



NYMEX OTC Clearing

Presented at

**North American Energy Standards
Board**

ANNUAL MEETING

September 25, 2002

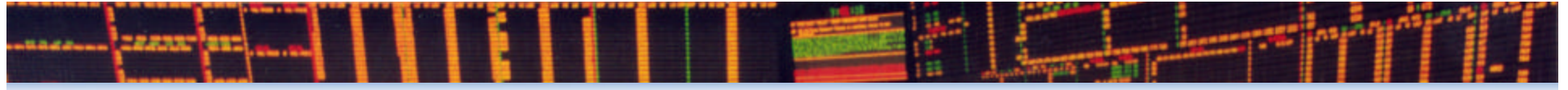
HUNT VALLEY, MD

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Energy Market Developments

- Enron Collapse and Financial Weakness of Merchant Sector
- Dramatic Increase in Credit Risk Recognition
- Significant Reduction in Leverage and Liquidity of Market Participants
- More Demanding Financial Statement Reviews with Rating Changes
- Credit Standards Governing OTC Transactions are not uniform



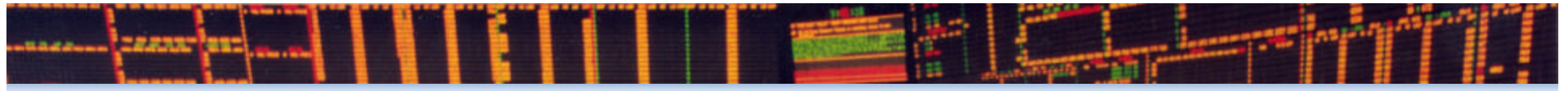
Financial Sector Overview of Merchant Energy Sector-Solutions

- **Moody's** - Energy Merchant Sector needs “the establishment of a clearing system that would provide Liquidity, Transparency and a more efficient transfer of Credit Risk”¹
- **S&P**- Energy Merchant Firms “must now mark-to-market derivatives associated with hedging strategies.”²

1. Reprinted by permission. Moody's May 2002 “Moody's View on Energy Merchants”

2. Reprinted by permission. Standard and Poor's June 11 2002. “Updated Approach for Rating U.S. Energy Trading and Marketing Firms”

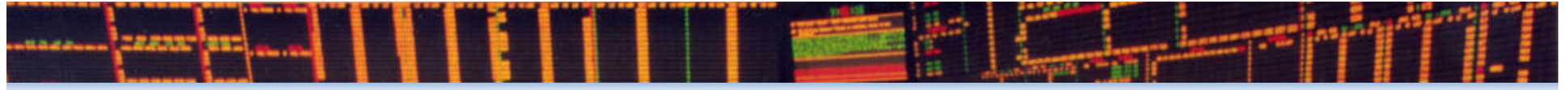




Financial Sector Overview of Merchant Energy Sector-Solutions

- **Fitch Ratings** - “A wave of Financial Stress and Credit Downgrades affecting wholesale energy marketers and power generators has triggered demands for security under trading contracts and long-term power and gas supply contracts”³

3. Reprinted by permission. FitchRatings August 12, 2002 Global Power North America Report



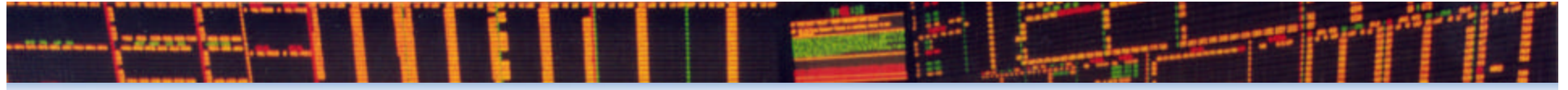
Financial Sector Overview of Merchant Energy Sector-Problematic

- Dramatically heightened sensitivity to Credit and Performance Risk and lack of Price Transparency
- Substantive Reduction in Counterparty Confidence
- Commerce becoming significantly more Capital Intensive
- **Net Result**: Chill bordering on Freeze in Commercial Activity



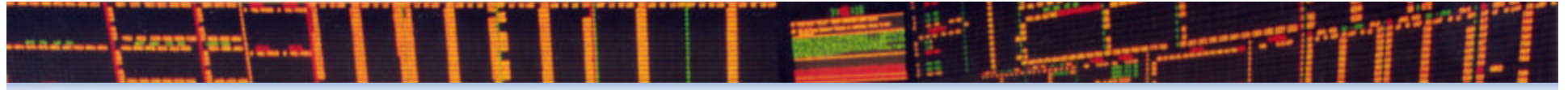
Bilateral Counterparty Credit Issues and Costs

