

ELECTRIC SETTLEMENTS SUMMIT

November 14 – 15, 2018
The Millenium Knickerbocker
Chicago, IL

PRE-CONFERENCE WORKSHOP I

**Fundamentals of ISO Settlements
Structures and Systems**

TUESDAY, NOVEMBER 13, 2018

PRE-CONFERENCE WORKSHOP II

**Using 5-Minute Settlement and P&L
Metrics to Provide Feedback to
Traders on Market Operations**

TUESDAY, NOVEMBER 13, 2018

POST-CONFERENCE WORKSHOP

**Utilizing Allocations More Effectively
for Billing, Financial and Regulatory
Reporting**

FRIDAY, NOVEMBER 16, 2018



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EUCI is authorized by IACET to offer 1.4 CEUs for the conference, 0.3 CEUs for each pre-conference workshop and 0.6 CEUs for the post-conference workshop.

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OVERVIEW

As wholesale market and bilateral power transactions mushroom to reflect increasing grid operations sophistication and complexity, load serving entities (LSEs) market participants and system operators confront myriad challenges in settling the related transactions. These include the need to:

- Improve data management through continual technology upgrades
- Maximize accuracy to avoid the need for costly resettlements
- Promote accelerated settlements timelines
- Adjust to changing power industry technologies and practices
- Accommodate challenges related to the proliferation of settlement increments

This conference moves beyond simply cataloguing these challenges and considers real-world solutions currently being employed to manage them and improve transactional efficiency and reliability. It provides a comprehensive survey of how transmission organizations and system operators across North America are engineering their settlements design to accurately reflect system operations. And the Settlements Summit offers insights into how load serving entities (LSEs) market participants are refining their own settlement systems and processes to ensure efficiencies and market performance.

LEARNING OUTCOMES

Attendees will hear presentations and engage in discussions that will allow them to:

- Examine the leading settlement issues from ISO/RTO staff perspectives
- Apply settlement analysis to drive profits and improve operations
- Evaluate optimum methods for accelerating settlement timelines
- Assess process adjustments related to sub-hourly/5 min settlements
- Discuss market structure designs to accommodate distributed generation and related settlement implications
- Assess the relationship between shifts in operational practices (e.g., energy storage, demand response and increasing renewable energy penetrations) and corresponding settlement requirements
- Evaluate methodologies, challenges and resource allocation decisions associated with closing market participants' monthly "financial book"
- Discuss methods for optimizing the statement validation and disputing process
- Identify challenges, lessons learned and best practices of market participation shadowing of ISO/RTO settlements



"This is a great way to orient staff on the RTO/ISO settlements space. EUCI is incredibly talented at putting together groups of individuals with similar interests and goals."

Manager of RTO Settlements, The Energy Authority



"Outstanding forum for communication between ISOs and market participants for all ISO markets."

Manager – Market Operations Accounting, Xcel Energy

WHAT PAST ATTENDEES HAVE SAID...

"In addition to being a great networking opportunity, the ISO Settlements Summit provides information and context that is hard to obtain over the phone or at market meetings." - Product Marketing Manager, Hartigen

"Great variety of topics and speakers in addition to meeting people from across the entire country." - Supervisor – ISO Settlements, Constellation

"Face-to-face conversations are a great way to learn and possibly improve your own best practices." - Senior Operations Analyst, Puget Sound Energy

"This is a great conference for anyone wanting to learn about what is happening with the ISOs across North America — a great learning opportunity." - Senior Manager – Market Settlements, IESO



"EUCI offered a wealth of settlements knowledge through a well-organized and executed Settlements Summit."

Senior Manager – Settlements, Ontario Power Generation

"Very informative conference. All presentations were relevant to me. Learned a lot in two days." - Settlements Manager, GDF Suez NA

"I highly recommend this conference." - Management Assistant, San Francisco Public Utilities Commission

"Great opportunity to network with other ISO settlements professionals from around the country and learn current best practices." - Manager, PG&E

"Excellent opportunity to compare and contrast various RTO markets; gain insights to future process improvements in your area of expertise, and network with those who can provide feedback and support in the future." - Supervisor – Electric Settlements, WPS

"Well managed event!" - Director – Business Development, MCG Energy Solutions

"A very productive conference that provided valuable information and a great opportunity to network." - Integrated Market Coordinator, Kansas City Board of Public Utilities

