BEST PRACTICES IN PORTFOLIO HEDGING FOR UTILITIES

October 6-7, 2016
Springhill Suites Chicago Downtown/River North
Chicago, IL
OVERVIEW

Utility hedge design has generally focused on creation of balanced physical positions largely independent of market prices and uncertainty.

By integrating the uncertainty in market prices and their joint relationship to loads and intermittent generation, more robust and less rigid hedging strategies can be developed that yield substantially greater risk reduction while preserving value.

This is a hands-on course that will walk attendees through exercises on portfolio hedging for actual utility portfolios. The course provides practical steps and techniques to manage portfolio positions, adhere to budgets and risk limits, and optimize operations.

WHO SHOULD ATTEND

The course is designed for executives that are involved in designing and approving hedging strategies for utilities. The course provides an overview of basic material such as markets, hedging instruments and risk metrics and then analyzes the tradeoffs around the use of those instruments in the context of actual utility portfolios exposed to price and volume uncertainty.

LEARNING OUTCOMES

- Define key concepts in electricity hedging
- Identify hedging strategies for a utility in the Midwest and Northeast
- Examine case studies from PJM, MISO
- Discuss simulation analysis and risk metrics for utilities
- Discover a 360 degree view of portfolio risk with market, credit, liquidity and volumetric risk metrics
- Review forward, futures, swaps and options
- List price hedging instruments
AGENDA

Thursday, October 6, 2016

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

8:30 a.m. – 4:30 p.m.   Course Timing

12:00 – 1:00 p.m.   Group Luncheon

Review of Key Concepts
• Spot prices for gas and power
• Forward prices for gas and power
• Long and short volumetric and financial considerations
• Building forward curves in gas and power markets
• Weather and load as key drivers for gas and power price behavior
• Case study: Weather, load, gas and power price relationships in PJM and MISO

Price Hedging Instruments (I): Forward, Futures and Swaps
• Physical forward contracts
• Futures: Clearinghouses, liquidity and margining considerations
• Swaps and basis swaps: OTC markets and collateral agreements
• Comparative analysis of use of instruments in hedging strategies
• Case study: Hedging with futures vs. swaps

Price Hedging Instruments (II): Options
• Options as insurance
• Intrinsic and extrinsic value
• Call, puts and collars
• Case study: Uses of options for protection against price spikes
• Main drivers of option premiums
• Are options a cost or an investment?
• Why most utilities should have options as part of their hedging program

Simulation Analysis and Risk Metrics for Utilities
• Risk metrics and simulation
• Introduction to distributions, volatility and correlation
• Cost at risk and other long term risk metrics
• Case study: Cost-at-risk vs. VaR metrics for utilities
• Credit risk and potential future exposures
• Funding risk and potential margin/collateral metrics
• Introducing volumetric risk from assets such as generation and storage
• Stress tests and scenario analysis for utilities
• Analysis of market, credit and liquidity risk reports

Case Study: Hedging Strategy for Utilities
• Why should utilities hedge?
• How should the ratepayer’s risk appetite influence the hedging decisions?
• Introducing the concept of ‘regret’ applied to hedge strategy design
• Market views and hedge timing
• The role of utility commission in hedge program design
AGENDA

Friday, October 7, 2016

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

8:30 a.m. – 12:30 p.m. Course Timing

Best Practices in Management of Weather, Load and Price Risk for Utilities
- Volumetric risk and hedging: Supply and demand risk
- The cost of ignoring volume uncertainty in hedge programs: Lessons learnt from utility hedging debacles
- Designing optimal hedge programs including retail load, unit characteristics, and forced outages
- The ‘meaningful uncertainty’ framework to develop utility hedging programs
  - How to produce realistic weather, load, gas and price scenarios
  - Creating a portfolio view of physical and financial exposures
  - Integrating price and volume risk modeling in a coherent framework
  - 360 degree view of portfolio risk with market, credit, liquidity and volumetric risk metrics

