EUCI Presents a Seminar on:

OPTIMIZING STRATEGIES FOR CONVERGENCE BIDS AND MULTI-STAGE GENERATORS IN CAISO MARKET

February 15-16, 2011 • Hyatt Regency Orange County • Anaheim, CA

TESTIMONIALS FROM PAST ATTENDEES

“Excellent insight on convergence bidding strategies.”
– Attendee from EUCI seminar in San Diego

“Fascinating material! I really like the methodology that PCI presented to validate the dispatch of MSG resources.”
– Attendee from workshop in Anaheim

“Best MRTU course that I attended.”
– Attendee from seminar in Anaheim

“The PCI instructors presented a very complex subject and made it very understandable and enjoyable for me and others. Great job!”
– Attendee from seminar in Anaheim

“Seminar was extremely informative, and it was a lot of fun as well. I probably learned more in those two days than in all the other training sessions.”
– Attendee from seminar in Anaheim

EUCI is authorized by IACET to offer 1.3 CEUs for this program.

This course has been approved for 16.0 CPEs.
OVERVIEW

This two-day seminar provides an advanced course on bidding strategies for convergence bids and optimization of multi-stage generators (MSG). The workshop covers the two big initiatives (convergence bidding and multi-stage generators) that CAISO is currently implementing. In the workshop, you will have an opportunity to use PCI Price Analyzer to evaluate convergence-bidding strategies and PCI MSG Simulator to optimize operations for MSG resources and determine the bottom-line profit and loss for your MSG resources. The workshop will discuss the impact of the new MRTU market initiatives on your portfolio optimization, bidding, and settlement workflows.

The seminar covers the following “hot” issues:

• How can you use convergence bids for hedging or speculative purposes?
• What are the pros and cons for implementing convergence bidding?
• How can you convince your management and PUC that convergence bids can be used to hedge against potential unit outages, load-forecast uncertainties, and wind-forecast uncertainties?
• What tools do you need to evaluate strategies for convergence bids?
• What are the credit requirements for submitting convergence bids?
• Why does CAISO implement position limits?
• How does CAISO monitor whether virtual bids are used to increase CRR values?
• How do you validate settlement for convergence bids?
• What are the potential benefits for registering units as MSG units?
• How do you set up MSG units to properly reflect the operation for your combined-cycle units?
• How can you verify that the CAISO day-ahead energy and A/S awards are “optimal” for your MSG units?
• Can you validate prices (LMPs and MCPs) that are published by CAISO?
• What rules does CAISO use to compute bid-recovery payments for MSG units?
• Can you increase market benefits for some units by adopting the MSG model?
• How can you use settlement results to compute profit and loss metrics and provide feedback to traders on bidding strategies?
• What IT infrastructure should you build to automate the bid-to-bill process?

WHO SHOULD ATTEND

• Portfolio managers and traders responsible for formulating strategies for convergence bidding and optimizing MSG resources
• Back-office personnel who are responsible for validating settlement charges for convergence bids and MSG resources
• Power-plant managers who would like to understand how MSG resources are optimized in the CAISO market
• Genco executives who need a good understanding of the potential impacts of the new MRTU market on their genco profits and losses
• Employees of RTOs, attorneys, and regulators who need to understand the settlement implications of market rules, congestion management philosophy, and mitigation guidelines

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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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

PowerPoint presentations, classroom discussions, and question-and-answer sessions will be used in this course.
PROGRAM AGENDA

TUESDAY, FEBRUARY 15, 2011

Registration and Continental Breakfast: 8:00 – 8:30 a.m.
Group Luncheon: 12:00 – 1:00 p.m.
Course Timing: 8:30 a.m. – 5:00 p.m.

Update on CAISO Market
• Key objectives for CAISO MRTU market
• Reviewing day-ahead, HASP, and real-time workflow for CAISO market participants
• Reviewing CAISO market prices and bidding statistics in 2009
• Why does CAISO implement convergence bids in MRTU?
• Using multi-stage generators (MSG) to better optimize combined-cycle plants
• Why do we have P&L leakages?
• CAISO timeline for MAP Initiative

Implementing Convergence Bids in CAISO
• CAISO timeline for implementing convergence bids
• Registration process for convergence-bidding entities
• Impacts of convergence bids on CAISO IFM schedule
• Impacts of convergence bids on day-ahead LMPs
• Using convergence bids for hedging purposes
• Using convergence bids for speculative purposes
• Understanding position limits for convergence bids
• Credit requirements for submitting convergence bids
• GMC charges for convergence bids
• Case studies to illustrate settlement calculations for convergence bids
• How does CAISO monitor whether virtual bids are used to increase CRR values?
• Experience with using convergence bids in other markets (MISO, ISO-NE, NYISO, etc.)