"A good forum to bring fresh ideas and discussions around the settlements world." Portfolio Analyst, Duke Energy

"A learning ground." - Principal Manager – Settlements, SCE

"Others share in your obstacles; come, hear and share solutions." - Managing Supervisor, Ameren

"Informative and engaging. The material was well prepared and diverse in scope." - Will Amos, Senior Power Coordinator, OG&E

"It was interesting to get viewpoints from several RTOs on a wide range of topics." - Senior ISO Settlement Analyst, Westar Energy

"Great of settlements from a wide perspective ranging from RTOs to market participants and vendors." - Utility Specialist, San Francisco Public Utilities Commission

AGENDA

WEDNESDAY, NOVEMBER 14, 2018

- 7:45 – 8:15 am Registration & Continental Breakfast**
- 8:15 – 8:30 am Program Overview**
- 8:30 – 10:15 am Considering ISO Settlement Depts' Current and Up-and-Coming Changes and Challenges**
- FERC orders
 - o 841
 - o 825
 - o 844
 - o Others
 - DOE initiatives and policy
 - ISO-specific market measures
 - Technology refresh
- Shannon Carey, Director – Market Analysis and Settlements, ISO New England (ISO-NE)***
Christopher Russell, Manager – Customer Settlements, New York ISO (NYISO)
Ray Fernandez III, Manager – Market Settlements Development, PJM Interconnection
Idalin McKenzie, Senior Manager – Market Settlements, Ontario Independent Electricity System Operator (IESO)
Chris Delk, Manager – Market Settlements, Midcontinent ISO (MISO)
Heather Kelley, Director – Market Services Support, California ISO (CAISO)
- 10:15 – 10:30 am Morning Break**
- 10:30 am – 12:00 pm Side by Side Comparison of Major ISO Settlement Data Delivery Characteristics**
- What are the means of disseminating data to customers? (e.g. API, CSV, Warehouse, etc.)
 - Web interfaces
 - Reports
 - o Publicly available
 - o Proprietary
 - Data warehouses
 - File types and technologies
 - Future planning and system updates
- Dan Lobue, President, Competitive Energy Consulting***
ISO Panel Discussion
- 12:00 – 1:00 pm Group Luncheon**
- 1:00 – 3:00 pm Last Year It Was 5 Min Settlements — This Year, It's Storage**
- FERC orders 841
 - Compliance requirements
 - Measurement timing, parameters and data sourcing
 - Market changes required
 - o Energy, Ancillary/Reserve, Capacity
 - o DA and RT
 - o Uplift treatment
 - o Transitory characteristics
 - o Aggregation considerations
 - Where (which ISOs) storage is already settled and how will that change
 - Storage settlement challenges in specific ISOs
 - Implementing different market products for different types of storage
- Andrew Kaplan, Partner, Pierce Atwood LLP***
ISO Panel Discussion

AGENDA

WEDNESDAY, NOVEMBER 14, 2018 (CONTINUED)

3:00 – 3:20 pm

Afternoon Break

3:20 – 5:00 pm

The Impact of Storage Settlements for Market Participants

- Operations
- Bidding aspects
- Forecasting and optimization
- Settlement and software aspects
- Shadow and post-settlement analysis

Ron Coutu, Founder and Strategic Market Advisor, Strategic Market Design

Tom Girlich, Manager – Market Settlements & Reporting, PG&E

5:00 pm

Adjournment for Day

5:00 – 6:00 pm

Networking Reception

THURSDAY, NOVEMBER 15, 2018

7:30 – 8:00 am

Continental Breakfast

8:00 – 9:45 am

Reviewing 5-Minute/Sub-Hourly Settlements — Lessons Learned and Benefits

Over the past 4 years, 5 RTOs (CAISO, SPP, ISO-NE, PJM, and MISO) have implemented 5-minute settlements. This panel session will review the implementation of 5-minute settlements, summarize lessons learned, and discuss the next steps.

- Review Implementation of 5-minute settlements in 5 RTOs (CAISO, SPP, ISO-NE, PJM, and MISO)
- Did we achieve the market objectives for FERC Order 855?
- Has the transition to 5-min settlements proved successful in all markets?
- Impacts of 5-minute settlements on meter data management, market operations, and settlements?
- Costs & Benefits for Implementing 5-minute Settlements
- Impacts of 5-minute Settlements on IT Infrastructure
- What lies ahead?

