August 8, 2000

To: The Commission

From: The Division of Economic Analysis

Subject: Proposed Amendments to Chicago Board of Trade Regulation 1008.01 regarding maximum daily price fluctuation limits for the Exchange's corn, corn yield insurance (six contracts), oats, rough rice, soybeans, soybean meal, soybean oil, wheat, kilo gold, 100 ounce gold, 1000 ounce silver, and 5000 ounce silver futures and option contracts, and proposed amendments to MidAmerica Commodity Exchange Rules 624, 625, 2604, and 2704 concerning maximum daily price fluctuation limits for that Exchange's corn, oats, soybean, soybean meal, soybean oil and wheat futures and option contracts.

Recommendations: (1) That the Commission approve the proposed amendments and the Exchange's plan to make them effective following approval by the Commission concurrently with the listing of the subject contracts for trading on the CBOT-Eurex Alliance trading platform for application to all then currently listed contract months and subsequent contract months, and (2) that the Commission's letter approving the amendments note the following: (a) that the CBOT's manual trading halt procedures are being approved only in the context of the electronic night trading session; and (b) that different issues must be considered by the Commission if the CBOT proposes to utilize the same trading halt procedures during the day trading session or in the context of a proposal to allow trading of the subject contracts under open outcry and electronic trading procedures simultaneously.

Concurring: Office of the General Counsel
Division of Trading and Markets

BACKGROUND AND SUMMARY OF PROPOSED AMENDMENTS

The Chicago Board of Trade (CBOT or Exchange) by letters dated May 25, June 22, and July 26, 2000 (Attachments B, C, and D) and the MidAmerica Commodity Exchange (MCE) by letters dated June 21 and August 4, 2000 (Attachments E and F)

submitted the subject proposed amendments for Commission approval. The proposed amendments were submitted pursuant to Section 5a(a)(12) of the Commodity Exchange Act (Act) and Commission Regulation 1.41(b) under the Commission's 45-day Fast Track procedures, which provide that, absent any contrary action by the Commission, the proposed amendments may be deemed approved on August 10, 2000.[1]

The proposed amendments would increase the maximum daily price fluctuation limits for the Exchange's corn, corn yield insurance (six contracts), oats, rough rice, soybeans, soybean meal, soybean oil, wheat, kilo gold, 100 ounce gold, 1000 ounce silver, and 5000 ounce silver futures contracts.[2] The proposed changes are shown in the table below.

CONTRACT	PROPOSED LIMIT	EXISTING REGULAR LIMIT
Corn	$.20 per bushel	$.12 per bushel.
Corn Yield Insurance (Iowa, Illinois, Indiana, Nebraska, Ohio and U.S.)	22.5 bushels per harvested acre	15 bushels per harvested acre.
Kilo Gold	$75 per ounce	$50 per ounce.
100 Ounce Gold	$75 per ounce	$50 per ounce.
Oats	$.20 per bushel	$.10 per bushel.
Rough Rice	$0.50 per hundredweight	$.30 per hundredweight.
1000 Ounce Silver	$1.50 per ounce	$1 per ounce.
5000 Ounce Silver	$1.50 per ounce	$1 per ounce.
Soybeans	$.50 per bushel	$.30 per bushel.
Soybean Meal	$20 per ton	$10 per ton.
Soybean Oil	$.020 per pound	$.010 per pound.
Wheat	$.30 per bushel	$.20 per bushel.

[1] The initial 45-day Fast track review period for consideration was extended 30 days to August 10, 2000, pursuant to a request by the Exchange (see Attachment C). The Exchange requested the extended review period "...to allow additional time for comment by interested parties." The MCE also requested an extension of the review period to August 10, 2000 for that Exchange's proposals (See Attachment F).

[2] The amendments proposed by the MCE are identical to the CBOT's proposed amendments in regard to increased daily price limits for the corn, oats, soybeans, soybean meal, soybean oil and wheat futures contracts and the deletion of existing provisions for expanding these limits. The subject MCE contracts are not traded electronically and , thus, the CBOT's trading halt procedure for electronic trading will not apply to the specified MCE contracts. In view of the otherwise identical nature of the MCE's amendments, the below discussion does not explicitly refer to the MCE amendments. However, the analysis and conclusions of this memorandum also apply to the MCE's proposals.

The proposed amendments also will delete the existing provisions of the subject contracts which provide for expanded price fluctuation limits under specified conditions.[3] In addition, the proposed amendments will increase the limits on daily premium fluctuations for the corresponding option contracts, since the option contracts' rules specify that maximum daily premium fluctuation limits are the same as the price limits specified for the underlying futures contracts.[4]

As currently provided for in the CBOT's rules, the proposed daily price limits would apply to all trading activity within a trading day, which consists of two trading sessions: an over night electronic trading session and a regular open outcry trading session.[5] For the overnight electronic trading session only, the trading halt procedures that apply when prices for a contract month reach the maximum daily price fluctuation limits and no trades can be executed at prices that fall within the maximum daily price fluctuation limits ("locked limit") would be modified.[6] Specifically, the CBOT represents that, whenever prices for one or more contract months become

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[3] The maximum daily price fluctuation limit for all months for a particular commodity is expanded to 150% of normal when three contract months in a contract year are locked limit (for the grain and soybean complex futures contracts, a contract year is generally defined as a crop year).

[4] Daily option premium fluctuation limits are applied to individual strike prices.