Formulating Strategies for Convergence Bids
• What are the key factors that cause RT LMPs to be different than DA LMPs?
• Can convergence bids change DA LMPs?
• Can convergence bids influence DA congestion?
• Can convergence bids influence CRR revenues?
• When can you make money by submitting virtual demand bids at generator nodes?
• When can you make money by submitting virtual demand bids at load nodes?
• When can you make money by submitting virtual supply bids at generator nodes?
• When can you make money by submitting virtual supply bids at load nodes?
PROGRAM AGENDA
WEDNESDAY, FEBRUARY 16, 2011

Continental Breakfast: 7:30 – 8:00 a.m.
Group Luncheon: 12:00 – 1:00 p.m.
Course Timing: 8:00 a.m. – 4:00 p.m.

Bid-to-Bill Workflow for MSG Units
• Why does CAISO implement multi-stage generators (MSG)?
• Registration process for MSG units
• Setting up MSG units to reflect combined-cycle characteristics
• Understanding transition matrix
• Day-ahead and real-time bidding workflow for MSG
• Bidding strategies for MSG units
• How does CAISO co-optimize energy and ancillary services for MSG units?
• Computing bid-cost recovery payments for MSG units
• Evaluating benefits of using MSG units

Optimizing MSG Resources
• Using PCI MSG Simulator to optimize MSG units
• Quantifying benefits for registering units as MSG units
• Validating DA schedule for MSG units
• Impact of transition costs on the dispatch of MSG units

Using Profit and Loss Metrics to Provide Feedback to Front Office
• Understanding DA and DART profits and losses (P&L)
• Key factors influencing profits and losses
• Understanding P&L leakages
• Using settlement results to provide feedback to traders on effectiveness of day-ahead and real-time bidding strategies
• Using settlement results to provide feedback to plant managers on plant performance
• Using settlement results to build key performance metrics
• Settlement forensics – where front and back offices meet

Seminar Review and Round-Table Discussion
INSTRUCTORS

Khai Le, Vice President, PCI
Over the past 35 years, Khai Le has conducted more than 500 seminars on bidding strategies, portfolio optimization, market-based operations, and shadow settlement for utilities and RTOs worldwide. He is currently working with market participants in CAISO, MISO, PJM, SPP, and ERCOT to deploy the PCI Generation Supply Management System (PCI GenManager, PCI GenTrader, and PCI GenPortal) to develop bidding strategies and automate their bid-to-bill workflow. Khai has authored more than 100 technical papers on unit commitment, hydro-thermal coordination, emission dispatch, optimization methods, post analysis, and short-term planning. Five of his papers have received awards. Khai received his B.S. from Harvey Mudd College and his M.S. from Carnegie Mellon University. He is a fellow of the IEEE and a Registered Professional Engineer in Pennsylvania.

Paul Davis, Manager, PCI
Paul Davis has 10 years of experience in portfolio management, unit commitment, production costing, risk evaluation, and bidding strategies. Paul is currently leading the development of PCI P&L Analyzer, which combines operations and settlement results to provide feedback to traders on the effectiveness of their bidding strategies and PCI Price Analyzer, which can be used to evaluate strategies for convergence bids.

Adolfo Fonseca, Principal Engineer, PCI
Adolfo Fonseca has more than 25 years of experience in unit commitment, combined-cycle modeling, hydro optimization, and optimal power flow. Adolfo is currently leading the development of PCI MSG Simulator, which can be used to evaluate bidding strategies for MSG resources. Adolfo received his M.S. in operations research from Southampton University.

Bart Tsala, Manager, PCI
Bart Tsala conducts numerous training classes on the use of PCI GenTrader to optimize unit commitment, perform production costing, and forecast revenues, costs, and profits and losses. Bart wrote the LMP simulator, which is used in this seminar to co-optimize energy and ancillary services and evaluate bidding strategies for convergence bids. Bart received his Bachelor of Science in power systems at the Institut Superieur Industriel de Bruxelles and his MSEE and Ph.D. from the University of Oklahoma.
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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 14, 2011 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 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 303-770-8800.

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

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Early Bird on or Before February 4, 2011: US $1295

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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 23 years organizing conferences.

PROCEEDINGS

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

EVENT LOCATION

A room block has been reserved at The Hyatt Regency Orange County, 11999 Harbor Blvd., Garden Grove, CA 92840, for the nights of February 14-15, 2011. Room rates are $149, plus applicable tax. Call 714-750-1234 for reservations and mention the EUCI course to get the group rate. Make your reservations prior to January 21, 2011. There are a limited number of rooms available at the group rate. Please make your reservations early.

EVENT LOCATION

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REGISTRATION INFORMATION

REMEMBER, EVERY FOURTH REGISTRANT IS FREE

For instant registration, call 303-770-8800 or fax the registration form to 303-741-0849.

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