Khai Le, Senior Vice President, PCI

Shannon Carey, Director – Market Analysis and Settlements, ISO New England (ISO-NE)

Ray Fernandez III, Manager – Market Settlements Development, PJM Interconnection

Andrew Dornier, Manager – Energy Analysis & Reporting, Entergy

9:45 – 10:00 am

Morning Break

10:00 – 11:45 am

Settlement Analysis of Plant Performance and Portfolio PNL in ISO/EIM Markets

- The need for reviewing multiple operational data sources simultaneously
 - o ISO — awards, dispatches, LMPS, outages, settlement charge codes, etc.
 - o Non-ISO — internal meter, forecasts, temperatures, etc.
- Need the ability to review from a portfolio level from the day and drill-down into an individual generator at the 5-minute level
- Using operational data to support the ISO/EIM dispute analysis process
- Did my plant make money or lose money in the ISO/EIM market?

David Dan, President and CEO, Power Settlements Inc

Doug Young, Director – Commercial & Trading Controller, PacifiCorp

AGENDA

THURSDAY, NOVEMBER 15, 2018 (CONTINUED)

11:45 am – 1:00 pm Group Luncheon

1:00 – 2:30 pm Leveraging Technology for Back Office Process Automation

Today's back office processes have evolved significantly the past few years to reflect market changes, better data availability, and customer wants and needs. Settlement staff need to leverage technology in order to meet deadlines, respond to reporting requests, and to maintain consistent staffing levels throughout time. This segment will discuss processes now pushing settlement resources to deliver data more/better/faster, including:

- Overnight processing
- Scheduled reports
- Ad hoc reports
- Approval-based processes
- Accounting data retrieval
- Data visualization
- Customer allocations

Michael Canto, Manager, Hartigen

2:30 – 2:50 pm Afternoon Break

2:50 – 4:30 pm Settlement Challenges to Accommodate the Changing Power Environment

- Renewables
- Flexibility
- Ancillary services
- Storage (non-FERC discussion)
- Fuel security (formerly RMR) contracts

Ron Coutu, Founder and Strategic Market Advisor, Strategic Market Design

Ping Wang, Senior Manager – RTO Analysis, The Energy Authority (TEA)

Bill Olson, Manager – Market Operations Accounting, Xcel Energy

Greg Patronik, Supervisor – South & West ISO and Structured Settlements, Constellation (invited)

4:30 pm Conference Adjourns

PRE-CONFERENCE WORKSHOP I

Fundamentals of ISO Settlements Structures and Systems

TUESDAY, NOVEMBER 13, 2018

OVERVIEW

Settlements' primary function is to ensure all power purchases and sales are correctly reconciled to the terms, agreements and Tariffs, and that any discrepancies are properly investigated and disputed. A secondary function of settlements is to provide feedback on the financial implication of power transactions to the Front Office, and to report on the financial performance of transactions to various Back Office departments.

But, not all settlements are created equal. Unlike bilateral, transmission and PPA power settlement transactions, RTO/ISO market settlements are very complex. Not only are there many different products/services (such as physical power, ancillary services and financial hedge instruments), but there are also multiple and different markets (Day-Ahead market vs. Real-Time market, and FTR). Those complexities in RTO/ISO market operations result in settlement charge types from approximately 60 in some wholesale market systems to more than 200 in others.

This workshop will present a high-level workflow of RTO/ISO market operations from the beginning to the end. It will focus on generation and load, which together covers 80% market activities. Illustrations from various RTOs will be employed.

LEARNING OUTCOMES

- Examine power markets design and processes
- Explain LMP methodology
- Compare basic charge types across ISOs
- Assess why there are different terms for similar market/settlement functions
- Examine market participant actions
- Identify shadow settlement purposes and functions

AGENDA

TUESDAY, NOVEMBER 13, 2018

7:45 – 8:15 am **Registration and Continental Breakfast**

8:15 – 10:00 am **RTO/ISO Market Overview**

- Why and how
- Functions
- Products/services
- Settlements

Market Participant Actions

- Asset bid strategy development
- Bid/offer price formation
- Bid submission

RTO/ISO Market Actions

- Products/services
 - Co-optimized clearing in Day-Ahead market
 - dispatching in Real-Time market
- Market Settlements