- Counterparty Non-Performance
- Capital Reserves applied twice-against potential loss from Principal's Portion and Counterparty's Portion
- No Netting in Capital Reserves that support Offsetting Transactions from different trading partners
- Lost Trading Opportunities from Credit Restrictions
- Back Office Administration, including errors
- Systemic Risk




Role of the Exchange Clearing House

- Guarantee of Financial Performance
- Segregation of Customer Funds
- Trade and Position Processing
- Risk Management
- Business Continuity in the Event of a Default
- Portfolio margining reduces capital requirements



NYMEX Energy Clearing History

- We Have Experience and Expertise in Energy Marketplace Management
 - *There is no generic “financial services” equivalent*
- 130 Year History in Clearing Commodity trades
- World’s Largest Physical Commodity Exchange
- 30+ Years Expertise in Exchange Energy Trading
- Customers receive the Protection of Even Handed Rule Based Operations



Exchange Performance Through Substantial Disruptions

- **Drexel Burnham Lambert**
- **1985 Oil Market Crash**
- **1990-1 Persian Gulf Hostilities**
- **Metallgesellschaft**
- **August 1992 Hurricane Andrew**
- **February 1993 WTC Bombing**
- **Winter 2000-01 Natural Gas Market**
- **September 11, 2001...**
 - Not Quite Business as Usual, But We Restarted Our Business against all odds
- **Enron**



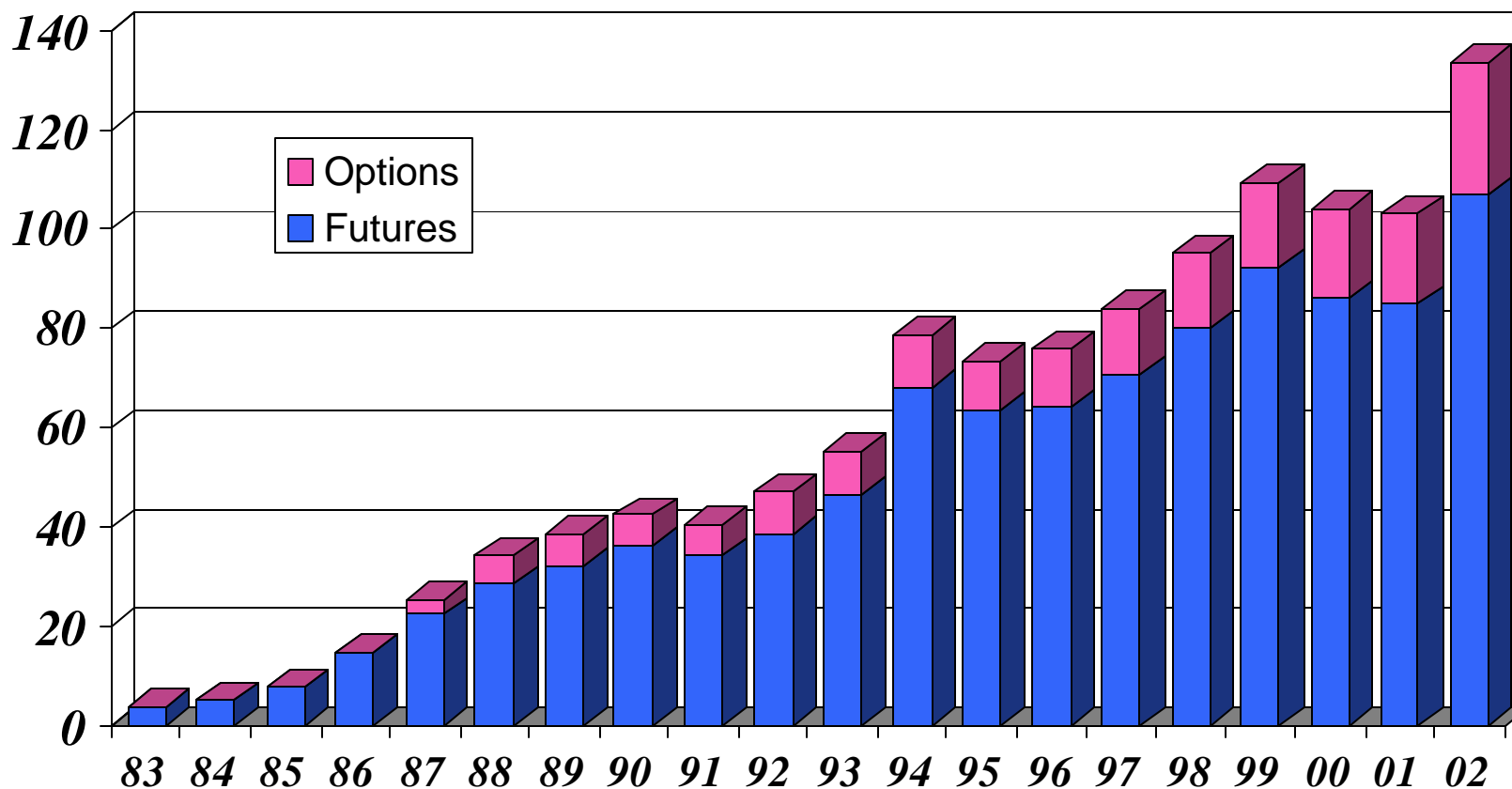
2001 Exchange Traded and Cleared Futures & Options Notional Values

