



Power Risk Analysis Workshop

MARCH 28-29, 2012 | HOUSTON, TX

Learn the tools for assessing risk.
Leverage your analysis into action.

The clear, complete training you've been looking for.

- Risk tools, models and templates you can put to immediate use
- Instruction in best practices for designing, implementing and leveraging quantitative modeling of energy scenarios that have inherent risk
- A comprehensive understanding of risk management methodologies, geared specifically to the energy sector

Who attends

This program presumes familiarity with standard basic option pricing theory or risk modeling, such as Monte Carlo simulation.

- Credit risk analysts
- Market risk managers
- Energy traders and managers
- Risk consultants
- Risk and audit committee members
- Finance department professionals
- Compliance managers

Instructor

Kenneth Skinner, Ph.D.
VP, Risk Evaluation Products
Integral Analytics

Dr. Skinner has over 20 years' experience in evaluation and risk measurement research. Having worked as an energy consultant with Financial Times (FT) Energy and PHB Hagler Bailly, and 5 years as the Derivative Structuring Manager for Sempra Energy Solutions, he has significant experience in economic analysis and modeling of energy storage, efficiency and demand response programs, energy demand and prices, financial derivatives, and evaluation of energy products and assets using econometric and statistical methods, optimization principles and real option valuation techniques.

Dr. Skinner is currently the technology columnist for Wiley Natural Gas and Electricity Journal and is a noted speaker on energy related topics for organizations, such as AESP, IAEE, ACEEE, PLMA, and many others.

Power Risk Analysis Workshop

March 28–29, Houston, TX

Power Risk Analysis Workshop gives you hands-on training in how to make Value-at-Risk work in practice. You'll learn best practices for designing, implementing and leveraging quantitative modeling of practically any energy scenario that has inherent risk.

Just as important, the class size is limited to allow significant time for direct instruction and practice constructing models. You'll leave with templates in hand, knowing how to develop models and where to go to get the data you need.

Don't delay. Reserve your space today.

Day One

Registration and continental breakfast open at 7:30 a.m. Program begins at 8:30.

Risk 101: Tools, templates and regulations

The program begins with a discussion of key terms and definitions for energy risk management; understanding and evaluating how companies approach commodities and capital markets risk; hedging vs. optimization; legislative/regulatory outlook for derivatives; ratings, and credit implications.

- The statistical foundations of risk
- Principal tools of risk analysis, including the fundamental concepts of Value-at-Risk (VaR), Earnings-at-Risk (EaR) and risk management
- What is risk worth? Moving beyond Value-at-Risk to value of risk
- The impact of current regulations on the use of derivatives for risk management
- Regulated cost recovery of capital asset investment for reliability and risk

Exercise

Statistical modeling and confidence intervals; energy budgetary risk

Principles of enterprise-wide risk management

Discussion includes methods and challenges of risk identification beyond financial instruments, to corporate-wide Earnings-at-Risk measures. Real-world challenges are discussed relating to measurement and computation of energy related uncertainty and risk.

- Keys to successful enterprise-wide risk management
- Strategic risk management and planning
- Modeling known knowns, known unknowns, and unknown unknowns
- Risk committee and policy essentials

Register at www.snlcenter.com/powerisk or call (434) 951-7786

Energy derivatives, pricing and hedging

Understanding the valuation of options and derivatives; best practices to keep analysts on point, considerations in the option and derivative markets and how these elements impact the valuation on these instruments. Participants will learn different calculation approaches needed for different applications and understand how the underlying statistics can make or break energy risk calculations, including:

- Fundamentals of hedging energy risk
- Price volatility, hedging strategies, understanding how correlation and hedging work together to manage risk
- Developing the framework to analyze derivatives structures and long term contracts
- Using the efficiency frontier and the Sharpe ratio to determine VaR limits and risk tolerance
- Applying the variable of credit risk; identifying the issues and using the appropriate models

Case Studies

- Hedging energy exposure
- Layered hedging strategy

Hedge optimization to increase cash flow and minimize risk

Unleash the latent value of generation assets and load obligations by turning risk management into an affirmative business tool that drives value and reduces uncertainty in budgeted cash flows. This hands-on session builds on lessons learned earlier in the day, walking attendees through exercises on portfolio

Exercises

- Regression analysis of hedge effectiveness
- Delta and dynamic hedging

hedging for actual utility portfolios.