10:00 – 10:15 am **Morning Break**

10:15 – 11:45 am **After-the-Fact Shadow Settlements**

- Mapping between settlement charge types and market results/transactions
- Mapping between settlement charge types and market and charge type calculations, dispute

Feedback to Front Office

- Asset P&L analysis and reporting
- Operation recommendations to
 - reduce market penalties...
 - increase asset margin
 - reduce cost

11:45 am **Workshop Adjourns**

WORKSHOP INSTRUCTORS

Ron Coutu

Founder and Strategic Market Advisor, Strategic Market Design

Ron Coutu is the founder and strategic market advisor of Strategic Market Design, a company he formed in 2018 upon retiring from ISO New England (ISO-NE). At the ISO, he was lead of the Business Architecture and Technology group. Mr. Coutu has more than 30 years' experience in markets and software design and development, having been involved in Electricity Markets design and development since 1996. Over the years his responsibilities included development of market solutions, providing guidance in implementing those solutions and deciphering market designs to various stakeholders and outside entities. Just a few of his several landmark efforts are the creation of a 'Standard Market Design' in New England, patterned after the PJM market design of the time; implementation of ancillary markets, which included a design for a forward reserve market; and development of a forward capacity market, featuring an aptly named pay-for-performance set of markets rules. He also designed and conducted many of the training modules administered by ISO New England. Mr. Coutu's degree is in Computer Science.

Ping Wang

Senior Manager – RTO Analysis, The Energy Authority (TEA)

Ping Wang is Senior Manager of RTO Analysis at The Energy Authority (TEA). He has some 18 years of experience in the wholesale energy industry that includes application support, market design, RTO/ISO operations and trading, and settlements. Mr. Wang joined TEA in 2015, managing the Midwest Region Settlement team including RTO/ISO, Bilateral Power, and Natural Gas Transmissions. Subsequently, he was promoted to Senior Manager of RTO Analysis, which responsibilities include RTO/ISO trading strategy development and optimization, client portfolio management, PPA and RFP analysis and development, RTO policy change initiatives and impact analysis, and asset market performance P/L measurement for CAISO, ERCOT, MISO, PJM, and SPP markets. Within the past two years, his team has provided more than \$10 million in value to clients in a spectrum of services that includes RTO/ISO resource trading optimization, FTR hedging, tolling agreements, and load under-scheduling in various RTO/ISO markets. Prior to affiliating with TEA, Mr. Wang served in different positions at MISO involving application design, integration, and support, market and settlement design and implementation, ARR/FTR model building and auction. He received his Master of Science degree in Atmospheric Science in Georgia Tech and Master of Science degree in Computer Science in University of North Carolina.

PRE-CONFERENCE WORKSHOP II

Using 5-Minute Settlement and P&L Metrics to Provide Feedback to Traders on Market Operations

TUESDAY, NOVEMBER 13, 2018

OVERVIEW

Over the past four years, five RTOs (CAISO, SPP, ISO-NE, PJM, and MISO) have implemented 5-minute settlements. A key goal set by FERC in implementing 5-minute settlements is to “pay for performance” and provide incentives for generating resources to follow 5-minute dispatch instructions.

A critical question facing all market participants is: “How can we use 5-minute settlement results to compute after-the-fact profits & losses and provide a feedback loop to front-office and plant personnel to improve real-time market operations?”

This workshop will discuss the impacts of 5-minute settlements on market operations, summarize lessons learned, and provide recommendations on fine-tuning market operations to achieve greater market benefits.

LEARNING OUTCOMES

- Identify bid-to-bill- workflow process features for implementing 5-minute settlement
- Assess potential impacts of 5-minute settlement on market revenues and P&L for generating resources
- Examine the cost for upgrading revenue-quality meters to provide 5-minute meter data
- Use of 5-minute settlement and production-costing results to compute DA and DART profits & losses (P&L) for a genco portfolio
- Use of 5-minute profit & loss metrics to build key performance indices
- Use of 5-minute profit & loss metrics to provide feedback to plant managers on plant performance
- Use of 5-minute profit & loss metrics to provide feedback to traders on effectiveness of day-ahead and real-time bidding strategies

