



EUCI Presents a Course on:

INTRODUCTION TO ELECTRIC UTILITY SYSTEMS FOR NON-ENGINEERS

December 8-9, 2008 • Grand Hyatt Manchester • San Diego, CA

"This course provides an excellent foundation to understanding the electric utility industry, without overwhelming the attendee with industry jargon. When complete, the attendee can participate in conversations rather than just listening."

– Sr. Project Director, SRBI

"This is a very good course for any non engineers who will be interested in working with the electric utility industry. Mr. Welch utilized excellent analogies to give me a better understanding of how the electric utility really works."

– Customer Service Supervisor,
Kosrae Utilities Authority

"An excellent seminar to introduce you to electric utility industry."

– Manager, Strategic Initiatives, Duke Energy



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

INTRODUCTION TO ELECTRIC UTILITY SYSTEMS FOR NON-ENGINEERS

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OVERVIEW

This course is for non-engineers working for or involved with electric utilities. The course provides a non-technical introduction to the fundamental concepts that form the basis for the design and operation of the integrated electric utility system.

The fundamental concepts underlying legacy electric power systems and how the attributes of these systems affect their operation in today's evolving market structure are addressed without reference to engineering techniques or mathematical analysis. Challenges facing companies in today's changing regulatory and operational environment are also discussed.

The course is structured for active participation by attendees, who will have ample opportunity to ask questions and discuss issues of particular interest to them. Individuals that attend this course develop a feel for why electric utility systems are built and operated the way that they are. They should feel comfortable speaking with engineers from their company or the utility that they are dealing with and they should know enough to ask follow up questions to clarify their understanding of the issues that are being discussed.

Extensive course notes are provided to everyone attending the course.

WHAT ATTENDEES WILL LEARN

Identify and explain the fundamental concepts underlying the design, economics, and operation of electric power systems, as well as issues facing design, operating, and management personnel of a modern electric utility system including:

- The components, design, and operation of electric utility systems
- The drivers of system design and operation
- Operation of the integrated system
- The effects of industry and corporate changes on the planning process, including:
 - Retail access
 - New corporate organizational structures
 - Regulatory emphasis on reliability
 - Performance standards
- Recent and ongoing standards related issues
- Challenges created by the evolving regulatory/market environment

WHO SHOULD ATTEND

- Directors, officers, and senior managers without previous electric utility experience
- Non-engineers new to the industry or with limited industry experience with, for example, legal, financial, regulatory, customer care, or community relations responsibilities. Individuals in other responsibility areas can benefit as well
- Investors and financial analysts seeking a better understanding of the industry
- Managers and supervisors of commercial and industrial facilities
- Regulatory, municipal, and legislative personnel dealing with issues related to the industry

INSTRUCTIONAL METHODS

PowerPoint Presentations and Classroom Exercises will be used.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

Participants must sign in/out each day and be in attendance for a minimum of four hours to be eligible for continuing education credit.

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 their 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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PROGRAM AGENDA

MONDAY, DECEMBER 8, 2008

8:00 – 8:30 a.m. **Registration and Continental Breakfast**
8:30 a.m. – 4:30 p.m. **Course Timing**

- Introduction & Overview
- Generation
 - Load characteristics
 - Baseload, intermediate and peaking capacity
 - General cost characteristics
 - Emerging technologies
- Transmission
 - Transmission's mission
 - Components
 - Characteristics
 - Emerging technologies

12:00 – 1:00 p.m. **Group Luncheon**

- Substations
 - Components
 - Configuration
 - Reliability
- Distribution
 - Definitions
 - Components
 - Characterization of circuits by type

4:30 p.m. **Class Adjourns**

TUESDAY, DECEMBER 9, 2008

7:30 – 8:00 a.m. **Continental Breakfast**
8:00 a.m. – 12:00 p.m. **Course Timing**

