Congress of the United States Washington, DC 20515

February 4, 2005

The Honorable Patrick Henry Wood, III Chairman Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

The Honorable Sharon Brown-Hruska Acting Chairman Commodity Futures Trading Commission Three Lafayette Centre 1155 Twenty-First Street, N.W. Washington, D.C. 20581

Mr. Mitchell Steinhause Chairman New York Mercantile Exchange, Inc. World Financial Center One North End Avenue New York, New York 10282

Dear Chairmen Wood, Brown-Hruska, and Steinhause:

I am writing to acknowledge receipt of your responses to my inquiry regarding the impact of speculative futures trading by hedge funds on natural gas prices.

The rapid growth in the number of hedge funds and their assets under management has been accompanied by corresponding growth in the impact of hedge funds on the markets, see e.g. "With Rising Clout, Hedge Funds Start To Sway Mergers," the Wall Street Journal, Tuesday, January 25, 2005, at A1, and in hedge fund fraud, see e.g. the significant role that hedge funds played in the explosive mutual fund scandals. Hedge funds can and do play a vital positive role in our financial markets by contributing to market efficiency and liquidity; by allocating investment risk by serving as counterparties to investors who seek to hedge risks; and by providing investors with greater diversification of risk by offering them exposure uncorrelated with market movements. Critics claim, however, that speculation by hedge funds in gas futures has amplified price swings and harmed gas consumers, including manufacturers and home owners.

The Honorable Patrick Henry Wood, III The Honorable Sharon Brown-Hruska Mr. Mitchell Steinhause Page 2

The Commodity Futures Trading Commission response states: "The staff is continuing to study hedge fund trading activity in the natural gas market (as well as in other markets), but at this time does not believe that hedge funds are the major source of price volatility in the natural gas market." The Federal Energy Regulatory Commission (FERC) response expresses the view that "price swings in natural gas markets have been driven by market fundamentals, but these swings may have been exaggerated by the paucity of statistics on gas supply and demand, and the over reliance on gas storage as an indicator of supply and demand." FERC also advises: "Further price volatility can arise when traders follow price trends rather than an independent assessment of supply and demand." The New York Mercantile Exchange (NYMEX) response indicates that the exchange does not believe that the volumetric level of participation by hedge funds (which NYMEX puts at 9.56 percent for all months' trading during the period January 1, 2004, through August 30, 2004) "is in any way disruptive or provides the effective wherewithal to accentuate any existing volatility in this market." NYMEX further advises that it is continuing to develop and will complete a more comprehensive review very shortly on this matter with a formal release of the results to follow. I look forward to receiving and reviewing that information.

Your responses also describe the actions that you have taken to enhance your surveillance, enforcement, and information-sharing programs to prevent and detect price manipulation and maintain fair and orderly markets, and I commend you for that. These issues, of course, are not unique to hedge funds. But hedge funds, because of their use of leverage and lack of transparency, present a unique challenge. I intend to monitor this matter closely, and I thank you for your cooperation. Last year's conference report on H.R. 6, the energy bill, did not provide gas consumers with any meaningful relief, and this year's legislation is likely to be similar, so the integrity of the pricing markets takes on increased importance.

Sincerely,

JOHN D. DINGELL

RANKING MEMBER

COMMITTEE ON ENERGY AND COMMERCE

cc: The Honorable Joe Barton, Chairman Committee on Energy and Commerce

The Honorable Ralph M. Hall, Chairman Subcommittee on Energy and Air Quality

The Honorable Rick Boucher, Ranking Member Subcommittee on Energy and Air Quality

FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, DC 20426

OFFICE OF THE CHAIRMAN

January 4, 2005

The Honorable John D. Dingell U. S. House of Representatives Washington, D.C. 20515

Dear Congressman Dingell:

Thank you for your December 2, 2004 letter to me, Commodity Futures Trading Commission Acting Chairman Sharon Brown-Hruska, and New York Mercantile Exchange (NYMEX) Chairman Mitchell Steinhause forwarding the concerns of Mr. Stephen R. Etsler about the trading of natural gas futures on the NYMEX. Mr. Etsler, of Stand Energy Corporation, is concerned that hedge funds are trading natural gas futures contracts with no intention of taking delivery of gas, and as a result, there have been "wild" swings in the price of gas to the detriment of traditional gas users. You asked us to look into Mr. Etsler's complaint and evaluate the adequacy of our regulatory tools, discuss potential agency actions, and suggest possible oversight or legislative issues the Committee on Energy and Commerce may wish to explore.