WORKSHOP INSTRUCTORS

Khai Le

Senior Vice President, PCI

Khai Le is Senior Vice President at PCI, a supplier of power portfolio optimization software for power generation and trading companies. Over the past 42 years, he has conducted over 700 seminars on market-based operations, bidding strategies, portfolio optimization, and shadow settlement for utilities and ISOs worldwide. He is currently working with market participants in CAISO, MISO, SPP, PJM, ISO-NE, and ERCOT to automate their bid-to-bill, portfolio-optimization, ETRM, and BA-operations workflows. Mr. Le has authored more than 100 technical papers on unit commitment, hydro-thermal coordination, emission dispatch, optimization of ancillary services, post analysis, and short-term planning. He received his BS from Harvey Mudd College and his MS from Carnegie Mellon University. Mr. Le is a Fellow of the IEEE.

WORKSHOP INSTRUCTORS (CONTINUED)

Justin Shearer

Director, PCI

Justin Shearer is a Director at PCI. He actively participates in all phases of solution development, deployment, and consulting for market participants in the CAISO MRTU and EIM markets. He has been closely involved with the deployment of the PCI EIM suite at NV Energy, Arizona Public Service, Puget Sound Energy, Portland General Electric, and Salt River Project. Mr. Shearer received both his BA and MBA from the University of Oklahoma.

WORKSHOP AGENDA

TUESDAY, NOVEMBER 13, 2018

12:30 – 1:00 pm	Registration
1:00 – 1:15 pm	Overview and Introductions
1:15 – 2:45 pm	<p>Bid-to-Bill Workflow for Market Participants in RTO Markets</p> <ul style="list-style-type: none"> • Key features of RTO markets (MISO, SPP, PJM, RTO-NE, NYISO, ERCOT, and CAISO) • Understanding bid-to-bill workflow • Reviewing day-ahead and real-time bidding workflows • Reviewing RTO settlement workflow • Goals for FERC Order 825 • Pros and cons for implementing 5-minute settlement <p>Impacts of 5-minute Settlements on Market Operations and Profits & Losses for Generating Units</p> <ul style="list-style-type: none"> • Potential impacts of 5-minute settlement on market revenues and P&L for generating resources • Pros and Cons for Submitting 5-minute vs Hourly Meter Data for Generating Resources • What is the cost for upgrading revenue-quality meters to provide 5-minute meter data? • Review case studies to illustrate why 5-minute Settlement is needed to provide correct market signals
3:00 – 3:15 pm	Afternoon Break
3:15 – 5:00 pm	<p>Using Settlement Results to Provide Feedback to Traders</p> <ul style="list-style-type: none"> • Using 5-minute settlement and production-costing results to compute DA and DART profits & losses (P&L) for a genco portfolio • Key factors influencing profits & losses • Computing P&L gains and leakages • Using 5-minute profit & loss metrics to provide feedback to traders on effectiveness of day-ahead and real-time bidding strategies • Using 5-minute profit & loss metrics to provide feedback to plant managers on plant performance • Using 5-minute profit & loss metrics to build key performance indices • Settlement forensics – where front and back offices meet • Benefits for using business-intelligence tools to analyze settlement results and validate market operations <p>Course Review & Round-Table Discussion</p>
5:00 pm	Workshop Adjourns

POST-CONFERENCE WORKSHOP

Utilizing Allocations More Effectively for Billing, Financial and Regulatory Reporting

FRIDAY, NOVEMBER 16, 2018

OVERVIEW

Allocation is a term that can be used to describe many processes or reporting methods in the electric settlement space. From tasks such as contract billing requirements to tracking financial performance, utilities, load serving entities, independent power producers, trading organizations, and other organizations operating in the power industry have put into practice specific business logic to allocate transaction data that informs a variety of downstream business functions. The wholesale settlements group is typically charged with disseminating this allocation data and logic to its corporate accounting, other internal as well as external reporting groups. The burdens, challenges and urgency associated with providing this information in a digestible, actionable manner are becoming more critical, more complex and more time consuming.

This workshop will provide an examination of the challenges that settlement operations are facing today as they struggle to carry out their allocation practices with current systems to provide adequate coverage for accounting and reporting functions required at the enterprise level. It will provide attendees with a deep-dive examination into real world, specific, technical solutions that have been implemented to more effectively use allocations and achieve accurate and timely results in today's wholesale, retail and bilateral electric settlements environments. The workshop will feature presentations by different solution providers re: many of the challenges addressed re: settlement allocations.

