



Energy Management Institute Presents

Futures, Options & Derivatives

Correlations, Basis, Premiums, NYMEX, Markets, Trading



**Understand what futures & options are,
how they work, how they are used and how
they can be applied to YOUR SPECIFIC BUSINESS.**

Course Date & Location

When: February 22-23, 2010
8:30 a.m. – 4:30 p.m.

Where: Regus Conference Center
Downtown Houston
Two Allen Center
1200 Smith Street, 16th Floor
Houston, TX 77002

Recommended Hotels on p.2

What You Will Learn

Have you hedged too early? Have you applied the wrong tools for trading? Are you unaware of the myriad of instruments available for trading & hedging, and do you know the implications of each tool & technique? Have you ever wondered how the NYMEX actually works and how the trading floor functions? These are just a few of the questions that will be answered during this dynamic two-day course.

You'll leave this course with a practical yet rigorous understanding of what futures, options and derivatives are, how they work, how they are used, and how to measure the risks and rewards associated with them. Topics covered include:

- ▣ Setting up a futures, options or derivatives account
- ▣ Types of exchange orders
- ▣ Margin
- ▣ Brokers
- ▣ Contract specifications
- ▣ Black - Scholes Model
- ▣ Spot & Futures market relationships
- ▣ How Option prices change when market conditions change
- ▣ The latest tools & techniques for risk managers
- ▣ Historical & implied volatility
- ▣ Option pricing relationships
- ▣ History of the NYMEX
- ▣ The vocabulary of futures & options
- ▣ The what , why, how & who of futures markets
- ▣ The market participants
- ▣ The mathematics of futures & options premiums
- ▣ All about NYMEX & the ICE
- ▣ Difference & similarities of futures, options and derivatives
- ▣ Real-time trading & hedging examples for all products in the energy infrastructure using futures, options & derivatives
- ▣ Correlation & Basis analysis
- ▣ EFP's & Alternate Delivery Procedures

Who Should Attend

This course is applicable to all levels of the energy infrastructure including oil, natural gas, electricity and coal. Individuals whose decisions have significant financial impact will benefit from this program. Managers from areas such as marketing, sales, manufacturing, engineering, supply & distribution, trading risk management, purchasing & financial & accounting will find the course highly beneficial.

Program Registration Fees

1st delegate: \$1,895
2nd delegate: \$1,595
3rd delegate: \$1,395

Fee includes full two-day course, expert instruction, course materials, continental breakfast & lunch.

CPE Credits



This course earns 13 CPE credits. EMI awards credit hours towards CPE and Certified Purchasing Manager status (CPM).



Futures, Options & Derivatives

February 22-23, 2010 ~ Houston, TX ~ An EMI Energy Training Program

Course Syllabus

DAY 1: Futures, Markets & Derivatives (8:30 a.m. – 4:30 p.m.)

- ▣ **Session 1: Overview & Foundation:** Overview of the most widely used tools for managing risk, monitoring performance & maximizing profit.

- ▣ **Session 2: Introduction to Futures:** Historical overview of the development & characteristics of futures markets, Price discovery & general terminology. All of the prerequisite info needed to delve into the NYMEX & the ICE.

- ▣ **Session 3: NYMEX & ICE Futures:** Detailed look at NYMEX & ICE Futures; How & why futures provide a simple & liquid market to trade & manage price & margin risk for all of the energies; Inner workings of both exchanges; Players, contract details, back office & clearing operations; EFP & alternate delivery procedures.

- ▣ **Session 4: How to Open the NYMEX & ICE Tool Bag:** Setting up a NYMEX & ICE Futures account; Choosing a broker; Fees & brokerage commissions; How NYMEX & ICE transactions are guaranteed; Mark to Market 101.

- ▣ **Session 5: Trading & Types of Orders:** Trading process, types of orders & terminology: Approach the Market, Announce Your Bid & Offer, Confirm the Transaction, Limit Order, Stop order, MOC, TAS.