- Total Exchange \$2.9 trillion
- Daily Average \$11.5 billion/day
- Crude Oil \$1.07 trillion
- Natural Gas \$786 billion
- Gasoline \$323 billion
- Heating Oil \$286 billion



Total Volume of Exchange Traded Contracts

(Million Contracts / Year)



2002 VOLUME IS A PROJECTION





Exchange OTC Clearing- Background

- Under Past Regulations Clearing of OTC Trades Were Prohibited
- The CFMA Separated the Regulation of Trading from the Regulation of Clearing
 - Previously allowed in the UK, but not the US
- NYMEX Started to Clear Energy Derivatives under this New Permission starting May 31, 2002
- Our Platform Is Live, and We Are Clearing Deals Each Day
 - We Have a Growing Book of Business and Open Interest



Exchange Regulatory Certainty

- We have obtained an Order from the CFTC Blessing our Approach to OTC Clearing
 - As with all other relevant issues, the order is published on the NYMEX web site
- The Exchange Has Overseen 12,650 Physical Deliveries in Power and Tens of Thousands Elsewhere
 - There is a known history to our firm approach toward compliance with obligations



Exchange OTC Clearing Is Providing Substantial Relief

- Elimination/mitigation of Counterparty Credit and Performance Risk
- Reduction of Operating Capital Demands
- Increases Confidence in Market Participants
- Increases Market Liquidity
- Increase Price Transparency
- Establish a Daily Forward Curve
- Better Bid/Ask Spreads



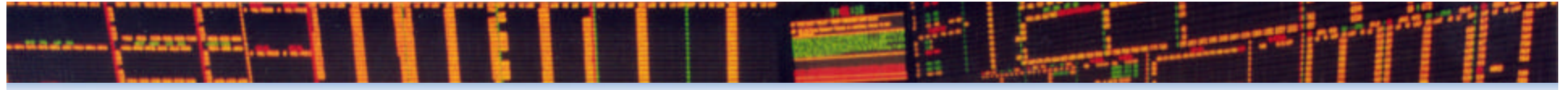
Additional Exchange OTC Clearing Benefits

- Net margin
 - *Power Positions Become Less Expensive When Spread Against Gas (Spark Spread) than when cleared on their own*
 - *Substantial freeing-up of collateral with netting of off-setting positions against ALL counterparties*
 - *Net Margin Only Has Meaning If There Are Positions To Margin Against*
- Mitigates limits on Trading Partners Increasing both the Number of Counterparties and Trading Level per Counterparty
- Offset physical power trades completely
- Offset of cash-settled trades
- Positions settled against current market values
- Benefit of US bankruptcy law as it applies to futures



Our Clearinghouse Is “Open Access”

- We Accept Trades that are executed through Trading Systems, Voice Brokers, or Directly between Principals
- We are offering **Direct Connectivity** to any trading platform that wants it. **WE ARE THE COUNTERPARTY TO ALL.**
- Customer and Voice Broker Access Can Occur through Secure Web Pages, or Automatically by Trade Extraction Technology
 - Confirmation Clearing Service Can Confirm Only or Confirm and Direct to the Clearinghouse
 - No Fee for Service if Trade Is Cleared List of products suitable for clearing is listed on the Exchange website-



Exchange OTC Clearing Mechanics

Settlement for OTC Clearing

- Forward curve established each day for settlement purposes (2:30 p.m. ET mark)
 - *The forward curve is based on real transactions from actual participants and brokers*
 - *NYMEX does not have a commercial bias or proprietary interest in settlements or settlement data*
- Settlements represent the collective view of those most familiar with fair value at a given time.
- Data comes to NYMEX as forward curves sent by brokers/principals (via website/e-mail).