LEARNING OUTCOMES

- Identify the types of periodic accounting and reporting challenges
- Distinguish how allocation protocols affects the various types
- Discuss some of the current allocation practices
- Assess how technical solutions are being used to more effectively allocate billing and invoices
- Evaluate how technical solutions are being used to more effectively allocate regulatory reporting
- Examine how technical solutions are being used to more effectively allocate corporate financial reporting
- Illustrate, through case studies, how allocation challenges are being addressed by different software solutions

AGENDA

FRIDAY, NOVEMBER 16, 2018

7:45 – 8:15 am Registration and Continental Breakfast

8:15 – 8:30 am Overview and Introductions

8:30 – 9:30 am Types of Periodic Accounting and Reporting Challenges

- Regulatory reporting
 - o FERC
 - EQR
 - Schedules and other reports
 - o NERC
 - o Regulatory commission requirements
- Corporate financial invoicing, reporting and statements
 - o Reconciling ISO settlements w/ monthly GAAP accounting
 - o Quarterly corporate earning reporting
 - o Trader performance tracking
- Contract billing and invoicing
 - o Bilateral contracts
 - o Purchased power agreements
 - o CCA allocations
 - o Revenue-sharing agreements
 - o Carve-out approaches

9:30 – 10:30 am Current, Prospective Data Compilation & Reporting Best Practices

- Current practices – industry observations
 - o Gathering and processing of data into common platform to be able to analyze and process
 - Requiring multiple step, usually, manual process
 - Extracting data from multiple data sources
 - Lack of technical solution required developing methods, platforms or worksheets that enable ability to, validate and report
 - o What are some of challenges being experienced today?
 - Taking settlement data and tying to corporate accounting (GAAP)
 - Taking settlement data and creating/invoicing counterparties
 - Gathering various forms of settlement data to derive comprehensive
 - Dealing with carry forward, re-settlements, active disputes, etc.
 - 5-minute settlements vs hourly invoicing/reporting
 - Using E-tag data in settlements and allocations
- Future state — where is industry trending (best practices)?
 - o Centralized data collection and process
 - o Invest in powerful and flexible solutions
 - o Adding enough attributes front end of process to provide ability to allocate or reference data to multiple processes
 - o Ability to integrate and provide required data sets to accounting, invoicing and reporting systems
 - o Ability to create comprehensive and dynamic reporting programmatically linked to centralized data source.
 - o Investing in compatible and supporting technical solutions or applications

10:30 – 10:50 am Morning Break

WORKSHOP AGENDA

FRIDAY, NOVEMBER 16, 2018 (CONTINUED)

10:50 – 11:50 am

Case Studies and Lessons Learned

- Contract Billing and Invoicing (1 hour)
 - o Bilateral contracts
 - o Purchased power agreements
 - o CCA allocations
 - o Revenue-sharing agreements
 - o Carve-out approaches

Mike Canto, Manager, Hartigen

11:50 am – 1:00 pm

Group Luncheon

1:00 – 2:00 pm

Case Studies and Lessons Learned (cont'd)

- Etag Data in Settlements and Allocations
 - o Using Etag data for renewable energy credit ("REC") settlement allocations
 - o Using Etag data for operational adjustments / delivered energy in shadow settlements and counterparty bilateral settlements
 - o Using Etag data in the transmission billing allocation process

David Dan, President, Power Settlements Inc

2:00 – 3:00 pm

Case Studies and Lessons Learned (cont'd)

- CAISO EIM Balancing Authority and Transmission Customer Settlements
 - o EIM settlement Balancing Authority charges to transmission customers
 - o Illustrating EIM settlement charges allocated to bilateral customers for revenue neutrality.
 - o Requirements for allocating different types of demand charges

Suiyi Su, Manager, PCI

3:00 – 4:00 pm

General Discussion

4:00 pm

Workshop Adjournment

WORKSHOP INSTRUCTORS

Dan Lobue

President, Competitive Energy Consulting

Dan LoBue is President of Competitive Energy Consulting. He is a subject matter expert with more than 30 years' experience in power markets, holding both senior management positions at market participating companies and as a consultant in the electric industry. As a corporate employee, he has held positions in generation, transmission, regulatory and commercial operations; specifically trading and origination. As a consultant, he specializes in advising and providing solutions to decision-makers looking to improve margins and reduce expenses in electricity markets through the application of adept knowledge of the market rules, regulations, risks and use of time proven systems and processes. Mr. Lobue works on behalf of market participants in MISO, SPP, PJM, CAISO, ISO-NE, and NYISO. He was the lead consultant for the MISO South / Entergy integration, assisting Entergy, MISO and many of the other embedded companies successfully transition and integrate into the market on time. Post-market integration activities have included proving solutions to improve market performance and reduce P&L leakage. He is considered a "go-to-guy" for bridging the gap between theory and practice.

