

ANCILLARY SERVICES FUNDAMENTALS AND MARKET DYNAMICS

November 30 - December 1, 2020
Online | Central Time



"This is my third event, apart from content I appreciate the diversity of attendee's. Lawyers, economists, ISO, FERC, generators, marketers, traders, back of the house support, grad students – all provide a different perspective of a single topic."

Sr. Data Architect, Aquilon



This course will explain the functions performed by each ancillary service with a focus on the real-power services. It will also provide an in-depth treatment of several features of ancillary services, regulation and reserve market design:

- Co-optimization in the scheduling and dispatch of energy and ancillary services
- The theory and practice of reserve and regulation shortage pricing
- The pricing and scheduling of demand side ancillary services
- Market design approaches to scheduling, pricing and bidding these services
- Comparison of ancillary services, regulation and reserve products across the various North American independent system operators (ISOs)
- Value and cost components that inform market participant ancillary services, regulation and reserve products bidding opportunities.

LEARNING OUTCOMES

- Identify what ancillary services are and why the power system needs them
- Examine what the cost drivers are for ancillary services, regulation and reserve products
- Assess the reasons that co-optimization of energy and ancillary services is becoming a standard feature of wholesale power markets and how they function
- Examine the relationship between ramp constraints, regulation shortage prices, price variability, and the returns to being on dispatch
- Identify the options of faster ramp and more accurate provision of regulation
- Identify how the increasing penetration of renewable energy, storage and distributed energy resources influence the need and provision of ancillary services, regulation and reserve products



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

INSTRUCTOR

- **Justin Schnegelberger**, Manager – Development Engineering, Burns & McDonnell

To Register Click Here, or

Mail Directly To:

PMA Conference Management
405 Highview Rd
Englewood NJ 07631
201 871 0474
Fax 253 663 7224
register@pmaconference.com

ONLINE DELIVERY & PARTICIPATION DETAILS

EUCI will use Microsoft Teams to facilitate participation in the upcoming event. Attendees do not need to have an existing Teams account to participate in the broadcast. The course will play in attendee's browser. When attendees sign on, their microphones are typically muted. Attendees should keep their mic muted until such time as it's needed to ask a question. During the event, participants will have the option of using a microphone to speak with the room and ask questions, or type in any questions via the chat window and our online administrator will relay your question to the instructor.

- Each attendee will receive an event invitation by e-mail, which will include one link to sign on for each half-day of the event (i.e., three links for a 1 ½ day event). The appropriate link must be used to join each half-day event segment at the appropriate time.
- The remote meeting connection will open approximately 30 minutes before the start of the course. We encourage attendees to connect as early as possible in case of unforeseen problems.

PLEASE SELECT

ANCILLARY SERVICES FUNDAMENTALS AND MARKET DYNAMICS ONLINE COURSE
NOVEMBER 30 - DECEMBER 1, 2020: US \$1,195 (Single Connection)

PACK OF 5 CONNECTIONS: US \$ 4,780 (20% Discount)

PACK OF 10 CONNECTIONS: US \$8,365 (30% Discount)

PACK OF 20 CONNECTIONS: US \$14,340 (40% Discount)

Recording: Each event is recorded, and will be available for three business days. For registrants only.

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

Print Name

Job Title

Company

Address

City

State/Province

Zip/Postal Code

Country

Phone

Email

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 October 30, 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.

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