The Federal Energy Regulatory Commission (FERC) is responsible under the Natural Gas Act for assuring that prices for natural gas sold for resale are just and reasonable. The scope of this responsibility was reduced under the Natural Gas Policy Act which exempted "first sales" of natural gas, leaving only sales for resale by interstate pipelines, local distribution companies, and their affiliates under FERC jurisdiction. FERC does not actively regulate these sales, but instead relies on competition among sellers to assure that these sales are just and reasonable. FERC regulates pipeline transportation rates, services, and infrastructure to facilitate competition by assuring that buyers and sellers can meet freely in the marketplace and access the competitive wellhead natural gas market.

At the time of wellhead deregulation, gas prices were set primarily in bilateral negotiations between buyers and sellers of physical gas. Over time, the gas market has become a true commodity market with a wide range of physical and financial products similar to those available in agricultural and metals commodities markets. Today, gas prices are formed primarily by trades in organized exchanges - futures on the NYMEX and physical contracts on the Intercontinental Exchange (ICE). A substantial portion of natural gas purchased by local distribution companies (LDCs) is priced on a monthly index that closely follows the closing price of the NYMEX prompt month futures contracts.

The NYMEX contract provides the foundation for price hedging strategies by buyers and sellers of gas seeking to control their exposure to price volatility. Buyers can use the NYMEX contract to lock in a price for gas for future delivery or use options to bracket the range of prices they will be exposed to. Hedging strategies are widely used by LDCs and industrial customers to manage price risk. Participation in NYMEX futures trading by hedge funds and other financial institutions increases the volume of trades and provides the liquidity these markets require to support these important gas price management strategies.

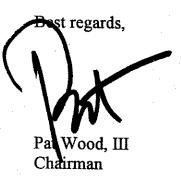
Mr. Etsler's concern that hedge funds are trading speculatively and never intend to take delivery of gas is misplaced. The vast majority of futures contracts for commodities of all kinds are never converted to a delivery obligation. This is the nature of futures markets. A futures contract is essentially a form of insurance against future uncertainty. Speculation as to what the future holds is inherent to futures markets.

Price swings occur when there is a shift in perception as to future market conditions. When most participants share a common view of the future, or use the same predictive models, or rely on the same set of indicators, prices can move radically when there is a shift in a key market indicator. In natural gas markets, the potential for a gas supply shortage is the key uncertainty. There is little real-time information available on gas production and production potential, or on gas usage or latent demand. The weekly Energy Information Administration (EIA) storage inventory report is widely used as a proxy indicator of the balance of supply and demand. Recent swings in gas prices are in part due to similar perceptions of the meaning of this one statistic in predicting market conditions for the rest of the winter. Further price volatility can arise when traders follow price trends rather than an independent assessment of supply and demand. This strategy can contribute to prices overshooting levels otherwise indicated by market fundamentals. Such overshoots are short lived as other participants act on these opportunities and prices return to levels consistent with market fundamentals.

In my view, price swings in natural gas markets have been driven by market fundamentals, but these swings may have been exaggerated by the paucity of statistics on gas supply and demand, and the over reliance on gas storage as an indicator of supply and demand. Last September, the Commission held a conference to explore the merits of daily Web posting of natural gas storage inventories as a means of reducing price volatility that currently occurs with the release of the weekly EIA storage report. We received views in support and in opposition to this concept. One difficulty facing the daily reporting proposal was whether the Commission has the jurisdiction to require intrastate and LDC storage operators to post the daily storage levels needed to provide a full picture of national storage inventories.

My market oversight staff continues to monitor gas market conditions and behavior. We have a good working relationship with the Commodity Futures Trading Commission and its market oversight and enforcement staff and continue to share views on market developments in our respective areas of responsibility.