Michael Canto

Product Manager, Hartigen Solutions

Michael Canto is Product Manager at Hartigen Solutions. He has been with the firm since 2012. Mr. Canto works exclusively on settlement implementations of company's software and custom reporting solutions for clients. He has extensive knowledge of North American RTO Settlements and has been in the RTO/ISO Settlement space for over a decade. He has managed multi-faceted settlement teams across SPP, PJM, MISO, & CAISO and his specialties include after-the-fact analysis, settlement and accounting, process optimization, and reporting structures. Mr. Canto received a Bachelor of Arts degree in Economics from the University of Florida.

David Dan

President, Power Settlements Consulting and Software

David Dan founded Power Settlements Consulting and Software, LLC in 2007, and as president is responsible for setting Power Settlements' strategic objectives and executing the expansion of the Power Settlements' bid-to-bill, visual analytics, and energy trading and risk management product lines. He is responsible for designing the business functionality in all of the company's modules for the western power markets. Prior to starting Power Settlements, Mr. Dan worked at various consulting firms including Deloitte & Touché, where he consulted for many of the ISO participants, including investor owned utilities, independent generators, power marketers, and municipalities. He first started his career in the ISO/RTO space when he joined the California Power Exchange in 1998, where he was a senior settlement analyst, led the dispute group, and trained market participants on validating their ISO settlement statement charges.

Suiyi Su

Manager, PCI

Suiyi has 6 years of working experience with settlements allocation, transmission billing, and energy accounting. He has been closely involved with the deployment of PCI Transmission Billing at Arizona Public Service, Puget Sound Energy, and Salt River Project. Mr. Su received his Master's degree in Industrial Engineering from the University of Florida.

INSTRUCTIONAL METHODS

PowerPoint presentations and case studies will be used in program.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

Participants must sign in/out each day and be in attendance for the entirety of the conference to be eligible for continuing education credit.

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 ANSI/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 ANSI/IACET Standard.

EUCI is authorized by IACET to offer 1.4 CEUs for the conference and 0.3 CEUs for each pre-conference workshop and 0.6 CEUs for the post-conference workshop.

REGISTER 3, SEND THE 4TH FREE

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

EVENT LOCATION

The event is located at The Millennium Knickerbocker, 163 E. Walton, Chicago, IL 60611. A room block has been reserved for the nights of November 12-15, 2018. Room rates are US \$229.

please call **1-800-621-8140** or [visit the website](#). **Please mention Group Room Block Code 1811EUCINV.** The cutoff date to receive the group rate is October 12, 2018 but as there are a limited number of rooms available at this rate, the room block may close sooner. ***Please make your reservations early.***

PLEASE SELECT

- ELECTRIC SETTLEMENTS SUMMIT ONLY:** NOVEMBER 14 – 15, 2018
US \$1495, EARLY BIRD ON OR BEFORE OCTOBER 26, 2018: US \$1295
- ELECTRIC SETTLEMENTS SUMMIT AND ONE OR TWO WORKSHOPS**
US \$1495, EARLY BIRD ON OR BEFORE OCTOBER 26, 2018: US \$1295 PLUS NOTED
ADDITIONAL PRICING - (MAKE SELECTION(S) BELOW)
 - PRE-CONFERENCE WORKSHOP I: TUESDAY, NOVEMBER 13, 2018: ADD US \$400
 - PRE-CONFERENCE WORKSHOP II: TUESDAY, NOVEMBER 13, 2018: ADD US \$400
 - POST-CONFERENCE WORKSHOP: FRIDAY, NOVEMBER 16, 2018: ADD US \$800
- PRE-CONFERENCE WORKSHOP I ONLY: TUESDAY, NOVEMBER 13, 2018: US \$595,
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How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

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Phone

Email

List any dietary or accessibility needs here

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 12, 2018 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 conference 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 (201) 871-0474