EVOLUTION OF DISTRIBUTION FEEDER NETWORK ANALYSIS AND AUTOMATION

February 26, 2020
Royal Sonesta Houston
Houston, TX

LT Feeder
400 V
33 KV
HT Feeder
11 KV
400 V

“Great job covering lots of material in a condensed time.”
Electrical Engineer, Black Hills Energy

EUCI is authorized by IACET to offer 0.8 CEUs for the course
OVERVIEW

While advanced transmission network analysis (aka energy management systems) steadily advanced from the 1970s through the 1990s, distribution management systems never enjoyed the same attention or funding, so it never advanced beyond SCADA (aka D-SCADA). Today, distribution network analysis and automation are more challenging and more advanced in every aspect compared to its transmission brother. Because the functional technology is evolving at such a rapid pace, the resulting complex suite of integrated analysis and automation applications is not well understood by its users.

This course will address the unique challenges that distribution network operations face and the developments at this stage in the distribution automation evolution. Where is it going? What are the benefits? Who are the users? These questions will be addressed in this course.

LEARNING OUTCOMES

- Discuss the history and evolution of real-time feeder network automation
- Review self-healing considerations
- Examine smart grid automation functions
- Identify current ADMS challenges
- Discuss visualization challenges
- Review renewable integration and control
- Identify types of architectures
- Discuss power quality considerations

INSTRUCTOR

Gary L. Ockwell
Chief Technology Officer, Advanced Control Systems

Gary Ockwell is the Chief Technology Officer for Advanced Control Systems (ACS). He joined ACS in 1995, bringing 22 years of expertise in the global electric utility market.

Gary began his career with ACS as the Energy Management System Business Unit Manager and has been the Chief Technology Officer since 2004. He has worked to transition ACS to integrated Transmission Management, Distribution Management and Outage Management Systems. As CTO, Gary is responsible for the Smart Grid product direction and roadmap. This includes defining the functionality and evolution of the core technologies and the integration of those technologies with those relevant in the industry.

From 1985 to 1995, Gary was the XA/21 SCADA/EMS Product Manager for Harris Controls Division. His responsibilities positioned him to make technology presentations for utilities in the domestic US, southeast Asia, Middle East and European markets. Gary was responsible for defining product requirements, strategic planning, and direction for Harris™ Distribution Management and Distribution Automation Systems. He was also responsible for the research and evaluation of strategic alliances with key utilities and vendors, product coordination of substation computer systems, substation automation and distribution automation, technical proposal documentation, setting price strategy, in-house engineering direction, and major contract negotiations.

Prior to that, Gary was the Project Manager for Sask Power Corporation in Canada. While with Sask Power, he served as the overall project manager for the $21,000,000 system control project for the Gas and Electric System Control. His responsibilities included directly supervising the engineering design, system evaluation, procurement, control center construction and facilities installation for the GESC project.

Gary holds a B.S., EE Degree from the University of Saskatchewan, Canada. He has authored and co-authored more than two dozen papers and articles for industry conferences and publications over the last twelve years. He is also an IEEE/PES member.
AGENDA

WEDNESDAY, FEBRUARY 26, 2020

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

8:30 am – 5:00 pm  Course Timing

12:00 – 1:00 pm  Group Luncheon

- History of Electrical Network Automation System Evolution to Today
- Smart Grid Functions
  - Automation functions / applications
  - Analysis functions / applications
  - Optimization functions / applications
  - Simulation
  - Benefits
  - Challenges
- ADMS Challenges
  - Definition of ADMS
  - Benefits
  - Challenges
- Self-Healing Automation Considerations
  - Benefits
  - Challenges
- Power Quality Considerations
  - Benefits
  - Challenges
- Visualization Challenges
  - Who are the users?
  - What operators get
  - What operators want
  - Challenges and considerations
- Renewable Integration and Control
  - Grid connected
  - Microgrid
  - Renewable operational objective and considerations
    - Applications and components
    - Integration with other smart grid functions
    - Supporting applications
  - Benefits (review real world use case field results)
- Network Modeling
  - Usage
  - Objective
  - Scope of the problem
    - Maintenance source model
    - Operational source model
    - Integration with IT and OT
- Architectures
  - Centralized
  - Peer-to-peer
  - Device controller
  - Distributed
- Summary and Closing
  - What's next?
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 AN-SI/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 AN-SI/IACET Standard.

EUCI is authorized by IACET to offer 0.8 CEUs for the course.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

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

PowerPoint presentations and open discussion will be used in this course.

EVENT LOCATION

A room block has been reserved at the Royal Sonesta Houston, 2222 W Loop S, Houston, TX 77027, for the nights of February 23-25, 2020. Room rates are $179 plus applicable tax. Call 1-713-627-7600 for reservations and mention the EUCI event to get the group rate. The cutoff date to receive the group rate is January 23, 2020 but as there are a limited number of rooms available at this rate, the room block may close sooner. Please make your reservations early.

“Great! Wonderful and useful explanations, visuals, and demonstrations.”
GIS Analyst at UDC

“A very good course with a lot of great information.”
Project Coordinator, Lubbock Power & Light

REGISTER TODAY! CALL 303-770-8800 OR VISIT WWW.EUCI.COM
PLEASE REGISTER

EARLY BIRD on or before FEBRUARY 7, 2020: US $1995

EVOLUTION OF DISTRIBUTION FEEDER NETWORK ANALYSIS AND AUTOMATION COURSE: FEBRUARY 26, 2020: US $995
EARLY BIRD on or before FEBRUARY 7, 2020: US $895

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

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 January 24, 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 at 303-770-8800. EUCI reserves the right to alter this program without prior notice.