My staff is ready at your convenience to brief you and your staff on our market oversight activities.



cc: The Honorable Joe Barton, Chairman House Committee on Energy and Commerce

The Honorable Bob Goodlatte, Chairman House Committee on Agriculture

The Honorable William H. Donaldson, Chairman Securities and Exchange Commission

The Honorable Sharon Brown-Hruska, Acting Chairman Commodity Futures Trading Commission

The Honorable Mitchell Steinhause, Chairman New York Mercantile Exchange, Inc.

Mr. Stephen R. Etsler



U.S. Commodity Futures Trading Commission Three Lafayette Centre, 1155 21st Street, NW, Washington, DC 20581

Sharon Brown-Hruska Acting Chairman

January 3, 2005

(202) 418-5037 (202) 418-5544 Facsimile

The Honorable John D. Dingell Ranking Member Committee on Energy and Commerce U. S. House of Representatives 2125 Rayburn House Office Building Washington, D.C. 20515-6115

Dear Congressman Dingell:

On behalf of the Commodity Futures Trading Commission ("Commission" or "CFTC"), I am writing in response to your letter of December 2, 2004, regarding the trading of natural gas futures on the New York Mercantile Exchange ("NYMEX" or "Exchange"). In your letter, you attached a letter from Mr. Stephen R. Etsler who raised concerns about trading in that futures contract. Specifically, Mr. Etsler indicated that many hedge funds participate in the futures contract, and that they never intend to take delivery of natural gas. He contends that this has resulted in volatility in the price of natural gas to the detriment of gas users and that this type of activity should be closely monitored and regulated. You asked the Commission to look into this complaint and to evaluate the adequacy of its regulatory tools and whether there are any actions that need to be taken.

Let me first assure you and Mr. Etsler that the Commission closely monitors trading activity in all futures markets, including that for natural gas. The principal means by which we conduct such monitoring is through the Commission's market surveillance program. The primary purpose of this program is to detect and prevent instances of price manipulation. To accomplish this, CFTC surveillance staff receives daily reports from futures commission merchants, foreign brokers and clearing members identifying all reportable long and short positions in natural gas futures and options-on-futures markets.^[1] This reporting requirement applies equally to positions held by hedge funds and other professional managed-

Positions in all accounts carried through futures commission merchants, foreign brokers, and clearing members that equal or exceed certain reporting levels (which vary by commodity market) must be reported daily to the Commission. The current reporting level for natural gas futures is 175 contracts. The Commission normally receives reports covering approximately 90 percent of the long and short open interest in the natural gas futures market.

money traders as it does to commercial firms and producers of natural gas.^[2] Using these reports, CFTC economists monitor trading activity in the natural gas futures market, looking for significant trading activity by owners of large positions that might be used to manipulate natural gas prices.

In addition to market surveillance, our economists monitor prices and price relationships in and between the futures and cash markets for natural gas, with the objective of determining if there are price distortions that might be evidence of manipulation. They also closely monitor supply and demand factors and other developments in the natural gas cash market through reviews of trade publications and through regular discussions with Exchange and other industry officials. Commission staff is routinely in contact with staff at the Federal Energy Regulatory Commission to exchange information about natural gas futures and cash market activity, and the two staffs have collaborated on examinations of several recent instances of price volatility in the natural gas market. Any unusual market developments or potential concerns concerning contracts traded on the US futures exchanges, including natural gas contracts, are reported to the Commission at regular weekly surveillance briefings.

Mr. Etsler's letter highlights the role of hedge fund trading with respect to "wild swings in the price of [natural] gas to the detriment of the traditional gas users." At the outset, it must be noted that there are inherent supply and demand factors applicable to the natural gas market that tend to make that market occasionally exhibit high price volatility. There are both long-term and short-term factors that should be considered in explaining high natural gas prices and price volatility over the recent period. With respect to price levels, demand for natural gas has grown sharply over the last several years due, at least in part, to it being an environmentally clean fuel. Meanwhile, the cost of producing natural gas has risen as the productivity of old wells has declined, and the cost of developing new wells has increased. In addition, the cost of competing fuels, and in particular heating oil, has also increased sharply. These factors have tended to raise the baseline or average price for natural gas.