Comprehensive Case studies
- Modeling expected costs and revenues
- Analysis of alternative hedging instruments
- How to assess and visualize market and weather risk factors on cash flows
- How to adjust the hedge dynamically as a response to weather, operational and price ‘shocks’
- Case study I: Hedging strategy for a utility in the Midwest
- Case study II: Hedging strategy for a utility in the Northeast
INSTRUCTORS

Gary Dorris / President / Ascend Analytics

Dr. Dorris has pioneered innovative solutions for energy risk management, portfolio planning and asset valuation for more than two decades. His expertise with large-scale physical and financial risk modeling has proved his company and its hedge optimization products to be indispensable to some 50 energy companies throughout the U.S. and Europe. Industry leaders have sought out Dr. Dorris for his delivery of expert testimony regarding risk management, energy procurement, trading practices, asset valuation, market power, rate design, and emission trading. In 2001, Dr. Dorris received distinguished recognition from the International Petroleum Exchange for his contributions to the field of energy risk management and he has been cited as a visionary in the field of modeling competitive energy markets. Prior to founding Ascend Analytics, he served as CEO and Chief Model Architect for e-Acument, a 60-person energy consultancy and software analytics firm. He has also provided independent expert reports to support the financing of more than $5 billion in electric generating assets.

Carlos Blanco, Ph.D. / Managing Director, Analytic Solutions / Ascend Analytics

Carlos is a financial risk management expert with over 20 years of diverse experience in the field. He has worked with some of the largest energy and commodity firms worldwide providing educational, advisory services and software solutions.

As Managing Director of Analytic Solutions, Carlos provides expertise to Ascend’s clients in the areas of analytic modeling, forecasting, optimization and simulation and also contributes to advance the software product and services to meet the evolving client needs. His role also involves communicating the business value of Ascend’s analytic solutions for energy risk management, planning and modeling developing articles, white papers and presentations.

He is the former co-founder and managing director of Black Swan Risk Advisors, a firm offering risk management advisory and educational services. As a consultant, his experience includes advising risk groups and senior management teams in oil, gas, power and mining firms on various enterprise risk management issues. He also worked as VP Risk Solutions at Financial Engineering Associates, Inc (a MSCI/BARRA Company) leading the market risk suite of products as well as the firm’s product support and professional services group. He was an active contributor in the growth and expansion of the firm from 1997 until its successful sale to BARRA in 2003.

A frequent conference speaker and writer, he has coauthored over 200 articles for Energy Risk, Commodities Now, Energy Metro Desk and others.

Carlos holds a PhD in finance from Universidad Complutense, Madrid and a Masters in International Economics and Investments from the University of Nebraska, Lincoln. He has also taught finance courses at the University of California, Berkeley, and the ABN AMRO Academy.
INSTRUCTIONAL METHODS

This program will use PowerPoint Presentations, group discussions, as well as active participation.

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.

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 1.0 CEUs for the course.

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 submitted to the National Registry of CPE Sponsors through its website: www.learningmarket.org.

Upon successful completion of this event, program participants interested in receiving CPE credits will receive a certificate of completion. EUCI is authorized by CPE to offer 12.0 credits for this program.

Program Level - Beginner/Intermediate

EVENT LOCATION

A room block has been reserved at the Springhill Suites Chicago Downtown/River North, 410 N Dearborn St, Chicago, IL 60665, for the nights of October 5-6, 2016. Room rates are $229, plus tax. Call 1-312-644-4071 for reservations and mention the EUCI course to get the group rate. The cutoff date to receive the group rate is September 5, 2016, but as there are a limited number of rooms available at this rate, the room block may close sooner. Please make your reservations early.

PROCEEDINGS

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

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.
BEST PRACTICES IN PORTFOLIO HEDGING FOR UTILITIES
COURSE, OCTOBER 6-7, 2016: US $1395
EARLY BIRD ON OR BEFORE SEPTEMBER 16, 2016: US $1195

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

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Billing Zip Code/Postal Code

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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 September 2, 2016 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.