Exchange Technology Enhancements

- Auto-Clear
 - *New Broker Interface Launching October 7, 2002*
- Straight Thru Processing systems are in Development for OTC Trading Systems to Connect Directly to NYMEX's Back Office
- Through XML Technology, Interested Clients Can Have Their Back Office Trade Blotters Interface Directly with NYMEX's Back Office
 - Technology Can Extract Trades, Confirm the Match for any Current Transactions, and Direct Designated Trades to the Clearinghouse



Exchange OTC Clearing Mechanics

Products - Natural Gas

- Henry Hub Swap
- Alberta Basis Swap
- Chicago Basis Swap
- Henry Hub Basis Swap
- Houston Ship Channel Basis Swap
- Northwest Rockies Basis Swap
- Panhandle Basis Swap
- San Juan Basis Swap
- SoCal Basis Swap
- Transco Zone 6 Basis Swap



Exchange OTC Clearing Mechanics

Products – Physically Delivered Electricity


- **Delivery Locations**
 - Mid Columbia (west)
 - Palo Verde (west)
 - PJM West (east)
- **25 MW Monthly Peak Blocks**
 - 400 MWh daily contracts (25 MW x 16 peak hours/day).
 - Submitted in multiples consistent with the number of peak days in month.



Exchange OTC Clearing Mechanics

Products - Crude Oil

- **Crude Oil:**
 - Financial
 - WTI Calendar Swap
 - Dubai Crude Oil Calendar Swap
 - **Physical**
 - LLS Crude Oil
 - Mars Blend Crude Oil
 - West Texas Intermediate - Midland
 - WTS Crude - Midland



Exchange OTC Clearing Mechanics

Products - Petroleum Spreads

- NY Harbor Heating Oil Crack Spread Calendar Swap
- NY Harbor Unleaded Gasoline Crack Spread Calendar Swap
- US Gulf Coast No.2 Crack Spread Calendar Swap
- US Gulf Coast Unleaded 87 Crack Spread Calendar Swap
- No.2 Up-Down Spread Calendar Swap
- Unleaded 87 Up-Down Spread Calendar Swap



Exchange OTC Clearing Mechanics

Additional Cleared Products

- **Natgas Basis**
 - TCO
 - Perm
 - M3
 - Demarc
 - Michcon
 - Sumas
- **Electricity**
 - Physical - Cinergy/Midwest ISO, Texas, CA NP and SP (consideration of Reg. Risk), Alberta
 - Financial - NY, NE, PJM