In addition to this longer-term trend toward higher natural gas prices, there have been periods of sharply increased prices and price volatility caused by short run factors; principally, unusually cold winter weather. Both supply and demand for natural gas are, in the short run, not very responsive to price changes. Supply during the winter months comes from producing wells and withdrawals from stored gas. Producing wells are routinely operated at full capacity, and new wells take more than six months to become operational. In the short run, therefore, production cannot be significantly increased in response to higher prices. During the winter, withdrawal of stored gas serves as a supply buffer to meet the heavy peak seasonal demand for heating. However, to satisfy expected demand over the course of the entire winter, stored gas must be rationed—with high prices serving as a signal to conserve scarce energy sources—throughout the winter season based on expectations about usage given weather forecasts. If there is unexpected unusually cold weather during the winter, demand can surge. Further, the demand for natural gas for heating tends not to be significantly curtailed in the face of rising prices.

^[2] Your letter specifically references hedge funds. However, in order to comprehensively respond to the issues you have raised, I address trading activity by all professional managed-money traders. Many such traders are registered under the Commodity Exchange Act as commodity trading advisors ("CTAs") and/or commodity pool operators ("CPOs").

Faced with these rigidities of supply and demand in the short term, large price increases can occur during the winter as a result of demand spikes caused by unusually cold weather.

Mr. Etsler concludes that price swings in the natural gas markets are the result of the speculative trading of hedge funds that never intend to take delivery. Non-delivery, however, is the norm in futures markets. A futures market serves two important economic functions: price discovery and hedging. Price discovery is the process by which, at any point in time, a market price is determined ("discovered") by the trading activity of many market participants, reflecting the aggregate market judgment regarding current and anticipated supply and demand conditions. Hedging refers to the voluntary shifting of price risk incurred by producers and commercial firms related to the financial risks they face in the production, storage, processing or marketing of the underlying commodity. This is usually accomplished by establishing a futures position that offsets a cash market price exposure. Physical delivery of the commodity underlying the futures contract is not necessary to accomplish these functions. In this regard, the rules for a number of futures contracts based on physical commodities do not even provide for physical delivery and instead are cash settled. Moreover, physical delivery usually is not contemplated by either hedgers or speculators in those contracts that provide for physical delivery. In fact, less than one percent of all such futures trading results in delivery. For these contracts, the purpose of delivery is to ensure that at expiration the futures contract's price converges to the price of the commodity in the physical market. It is the potential to convert (via delivery) a futures position into a physical position that causes price convergence to occur. Commercial firms typically offset their hedge futures positions prior to the expiration of the contract, and enter the cash market to mange their business needs for the actual commodity.

Most trading by hedge funds in natural gas futures is, no doubt, for speculative purposes (i.e., they hold a view regarding the future direction of price movements, and are willing to accept the price risk of holding a position in return for the opportunity to earn a reward if their view regarding the direction of price movements proves to be correct). Speculators provide an essential role by helping futures markets more efficiently perform their price discovery and hedging roles. By putting their own capital at risk, speculators help to provide liquidity for other market participants, including hedgers. Liquidity can generally be described as a measure of the ability to buy and sell futures contracts quickly, without materially affecting the market price. Liquidity is important to hedgers who need to establish hedge positions quickly and with little price slippage. Frequently, there may not be any other commercial firms willing to take the opposite side of a firm's intended hedge position. The participation of speculators willing to take the other side of hedgers' trades adds liquidity and makes it easier for hedgers to hedge their exposure.

The Commission's market surveillance staff, using its large-trader reporting system, closely monitors hedge fund trading in the natural gas futures market, both individually by trader and as a group. Of course, within the group there are different approaches to trading. Some appear to trade based on their judgment regarding fundamental supply and demand conditions. Many, however, appear to trade using technical trading systems, i.e., systems that generate trading signals based on movements in prices, volume, and open interest in the futures market. This type of trading is not unique to the natural gas market, or to commodity markets in general; it is, in fact, a very common type of trading technique in other markets, including equity markets.