- ▣ **Session 6: Let's Get to the Specifics:** Long, short & spread trades; Applying these types of trades as part of a hedging strategy; Examples for the entire main product categories currently traded on the NYMEX & ICE – each example will use current data with a mark to market calculation.

- ▣ **Session 7: Self-Regulated Instruments: OTC & Derivatives:** Overview of the derivatives market, tools available, mechanisms, electronic exchanges, contracts, & ISDA; Similarities to the futures & options markets & how OTC options can provide similar ways to manage & trade energy; Will include examples used in Session 6 so we can compare both approaches with a mark to market calculation.

Recommended Hotels (Within Walking Distance)

Doubletree

400 Dallas Street, Houston, TX 77002
PH 713.759.0202

Crowne Plaza

1700 Smith Street, Houston, TX 77002
PH 713.739.8800

Hyatt

1200 Louisiana Street, Houston, TX 77002
PH 713.654.1234

Residence Inn

904 Dallas Street, Houston, TX 77002
PH 832.366.1000

Course Syllabus

DAY 2: Welcome to the World of Options (8:30 a.m. – 4:30 p.m.)

- ▣ **Session 1: A Walk down Correlation Row – What About Basis?:** How energy futures markets correlate with various physical instruments at each level of the energy infrastructure; Examples of the relationships of various futures instruments & real-life physical risks; Correlations of futures vs. spot, wholesale & retail markets; Basis relationship of energy futures & physical markets.
- ▣ **Session 2: Keeping All Your Options Open:** See how functional & easy options are to incorporate into your trading & risk management portfolio; Vocabulary, arithmetic, characteristics, & styles of options.
- ▣ **Session 3: Understanding Contracts & How to Use Them:** Contract specifications for NYMEX & ICE options contracts for all available energy instruments; Characteristics of OTC options, American & European options, & Put & Call options; Hedging with OTC options; How to buy, sell, write, hold, fold & exercise options; e-miNY energy contracts.
- ▣ **Session 4: Time to Put a Value to Those Options: Black-Scholes Pricing Model:** Employ the Black-Scholes model to determine if an option is fairly valued or over or under-valued; Objectives of the model & the assumptions, formula & four elements involved in pricing Put & Call options; Types of volatility & the role it plays in the valuation of options.
- ▣ **Session 5: Let's Visit the Greeks:** Explore the impact of option delta, gamma, vega, and theta on profits & losses; How each of these parameters impacts price exposure, time decay, & volatility; Option hedging techniques such as delta hedging; Exercise styles & their impact on prices & payoff.
- ▣ **Session 6: Real-Word Examples:** Comparison between the payoff of options & futures & when to use them; Creating synthetic futures & options on spreads; Each example uses the same data as in futures sessions with a mark to market for each to allow comparison of approaches



About EMI Instructors



Learn From the Experts that Experts Trust

EMI experts are frequent editorial contributors to petroleum magazines & are trusted by today's leading news sources. Our experts have been featured in:

Futures Magazine • *The Wall Street Journal* • *USA Today* • *The New York Times* • *The Washington Post* • *Journal of Commerce* • CNN • NBC • CBS • ABC • Bloomberg • Reuters

EMI's leading industry experts have an average of over 30 years of knowledge and experience in:

**Energy • Commodity trading • Risk management
• Education • Consulting • Financial services**

Plus many years of managing marketing, international trading, manufacturing, consulting, start-up operations and project finance operations of well-known companies; integrated major oil companies as well as international trading companies.

EMI's industry experts have also provided risk and value management analysis, advice, information, and services to a variety of companies in the electric power industry. Clients have included power marketers, integrated utilities, retail power providers, hedge funds, and power plants.