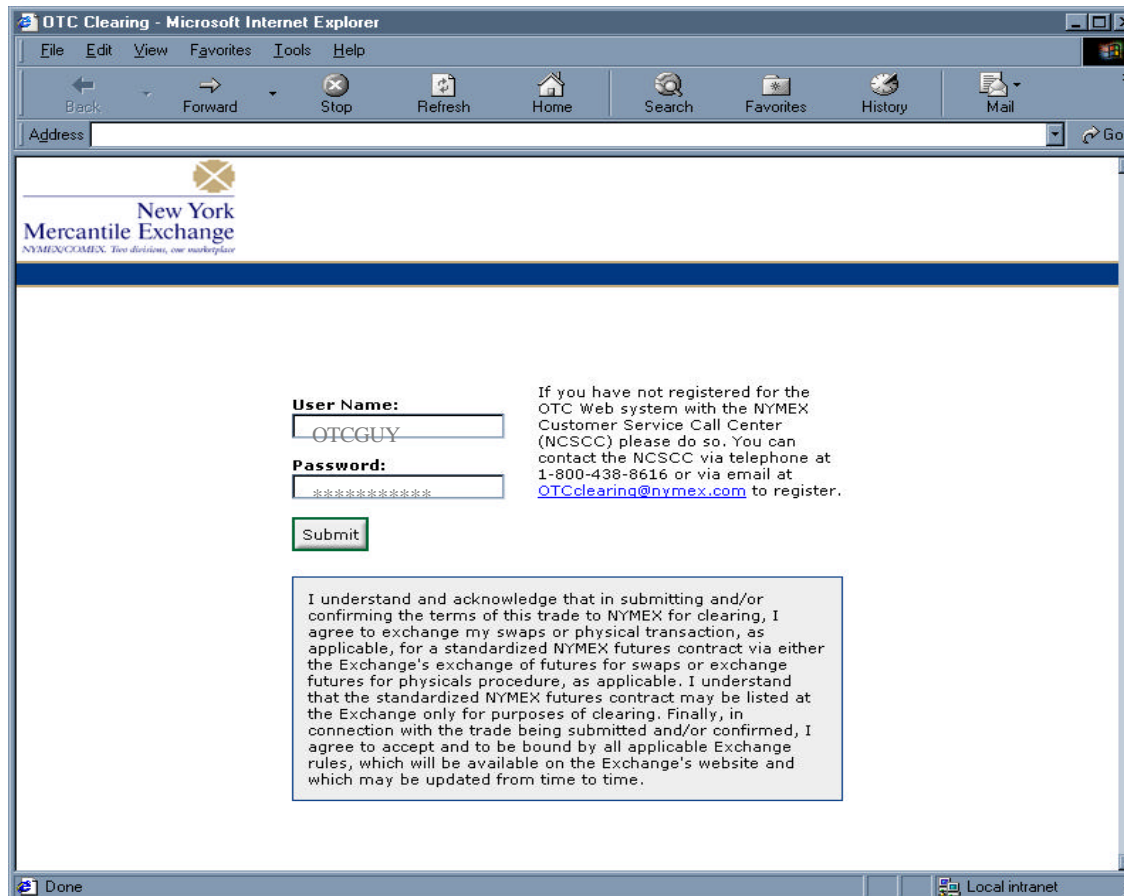


Exchange OTC Clearing Mechanics

Additional Cleared Products

- **Petroleum**
 - Gulf Coast Residual Fuel Oil
 - New York Harbor Residual Fuel Oil
 - Gulf Coast Jet Fuel
 - Singapore Jet Fuel
 - Singapore Naphtha
 - European Fuel Oil
 - European Gasoline
 - European Naphtha

Exchange Web Entry Page



The screenshot shows a Microsoft Internet Explorer browser window titled "OTC Clearing - Microsoft Internet Explorer". The address bar is empty. The page content includes the New York Mercantile Exchange logo and tagline "NYMEX/COMEX. Two divisions, one marketplace". Below the logo is a registration form with the following fields and text:

User Name:

Password:

If you have not registered for the OTC Web system with the NYMEX Customer Service Call Center (NCSCC) please do so. You can contact the NCSCC via telephone at 1-800-438-8616 or via email at OTCClearing@nymex.com to register.

I understand and acknowledge that in submitting and/or confirming the terms of this trade to NYMEX for clearing, I agree to exchange my swaps or physical transaction, as applicable, for a standardized NYMEX futures contract via either the Exchange's exchange of futures for swaps or exchange futures for physicals procedure, as applicable. I understand that the standardized NYMEX futures contract may be listed at the Exchange only for purposes of clearing. Finally, in connection with the trade being submitted and/or confirmed, I agree to accept and to be bound by all applicable Exchange rules, which will be available on the Exchange's website and which may be updated from time to time.

The browser status bar at the bottom shows "Done" and "Local intranet".



Seller: Enter New Trade

Ref #	Type	Contract	Quantity	Price	Last Updated	Status	
						Buy	Sell
####	B	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input checked="" type="checkbox"/>
####	S	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input type="checkbox"/>
####	B	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input type="checkbox"/>
####	B	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input checked="" type="checkbox"/>
####	S	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input type="checkbox"/>
####	B	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input type="checkbox"/>
####	B	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input checked="" type="checkbox"/>
####	S	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input type="checkbox"/>
####	B	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input type="checkbox"/>
####	B	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input checked="" type="checkbox"/>
####	S	XXX#	#	#.####	00/00/0000 - 00:00	<input type="checkbox"/>	<input type="checkbox"/>




Seller: Enter Details

OTC Clearing - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail

Address

 New York Mercantile Exchange
NYMEX/COMEX. Two divisions, one marketplace.

Trade Information: Sell

Contract:

Contracts per Day: **Price:**

1 contract = 2,500 MMBtu times the number of Calendar Days in the chosen contract month(s)

Seller Information

Seller User Name: OTCGUY

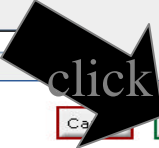
Seller CM/Account:

Seller Contact Name: **Seller Contact Phone #:**

Buyer Information

Buyer User Name:

Buyer Contact Name: **Buyer Contact Phone #:**



My Computer



Exchange OTC Clearing Mechanics

Operating Hours/Contacts

- **Operating Hours**
 - 7:30 a.m until 1:30 p.m. ET (Expanding to 2:30 on Oct 7)
 - All trades submitted and match prior to deadline marked against that day's settles
- **Customer Service**
 - phone: 800-438-8616
- **Marketing Dept**

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