Based on our surveillance experience with hedge fund trading in natural gas futures, Commission staff can make the following observations regarding their trading activity. Individual hedge funds' net positions generally are not large compared to total open interest in the futures market. Most hedge funds normally roll their positions into forward contract months well before expiration (i.e., they liquidate their existing positions in the spot month contract and simultaneously reinstate those positions in the next nearby month contract of the same commodity). Commission staff has also observed that hedge funds generally seem to trade in the opposite direction from commercial traders. This observation appears to be consistent with the classic view that speculators provide a ready counterparty to commercial trader activity.

I believe that our current regulatory tools are adequate to closely monitor trading activity by hedge funds in the futures markets. Commission surveillance staff routinely tracks activity by these traders (among many other traders) using our large-trader reporting system and has not identified these traders as a particular source of concern. In particular, these traders normally exit futures positions long before expiration, and have not caused concern regarding manipulation at contract expirations. The staff is continuing to study hedge fund trading activity in the natural gas market (as well as in other markets), but at this time does not believe that hedge funds are the major source of price volatility in the natural gas market.

I would also emphasize that the Commission recently has brought a number of enforcement actions in the physical natural gas markets involving allegations of price manipulation and misreporting. Over the past two years the Commission has settled over 20 cases that resulted in approximately \$267 million in civil monetary penalties. These cases involved primarily individuals and firms trading physical gas—as opposed to speculators or hedge fund traders in the futures markets.

I appreciate your interest in this issue and in the Commission's programs and I hope this information is helpful to you. If I can be of any further assistance on this or any other matter, please do not hesitate to contact me.

Sincerely,

Sharon Brown-Hruska

Acting Chairman

cc: The Honorable Joe Barton, Chairman Committee on Energy and Commerce

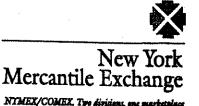
The Honorable Bob Goodlatte, Chairman Committee on Agriculture

The Honorable Patrick Henry Wood, III, Chairman Federal Energy Regulatory Commission

The Honorable William H. Donaldson, Chairman Securities and Exchange Commission

Mr. Mitchell Steinhause, Chairman New York Mercantile Exchange

Mr. Stephen R. Etsler



January 3, 2005

Representative John D. Dingell 2328 Rayburn House Office Building Washington, D.C. 20515

Dear Representative Dingell:

This is written in response to your letter dated December 2, 2004, to me and also to Patrick Henry Wood III and to Sharon Brown-Hruska, the Chairman and Acting Chairman of the Federal Energy Regulatory Commission ("FERC") and the Commodity Futures Trading Commission ("CFTC"), respectively.

Your letter generally focuses on two areas: (1) the activity of hedge funds at the New York Mercantile Exchange ("NYMEX or the "Exchange") in Natural Gas futures contracts; and (2) the adequacy of the Exchange's regulatory tools and compliance programs to deal with the first item. NYMEX, as a designated contract market under direct regulation by the CFTC, takes the regulatory responsibilities for the oversight and orderly maintenance of its markets very seriously. I am happy to respond to both items individually.

Hedge Fund Activity in NYMEX Natural Gas futures contracts

With your letter, you included correspondence from Stephen R. Etsler of Stand Energy Corporation which, in turn, includes an article by Peter Fusaro and Gary Vasey in PowerMarketers Industry Publications, which further references a broader study entitled "Hedge Funds in Energy."

Simply stated, it has been fundamental economic and political factors in the NYMEX Natural Gas futures market, as well as energy markets in general, including Crude Oil, that have led to higher prices and more volatility. The result is an environment that attracts speculators and highlights the need for hedging by commercial entities. NYMEX services the needs of both of these segments of the market and does so by providing a liquid and transparent mechanism for price discovery.¹

This point is so fundamental to an understanding of our markets that it deserves further emphasis. NYMEX itself does not take positions or otherwise participate in the trading of the products that we list. Instead, our focus is upon providing a neutral market forum for trading by a broad and diverse range of market participants. In other words, our role is not to guide or "steer" market prices to the high prices that may be desired by some market segments or the low prices sought by others. Rather, our mission is to provide a neutral, open, efficient and publicly

¹ NYMEX disseminates real-time price information through numerous vendors for its various energy and metal contracts during regular and aftermarket hours.

transparent market forum in which, under diligent supervision and oversight, the forces of supply and demand interact to provide an effective mechanism for price discovery.

