples for lab testing. This presentation will detail the principles behind these technologies and present sample results from testing.
– Craig Pon, Manager - Transmission Lines and Testing Lab, Kinectrics
– Yury Tsimberg, Director - Asset Management, Kinectrics
- 11:30 a.m. – 12:15 p.m.** **Panel Discussion: Overcoming Asset-Management Challenges**
In this panel presentation, utilities and asset-management experts will discuss the future of asset management planning and how to address the increasing challenges faced by their utilities. Attendees will have the opportunity to explore how best to apply strategies and techniques to meet increasing future demands on their T&D systems.
- 12:15 p.m.** **Conference Adjourns**

SPONSORSHIP OPPORTUNITIES

Do you want to drive new business through this event's powerful audience?

Becoming a sponsor or exhibitor is an excellent opportunity to raise your profile before a manageably sized group of executives who make the key purchasing decisions for their businesses. There is a wide range of sponsorship opportunities available that can be customized to fit your budget and marketing objectives, including:

- Platinum, gold, or VIP sponsor
- Workshop sponsor
- Reception host
- Lanyard sponsor
- Networking break host
- Luncheon host
- Tabletop exhibit
- Breakfast host

Custom sponsorship opportunities are also available. Please contact Joel Sharrer at 720-988-1215 or jsharrer@euci.com for more information.

PROCEEDINGS

A copy of the conference proceedings will be distributed to attendees at the event. If you are unable to attend or would like to purchase additional copies, flash drives are available two weeks after the conference is complete. The cost per flash drive is US \$295 (add US \$50 for international shipments). Flash drives include visual presentations only. Upon receipt of order and payment, the flash drive will be shipped to you via regular USPS mail.

NOTE: All presentation flash drive sales are final and are nonrefundable.

EVENT LOCATION

A room block has been reserved at the Hyatt Regency Atlanta, 265 Peachtree Street NE, Atlanta, GA 30303, for the nights of February 29-March 1, 2012. Room rates are \$185, plus applicable tax. Call 404-577-1234 for reservations, and mention the EUCI course to get the group rate. The cutoff date to receive the group rate is February 2, 2012, but as there are a limited number of rooms available at this rate, sometimes the room block will close sooner. **Please make your reservations early.**

REGISTRATION INFORMATION

REMEMBER: EVERY FOURTH REGISTRANT IS FREE.

For instant registration, call (201) 871-0474 or fax the registration form to (253) 663-7224.

Register Three; Send Fourth Free!

Any organization wishing to send multiple attendees to this course may send one FREE for every three delegates registered. Please note that all registrations must be made at the same time to qualify.

All cancellations received on or before January 27, 2012, will be subject to a US \$195 processing fee. Written cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event or publication. This credit will be good for six months. In case of event cancellation, Electric Utility Consultants' 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.

FIVE EASY WAYS TO REGISTER

One: CALL
(201) 871-0474

Two: FAX
(253) 663-7224

THREE: E-MAIL
register@pmaconference.com

FOUR: MAIL
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P.O. Box 2303
Falls Church, VA 22042

Five: WEB SITE
www.pmaconference.com

PLEASE REGISTER THE FOLLOWING

- T&D Asset Management:
Integrated Approach to Reduce Costs and Improve Efficiencies
March 1-2 2012: US \$1395
Early bird on or before February 17, 2012: US \$1195
- I'm sorry I cannot attend, but please send me the conference proceedings for \$295.
(Please add \$50 for international shipping.)

ENERGIZE WEEKLY

EUCI's *Energize Weekly* e-mail newsletter compiles and reports on the latest news and trends in the energy industry. Newsletter recipients also receive a different, complimentary conference presentation every week on a relevant industry topic. The presentations are selected from a massive library of more than 1,000 current presentations that EUCI has gathered during its 25 years organizing conferences.

Sign me up for *Energize Weekly*.

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

Name _____ Job Title _____

Name Preferred for Badge _____ E-mail _____

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Check here if you have any dietary or accessibility needs. We will contact you for more details.

PAYMENT METHOD

Please make checks payable to "PMA"

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Visa and MC cards have a 3-digit code on the signature panel on the back of the card, following the account number. American Express cards have a 4-digit code on the front of the card, above the card number.

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