- Distribution
 - Reliability
 - Customer satisfaction
- System Integration & Operations
 - Utilities as asset managers
 - Reliability
 - Optimization
 - Supporting technology
- The Modern Utility Environment
 - Evolution
 - Competitive market structure
 - Organizational and technical challenges

12:00 p.m. **Class Adjourns**

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INSTRUCTOR

Mr. Greg Welch has over 36 years of experience in engineering, planning, and management in the electrical utility industry. For more than 15 years, his responsibilities included explaining the design and operation of electric power systems to residential, commercial, and industrial customers, reporters, municipal officials, lawyers, and legislative and regulatory personnel. He formed Triangle Power Systems Consulting in 2003 after working for ABB, Inc. as an executive consultant. As an executive consultant, he participated in the development of power delivery system designs that reduced capital and maintenance costs without compromising reliability and served as an advisor to executives in charge of improving the operating condition of power delivery systems. He also provided technical support for clients in preparation for rate case litigation and in development of innovative, cost saving approaches to reliability improvement. Prior to joining ABB, Mr. Welch was Vice President, Technical Services and Supply Management for the Transmission and Distribution business unit of Commonwealth Edison of Chicago. Before his promotion to Vice President, he was the Manager of Distribution Planning and Reliability. He has extensive experience in generation planning, transmission planning,

EDUCATIONAL CREDITS



EUCI is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the acceptance of individual courses for CPE credit. Complaints regarding registered sponsors may be addressed to the National Registry of CPE Sponsors, 150 Fourth Avenue North, Suite 700, Nashville, TN, 37219-2417. Web site: www.nasba.org. For more information regarding administrative policies such as complaint and refund, please contact our offices at (303) 770-8800.

CPE CREDITS

Upon successful completion of this event, program participants interested in receiving CPE credits will receive a certificate of completion.

Course CPE Credits: 13

Program Level – Beginner

There is no prerequisite for this conference.

About EUCI

EUCI is a leading provider of conferences, seminars, workshops and courses designed exclusively for the energy industry. We seek to create a forum for professional communication and exchange knowledge and ideas among energy industry professionals and others interested in the industry.

Join the thousands of others who have attended our events since 1987 and see why they keep coming back.

PROCEEDINGS

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

COURSE LOCATION

A room block has been reserved at the Grand Hyatt Manchester, One Market Place, San Diego, CA 92101, for the nights of December 7-9, 2008. Room rates are \$189 plus applicable tax. Call 619-232-1234 or 800-233-1234 for reservations and mention the EUCI Conference to get the group rate. Make your reservations prior to November 14, 2008. There are a limited number of rooms available at the conference rate.

Please make your reservations early.

REGISTRATION INFORMATION

REMEMBER, EVERY 4TH REGISTRANT IS FREE

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

Register 3, Send 4th Free!!

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

All cancellations received on or before November 7, 2008 will be subject to a \$195 processing fee. Written cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI conference or publication. This credit will be good for six months. In case of conference cancellation, Electric Utility Consultants' liability is limited to refund of the conference registration fee only. For more information regarding administrative policies such as complaint and refunds, please contact our offices at (201) 871-0474

EUCI reserves the right to alter this program without prior notice.

MAIL DIRECTLY TO:

The Power Marketing Association (PMA)
P.O. Box 2303
Falls Church, VA 22042

FAX TO: (253) 663-7224
PHONE: (201) 871-0474

PLEASE REGISTER THE FOLLOWING

- Introduction to Electric Utility Systems for Non-Engineers, December 8-9, 2008, \$1395
Early Bird Before November 26, 2008, \$1195

How did you hear about this event?
(Direct email, Colleague, Speaker(s), etc.)

ENERGIZE WEEKLY

When you sign up to "Energize Weekly" you will receive a new conference presentation each week via email on a relevant industry topic. The presentations are selected from a massive library of over 1000 current presentations that EUCI has gathered during its 21 years organizing conferences.

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

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