Hedge funds have participated in NYMEX markets for several decades prior to the recent increase in attention that they have gained from outside parties. Throughout this time, the Exchange has continually monitored their trading activity in the Natural Gas and other energy futures markets, using its various regulatory tools, which will be discussed below. In this connection, NYMEX has conducted a review for the period January 1, 2004, through August 30, 2004, focusing on the volume of activity in Natural Gas futures, and determined that hedge funds accounted for only 9.56% of all months' trading during that period. Further, a focus on the activity of those entities during the first nearby, or spot contract month revealed that the volumetric activity of these entities was 9.06% for the same time period. The Exchange does not believe that this volumetric level of participation by a particular class of participant is in any way disruptive or provides the effective wherewithal to accentuate any existing volatility in this market,

Moreover, NYMEX is continuing to develop and will complete a more comprehensive review very shortly on this matter with a formal release of the results to follow, but some additional preliminary data is relevant to the current inquiry. NYMEX has examined the trading activity of these entities and tracked the 20-day historical volatility during the review period and found that, based on the Granger Causality test, hedge funds activity does not cause or increase volatility but, in fact, follows volatility.

The Exchange believes that the results cited above are significant insofar as they put the relative degree of participation of these entities into context, as well as dispel the notion that these entities "cause" the volatility in the market. NYMEX firmly believes that the speculative activities of these entities serve an important function in the market by providing additional liquidity that is essential to an efficient price discovery process.

Regulatory Tools for Safeguarding the Market

NYMEX employs significant resources in overseeing all of its markets. These tools are utilized by its Compliance Department on a daily basis and include the following:

(I) Large Trader Reporting

At the end of every trading day, NYMEX electronically collects from its clearing members and carrying brokers the identities of all participants who maintain open positions that exceed set reporting levels.⁴ This information is gathered and aggregated for all reportable participants in order to detect and identify market makeups/concentrations, to ensure compliance

² This level of activity was identified by utilizing the NYMEX Trade Register/Streetbook identifying account numbers at NYMEX Clearing Members for identified hedge funds or managed money.

Statistical Analysis of Hedge Fund Activity for Natural Gas Futures" (attached).
 See NYMEX Rule 9.34 "Reportable Levels" (Natural Gas Futures = 175 contracts).

with expiration position limits⁵ and position accountability levels,⁶ and to administer hedge or swap exemptions⁷.

(II) Trade Register/Streetbook

NYMEX maintains a detailed and comprehensive audit trail of <u>all</u> transactions executed in its markets (both open outcry and electronic). Relevant data, such as trade time, executing broker or electronic trader, customer type indicator code⁸ and the account number for the beneficial owner of the trade are collected for every executed trade in our markets. The transaction data can be sorted by the Compliance Department by any criteria necessary.

NYMEX Compliance Staff routinely reviews trading activity, and this review is generally focused upon compliance with intra-day expiration limits and hedge/swap exemptions, as well as review of activity during periods of market moves. To this end, Compliance Staff will use the Price Change Register⁹ to identify volatile periods in a given trading session and then analyze the activity within the Trade Register/Streetbook. This electronic analysis is used to identify activity by floor members as well as ultimate customers for potentially disruptive trading. When Staff identifies anomalous activity, formal investigation as to the reason for that activity is pursued and, where appropriate, formal disciplinary action may follow.

NYMEX Compliance Staff utilized this investigative technique in December 2003 to focus on Natural Gas trading and shared its general findings with the CFTC. Much of the focus of this review was on the activity of the hedge funds. NYMEX did not find any violative or coordinated activity by the participants, and similarly, the CFTC subsequently publicly released findings that no manipulation occurred in the NYMEX Natural Gas Futures contract.

The Exchange believes the numerous tools available for use in overseeing NYMEX markets are effective to maintaining fair and orderly markets. I also note that the CFTC routinely conducts rule enforcement reviews of the regulatory programs of designated contract markets, the results of which are a matter of public record. NYMEX has consistently been deemed by the CFTC to maintain adequate regulatory programs and oversight to comply with its self-regulatory obligations under the Commodity Exchange Act. In this regard, of the various market tiers established by Congress as a result of legislation in 2000, the designated contract market category is subject to the highest level of CFTC regulation.