Highlights of our instructors' experience include: • Developing a suite of models for a variety of power markets that quantify value and risk • Managing spark spread portfolios for hedge funds in the power markets • Operating in futures trading pits as a market observer in the power markets • Developing working papers for investigations and performing compliance audits in the power industry • Helping Texaco initiate its first use of futures exchanges as an integral part of hedging/trading strategy • Chief Operating Officer of Triwell Marketing and refining • Director of OPIS, Oil Price Information Service, a management-consulting and educational services group that solely focused on the downstream energy industry • Member of Board of Directors of Longview Refinery • Member of the New York Mercantile Exchange Petroleum Advisory Board • Expert witness for a hearing before the subcommittee on surface transportation for the Commerce, Science, and Transportation Committee of the US Senate • Supplied expert testimony to a US Senate subcommittee hearing on diesel petroleum product pricing • Supplied testimony to the Federal Highway Administration regarding fuel tax evasion • Expert witness in a MTBE litigation against the major oil companies • Publishers of *The Daily Hedger*, *BTU's Daily Gas Wire* and *BTU's Daily Power Report*, which advise thousands of petroleum professionals daily.

Our instructors are **frequent expert speakers for numerous petroleum industry events and trade associations including:**

• DOE DESC World Energy Conference • OPIS Fleet Fueling • NYMEX • Fuel Management University • NATSO • ATA • AAA • Dairy Distribution • eyeforEnergy eCommerce • OPIS Supply Summit • CIOMA • American Society of Mechanical Engineers • American Society of Lubricating Engineers • Ambrust Aviation • NACHA.

Over the years EMI has developed a series of intensive courses covering all aspects of Energy from production all the way to managing the impact price and volatility on the margin of end-users, resellers, traders, marketers, shippers, retailers and refiners. Our instructors have had the privilege to instruct thousands of professionals representing all aspects of the energy industry, including every major oil company (i.e. Exxon Mobil, BP, Shell, Equilon, Motiva) major power utilities (i.e. Sempra, Edison Mission, Berkley, Toronto Hydro, Dominion, Conectiv) small marketers (i.e. Sprague, Getty, Southern Counties, Western Petroleum) trucking fleets from 50 to 10,000 (i.e. UPS, U.S. Postal Service, Yellow, Pepsi, Werner), gasoline-powered fleets hyper-markets (i.e. The Pantry, Wawa, BJs Wholesale) and many fortune 500 energy consumers.



Futures, Options & Derivatives

February 22-23, 2010 ~ Houston, TX ~ An EMI Energy Training Program

Reserve Your Seat Today!

Three easy ways to register:

1. Call PMA Conference Management at 201.871.0474 or send email to: register@pmaconference.com.
2. Complete & fax this form to 253.663.7224.
3. Complete & mail the form to: PMA Conference Management, POB 2303, Falls Church, VA 22042.

<p>A Registration Fees:</p> <p>\$1,895 for full two-day program</p> <p>This fee includes expert instruction, course materials & lunch.</p>	<p>Discount for Additional Attendees:</p> <p>2nd delegate \$1,595</p> <p>3rd delegate \$1,395</p>
<p>B Enrollment Information (please print clearly)</p> <p>NAME: _____</p> <p>COMPANY: _____</p> <p>ADDRESS: _____</p> <p>_____</p> <p>PHONE: _____ FAX: _____</p> <p>E-MAIL: _____</p>	
<p>C PAYMENT METHOD</p> <p><input type="checkbox"/> Please invoice my company (payment must be received prior to course date)</p> <p><input type="checkbox"/> MasterCard <input type="checkbox"/> Visa <input type="checkbox"/> American Express</p> <p>Card Number _____ Expiration Date ____/____/____</p> <p>Card Holder Name _____</p> <p>Card Holder Signature _____</p>	

REFUND/CANCELLATION POLICY:
Attendees may reschedule for a different date or course with no penalty. 100% refundable with 14 days cancellation notice. 80% refundable with 5 days cancellation notice. Cancellations are non-refundable day of or after course.