- Interpreting and applying metrics of hedge effectiveness
- Where basic hedge strategies fall short
- How to apply dynamic hedging to meet corporate goals

Analytics of managing commodities risk as markets evolve

An outline of the knowledge and skills needed to pursue a comprehensive risk strategy in today's ever-changing commodities marketplace. Through practical exercises from the power sector, the instructor will walk participants through the process to develop a strategy that is comprehensive enough to take account of traditional fundamental drivers of price volatility while being flexible enough to cope with the new demands of the emerging regulatory framework.

- Examining market risk and how to calculate VaR; three approaches to calculating VaR (model-building, historical simulation and Monte Carlo simulation) – advantages and disadvantages
- Incorporating current margin and capital requirements into your risk models
- Recent trends in risk instruments: weather contracts, catastrophic, volatility indices and credit default swaps
- Implementing extreme value theory (and other lessons from the banking crises)

Exercises

- Portfolios and volatility – getting the units right
- Building a NYMEX gas portfolio VaR calculation from scratch
- Cornish-Fisher expansion to correct gamma error

5:00 p.m. Wine and cheese reception

Day Two

Continental breakfast opens 8:30 a.m.
Program begins at 9 a.m. and ends at noon.

Case Studies: Risk mitigation and modeling

The focus is on how to make Value-at-Risk work in practice – how to design, implement and use scalable production Value-at-Risk measures. The relationship between risk and value is further developed as we apply financial engineering principles to strategic capital asset problems. Participants will discuss best practices/identify key fundamental relationships as well as perform exercises to update models, vet standard quant models and examine emergent techniques in risk mitigation, strategic valuation and stress testing

- Selecting and using risk metrics and value drivers
- How to incorporate forward market prices, unit characteristics, forced outages, and retail load
- Visualization of market and physical component contributions to risk
- Model validation and benchmarking of results
- How to forecast strategic project risk using financial engineering methods

Exercises

- Calculating retail supply/demand uncertainty risk
- Monte Carlo modeling of risk factors
- Valuing physical energy assets using financial engineering tools
- Calculating the value of energy storage for renewable energy intermittency risk

Continuing Education Credits



CFA Institute –
9 Professional Development Credit Hours



National Association of State Boards of
Accountancy – 11 CPE Credit Hours

Complete details on continuing education credits are available at: www.snlcenter.com/powerisk

The Essentials

When

March 28-29, 2012

Where

Intercontinental Houston
2222 W Loop South
Houston, TX

A block of rooms at the Intercontinental has been reserved for this event at a special rate of \$179 per night, exclusive of taxes and fees. The discount rate is available through Sunday, February 26, 2012 or until the block is filled.

To reserve your room, please call the Intercontinental directly at (800) 316-8645 and mention the SNL Power Risk Analysis Workshop program.

How to Register

Online:

www.snlcenter.com/PowerRisk

By Phone:

434-951-7786

Pricing

\$1,795

Discounts available for groups of three or more. Please call us.

Cancellation Policy

Cancellations for this program are eligible for a full refund, less a \$150.00 administrative fee, if received at least 15 business days prior to the start of the program. Cancellations received after that date, but at least 5 business days prior to the start of the program, receive a credit in the amount of the registration fee, less a \$150.00 administrative fee, to attend another SNL CFE program within 13 months. Due to commitments and expenses, cancellations received fewer than 5 business days prior to the start of the program are not eligible for a refund or credit.

Attendee substitutions from the same company are welcome at any time. For more information about our refund, complaint and program cancellation policy, please call us at 434-951-7786.