"Exemptions from Position Limits for Exposure from Commodity Swap Transactions."

See NYMEX Rule 6.19 "Type Indicator Codes."

See NYMEX Rule 9.27 "Expiration and Current Delivery Month Position Limits or Position Accountability."
 See NYMEX Rule 9.26 "All Month Any One Month Position Accountability."

⁷ See NYMEX Rule 9.28 "Exemptions from Position Limits for Bona Fide Hedging Transactions" and Rule 9.29

Exchange public record of pricing in all markets. Disseminated to vendors.

In closing, I am extremely confident of the ability of our regulatory programs to maintain orderly markets and afford appropriate customer protection. NYMEX believes that hedge funds serve a constructive role in our futures markets, and while their participation has not been substantial to date, we will nonetheless continue to monitor it closely. When we complete our current analysis of hedge fund participation in NYMEX markets, more formal data will be made available.

Please feel free to contact me with any questions.

Sincerely,

Mitchell Steinhause

Chairman

New York Mercantile Exchange

cc: The Honorable Sharon Brown-Hruska
Acting Chairman, Commodity Futures Trading Commission

The Honorable Patrick Henry Wood III Chairman, Federal Energy Regulatory Commission

The Honorable Joe Barton Chairman, Committee on Energy and Commerce

The Honorable Bob Goodlatte Chairman, Committee on Agriculture

The Honorable Jerry Moran
Chairman, Subcommittee on General Farm Commodities and Risk Management

The Honorable William H. Donaldson Chairman, Securities and Exchange Commission

Stephen R. Etsler EVP/GM, Stand Energy Corporation

James E. Newsome President, New York Mercantile Exchange

Statistical Analysis of Hedge Fund Activity for Natural Gas Futures

In many economic time series, there are many complex interrelationships between different variables. Typically, there arises a "Chicken and Egg" issue of which variable leads (or causes) the other. A standard technique that is often times used to disentangle which variable leads was developed by econometrician C.W. Granger. "Granger Causality" refers to a situation where two variables are interrelated and the analyst is interested in which one leads (causes) the other one to change. ¹⁰ Therefore, Granger tests can be employed to give evidence as to whether preexisting volatility entices hedge funds to enter the market and to trade in NYMEX Natural Gas futures or whether hedge fund trading activity leads to volatile markets.

NYMEX Staff looked at weekly data for NYMEX Natural Gas futures, including the 20-day historical volatility and its relationship with identified hedge fund open-interest from January to August 2004¹¹. The methodology used a lag period of one week, and asked the question, "Does hedge fund activity this week lead to a change in volatility next week or does volatility this week lead to a change in hedge fund activity next week?" The results follow an F Distribution testing the Null Hypotheses for each variable that one variable does not lead to the other. A high F-statistic (typically more than 5) leads to a rejection of the Null Hypothesis; in other words, a high F-statistic indicates that there is causation. A low F-statistic is evidence that there is no causation.

The results for total hedge fund open-interest are recorded below:

20 Day Volatility ("Vol 20") and Open Interest ("Open Int.")

Pairwise Granger Causality Tests Date: 12/27/04 Time: 11:47 Sample: 1/01/2004 9/02/2004

Lags: 1

Null Hypothesis:	Obs.*	F-Statistic	Probability
Open Int. does not Gran	ger Cause 33	0.02977	0.86417
Vol 20 does not Granger	Cause Open Int.	2.90698.	0.09853

^{* =} the number of observations within the target period 12/27/03-9/02/04.

The results indicate that volatility appears to lead hedge fund participation into the Natural Gas market rather than hedge funds leading to more volatility. For Open Interest, there is only a 9% chance that volatility does not entice hedge funds into the market, whereas there is better than an 86% probability that hedge fund activity or open interest does NOT lead to higher volatility.

It should be understood that statistical analysis cannot prove causation. Very much like a criminal trial, "proof" can become a very ambiguous term. It can, however, show what level of probability there is to support or not support a hypothesis.

Data obtained from NYMEX Large Trader Reporting System "LTRS" and Trade Register/Streetbook.