



EUCI presents a seminar on:

MANAGING BID-TO-BILL WORKFLOW IN NEW SPP INTEGRATED MARKETPLACE

October 20-21, 2011 • Embassy Suites Norman • Norman, OK

TESTIMONIALS FROM PAST ATTENDEES

"Very informational! Good balance between overview and details."

– Market participant who attended seminar in Cincinnati

"PCI instructors are very knowledgeable with much practical experience. Instructors answered our questions well."

– Market participant who attended seminar in Knoxville

"Very well-done course! Lots of good information packed in two days!"

– Market participant who attended seminar in San Antonio

"Very good material! Excellent insight!"

– Market participant who attended seminar in Houston

"The PCI instructors presented a very complex subject and made it very understandable and enjoyable for me and others. Great job!"

– Market participant who attended seminar in Houston



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

MANAGING BID-TO-BILL WORKFLOW IN NEW SPP INTEGRATED MARKETPLACE

October 20-21, 2011

OVERVIEW

Sponsored by EUCI, this two-day seminar provides an in-depth discussion on the bid-to-bill workflow for market participants in the new SPP Integrated Marketplace. The seminar uses a number of case studies to illustrate how you can maximize the value of your assets (generators, loads, TCRs, bilateral contracts) in the new SPP market. In the workshop, you will have an opportunity to use a market simulator to submit your energy and ancillary-service offers, test your bidding strategies, clear the market, compute settlement, and determine the bottom-line profit for your generation and load assets. The seminar covers the following "hot" issues:

- What are the main objectives of the SPP Integrated Marketplace?
- What are the key differences between the existing imbalance-energy market and the new SPP Integrated Marketplace?
- How should you best prepare your genco team (portfolio managers, traders, risk managers, back-office personnel, and plant managers) for the SPP Integrated Marketplace?
- How can you formulate unit offers to fully account for price and volumetric risks, operational constraints, production costs, and market mitigation rules?
- How should you formulate energy and ancillary-service offers to maximize total profits while meeting operational constraints and risk guidelines?
- What rules does SPP use to mitigate unit offers?
- How can you verify that the SPP day-ahead schedule is "optimal" for your units?
- What rules does SPP use to penalize units for uninstructed deviation?
- How well can you forecast costs, revenues, profits and losses, fuel consumption, and emissions for units that are scheduled by SPP?
- How much money are you leaving on the table if you decide to self-schedule selected resources? Or can you profit by self-scheduling?
- How does a lower availability affect revenues and profits for your portfolio?
- What rules does SPP use to compute RUC make-whole payments and charges?
- What are the key risk drivers in SPP? What is the best way to formulate hedging strategies for your assets?
- How should you structure TCR contracts to hedge against congestion costs?
- In the long run, will your plants collect enough revenues from the energy, capacity, and ancillary service markets to cover for their operating and capital costs?
- What are the key settlement charge types in the new SPP Integrated Marketplace?
- Why perform shadow settlement? Do you need to have your own shadow settlement software to check SPP invoices?
- What are the main data sources for shadow settlement?
- What are the main causes for settlement disputes? What is the best way to manage settlement disputes?
- How can you use post-analysis as strategic tools to provide feedback to traders on the effectiveness of their bidding strategies?
- How can you quantify P&L leakages?
- What IT infrastructure should you build to automate the bid-to-bill process?

WHO SHOULD ATTEND

- Portfolio managers and traders responsible for formulating and submitting energy and ancillary-service offers to SPP
- Back-office employees who need to gain a good understanding of the new settlement rules for the SPP Integrated Marketplace
- Power-plant managers who would like to understand the impact of LMPs on their plant profitability
- IT personnel who need to build the IT infrastructure to support the new bid-to-bill workflow for the SPP Integrated Marketplace
- Genco executives who need a good understanding of the potential impacts of the new SPP Integrated Marketplace on their genco profits and losses
- Employees of ISO/RTOs, attorneys, and regulators who need to understand market rules, congestion management philosophy, and mitigation guidelines that are proposed for the new SPP Integrated Marketplace

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PROGRAM AGENDA

THURSDAY, OCTOBER 20, 2011

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

Workshop Timing: 8:30 a.m. – 5:00 p.m.

Group Luncheon: 12:00 – 1:00 p.m.

Overview on SPP Integrated Marketplace

- Objectives of SPP Integrated Marketplace
- Key differences in market rules between the current energy-imbalance market and the new SPP Integrated Marketplace
- Reviewing day-ahead and real-time bidding workflow for SPP market participants
- Understanding SCUC objectives for DA market
- How does the two-step settlement work?
- Why use virtual bids and offers?
- Using TCR and ARR contracts to hedge against congestion costs
- Bid-to-bill timeline and challenges
- Potential benefits of SPP Integrated Marketplace
- Differences in market rules between SPP Integrated Marketplace and other nodal markets (MISO, PJM, ISO-NE, NYISO, and CAISO)

Uses of Nodal Locational Marginal Prices in Bidding and Settlement

- Using full network model to compute nodal locational marginal prices
- How are LMPs computed?
- Understanding three components of LMPs: energy, loss, congestion
- Understanding impacts of flowgates on congestion
- Can LMPs be negative?
- Day-ahead settlement calculations
- Can you forecast LMPs?

Formulating Bidding Strategies for Generating Units

- Understanding three-part energy offers for generators
- Should units be offered in day-ahead market or self-scheduled in real-time market?
- Examples illustrating day-ahead and real-time settlement for generators
- Market principles behind make-whole payments and charges
- Computing day-ahead make-whole payments for generators
- Who will pay DA and RUC make-whole charges?

Bidding Strategies for Loads, Bilateral Transactions, and Virtual Transactions

- Reviewing demand-bidding strategies
- Examples illustrating DA and RT settlement for loads
- Computing A/S charges for LSEs
- Understanding internal and external bilateral transactions
- Bidding strategies for virtual transactions

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.

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

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.

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PROGRAM AGENDA

FRIDAY, OCTOBER 21, 2011

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

Workshop Timing: 8:30 a.m. – 4:30 p.m.

Group Luncheon: 12:00 – 1:00 p.m.

Strategies for Bidding Ancillary Services

- Ancillary-service (A/S) products offered under SPP Integrated Marketplace
- Formulating A/S offers
- Understanding opportunity costs
- Understanding A/S deployment costs and probabilities
- Key changes in A/S procurement and pricing in SPP Integrated Marketplace
- Why does SPP use co-optimization to compute prices LMPs and A/S prices?
- Does co-optimization minimize SPP energy and ancillary-service costs?
- Does co-optimization maximize revenues and profits for market participants?
- How does SPP compute marginal prices for ancillary services?
- How does SPP allocate A/S charges?
- Understanding causes for price reversal
- Computing revenues and costs for providing ancillary services
- How do A/S requirements affect unit dispatch and LMPs?
- Are A/S marginal prices influenced by congestion?
- Validating DA market results

Understanding Settlement Rules for SPP Integrated Marketplace

- Key differences in settlement rules between current energy-imbalance market and new SPP Integrated Marketplace
- Understanding settlement statements and charge codes for SPP Integrated Marketplace
- Settlement calendar for SPP Integrated Marketplace
- Why perform shadow settlement?
- Key functions of shadow settlement software
- What data do we need to validate settlement under SPP Integrated Marketplace?
- Downloading settlement statements and invoices from SPP server
- What are the most common causes for settlement disputes?
- Managing settlement disputes

Using Profit and Loss Metrics to Provide Feedback to Traders

- Using settlement results to compute DA and DART profits and losses (P&L) for your SPP portfolio
- Key factors influencing profits and losses
- Computing P&L gains and leakages for generators
- Using profit and loss metrics 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 indexes
- Settlement forensics – where front and back offices meet

Using PCI Market Simulator to Evaluate Bidding Strategies

- Day-ahead workflow for bidding ancillary services
- Formulating day-ahead energy and ancillary-service offers
- Is self-scheduling allowed?
- Impacts of self-scheduling on profits
- Forecasting ancillary-service prices
- Quantifying profit margins for ancillary services
- Running case studies to illustrate impacts of various A/S bidding strategies on portfolio profit and loss
- Savings achieved by optimally allocating ancillary services
- Market simulation

Round-Table Discussion

Register Today! Call 303-770-8800 or visit www.euci.com

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INSTRUCTORS

Khai Le, Vice President, PCI

Over the past 35 years, Khai Le has conducted over 500 seminars on market-based operations, RTO operations, bidding strategies, portfolio optimization, and shadow settlement for utilities and RTOs worldwide. He is currently working with market participants in SPP, MISO, PJM, CAISO, and ERCOT to deploy the PCI Generation Supply Management System (PCI GenManager, PCI GenTrader, and PCI GenPortal) to automate their bid-to-bill workflow. Khai authored over 100 technical papers on unit commitment, hydrothermal coordination, emission dispatch, optimization of ancillary services, post analysis, and short-term planning. Five of his papers received prize 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.

Tony Delacluyse, Director, PCI

Tony Delacluyse is a well-recognized authority on SPP settlement, settlement disputes, and market rules. Tony has over 22 years of experience with market settlement, trading, operational planning, and plant management. Tony participates actively in the SPP settlement group. He received both his B.A. and his MBA from St Ambrose University.

Bart Tsala, Manager, PCI

Bart has a deep understanding of the SPP Integrated Marketplace. Bart has been working with the SPP staff in Little Rock over the past two years to help with the design and implementation of the Integrated Marketplace. Bart wrote the LMP simulator, which is used in this course to co-optimize energy and ancillary services and evaluate bidding strategies for convergence bids. Bart Tsala received his Bachelor of Science in power systems at the Institut Supérieur Industriel de Bruxelles and his MSEE and Ph.D. from the University of Oklahoma.

Mark Wiggins, Manager, PCI

With over 20 years of experience, Mark is specializing in ISO settlements and market design. Mark has a detailed knowledge of the new SPP market, having worked with the SPP staff in Little Rock over the past nine months to help with the design and implementation of the SPP Integrated Marketplace.

PROCEEDINGS

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

EVENT LOCATION

The course will be held at the Embassy Suites Norman – Hotel & Conference Center, 2501 Conference Drive, Norman, OK 73069. Sleeping rooms are available at the special rate of \$107 (must mention Power Costs Inc. rate when registering). Call 405-364-8040 for reservations. **Please make your reservations early.**

REGISTRATION INFORMATION

REMEMBER, EVERY FOURTH REGISTRANT IS FREE

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

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 September 16, 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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PLEASE REGISTER THE FOLLOWING

- Managing Bid-to-Bill Workflow in New SPP Integrated Marketplace
October 20-21, 2011: US \$1395
Early bird on or before October 7, 2011: US \$1195

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 24 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 _____

Company _____ Telephone _____

Address _____ City _____ State _____ Zip _____

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

PAYMENT METHOD

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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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