[5] A trading day begins with the start of the electronic trading session during the overnight period (the CBOT currently utilizes the Exchange's Project A electronic trading system) and continues through the close of the open outcry trading session on the following day. For example, for the subject grain and soybean complex futures contracts, a trading day begins at 10 p.m. of a given business day with the start of the Project A electronic trading session and ends at 1:15 p.m. of the following business day at the close of the open outcry trading session. Maximum daily price fluctuation limits for a given trading day are calculated using the settlement price reported by the CBOT at close of the open outcry trading session of the previous trading day. Under the Exchange's regulations, trading in a contract month during a given trading day is permitted only at prices that are no greater than (less than) the previous trading day's settlement price plus (minus) the maximum daily price limit. Since settlement prices typically vary between contract months, the daily maximum and minimum prices associated with maximum daily price limits will vary from contract month to contract month.

[6] Under current Exchange regulations, trading ceases in the affected contract month once acceptance of a bid or offer made in the pit would result in a price for that month that is outside the applicable maximum price fluctuation limit.

locked limit, trading in all contract months will be stopped for the remainder of the electronic trading session.[7]

The CBOT also represented that the current trading procedures for locked limit contract months would continue to apply to the daytime open-outcry trading session. Under these existing procedures, when prices for any one contract month become locked limit, trading is stopped in that contract month only, with trading continuing in all other contract months that are not locked limit. In addition, under these existing trading procedures, trading in a contract month that becomes locked limit can resume at any subsequent time during the trading day if trades can be executed at prices that fall within the specified maximum daily price fluctuation limits for that day.

The proposed amendments would not change the subject contracts existing terms which provide for the removal of maximum daily price fluctuation limits with respect to expiring contract months commencing on the second business day prior to the first business day of the delivery month.

The proposed amendments were published in the Federal Register on June 8, 2000 (65 FR. 36416) for a 15-day comment period (Attachment G). The comment period was extended for 30 days on June 29, 2000 (65 FR 40082) following receipt of requests from two organizations representing grain producers and the Exchange's agreement to extend the fast track review period for that purpose (Attachment H). One hundred and thirty three comments were received in response to the Federal Register notice. The comments are considered below.

[7] For option contracts, trading in all contract months will be halted for the rest of the overnight electronic trading session whenever trading at one or more strike prices can no longer occur at a premium that falls within the maximum daily premium fluctuation limits.

In the course of reviewing the proposed amendments, Division staff considered the Federal Register comments and information provided by the CBOT.

LEGAL STANDARD

Section 5a(a)(12) of the Act states that the Commission shall approve rules proposed by exchanges if such rules are determined not to be in violation of the Act and regulations of the Commission, or that the Commission, after appropriate notice and opportunity for hearing, shall disapprove any such rule which the Commission determines at any time to be in violation of the Act or the regulations of the Commission.[8] Neither the Act or the Commission's regulations require that exchanges adopt maximum daily price fluctuation limits. The Act is silent with respect to the specification of maximum daily price fluctuation limits by exchanges. However, paragraph (a)(3)(viii) of the Commission's Guideline No. 1, states that maximum daily price fluctuation limits that are adopted by an exchange should be…"not overly restrictive in relation to price movements in the cash market."

[8] The Commission has taken the position that its authority is to be interpreted broadly. Specifically, the Commission has stated that …"It is the view of the Commission that these provisions of the Act demonstrate that Congress did not intend to limit the Commission's authority to disapprove a contract market rule…merely to those rules which are directly contrary to a specific substantive or procedural requirement of the Act or the Commission's regulations. Rather, the Commission understands its statutory responsibility to disapprove as well those contract market rules which conflict or are inconsistent with any of the policies, purposes and public interest considerations embodied in the Act and the Commission's regulations." See, "Standard to be Applied by the CFTC in Disapproving Contract Market Rules," 45 Fed. Reg. 34873 (May 23, 1980), reprinted in 1 Comm. Fut. L. Rep. (CCH) Para. 6526 at 6331 ("Standards for Disapproving Rules").

EXCHANGE JUSTIFICATION

In support of the proposed amendments, the Exchange indicates that the proposed amendments are necessary to facilitate electronic trading of the subject contracts on the Eurex electronic trading system. In this regard, the Exchange states that:

> The CBOT/Eurex Alliance electronic trading system does not have the ability to implement daily price limits electronically. Therefore, Electronic Trading System (ETS) staff would be required to halt trading manually when prices reached specified limits. If one futures contract month for a commodity goes to a limit, this event would trigger a manual shutdown of all futures contract months and the market would remain shut down for the remainder of the trading session. Likewise, if one option contract month and strike price goes to a limit, trading in all option contract months and strike prices would be terminated for the remainder of the session. Increasing the limits would reduce the number of occurrences of manual trading halts.
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> Price limits were established because of a perceived need for a "cooling off period" for futures when a major news release or event causes prices to move substantially. However, price limits, by their very nature, prevent futures markets from discovering the market price at times when market participants would most like to have that price information (i.e. after a major news release or other event). Widening daily price limits will allow the agricultural and metals futures markets to better reflect cash price movements and will provide greater access for market users during periods of uncertainty.

The CBOT also said that:

> The proposed increases in price limits will increase the probability that the futures markets will continue to trade and provide a price discovery function following a major news release or unexpected event. This in turn will provide the marketplace with a benchmark price from which to base cash prices and production, marketing and buying decisions.

The CBOT also stated in its submission that it received a number of opposing comments regarding proposed amendments, primarily from agricultural interests.

The Exchange's alliance is with the Deutsche Börse Group, for the purpose of implementing trading using the Eurex trading system. The Deutsche Börse Group consists of European banks, some European regional exchanges and "specialists." The Eurex trading system is an electronic trading platform that is intended to provide global access for the member securities and derivatives markets. As indicated above, all trading using the Eurex system currently is done without daily price fluctuation limits. As provided in the CBOT's existing

procedures for trading under the existing Project A system, the Exchange intends that trading using the Eurex trading system will occur during the overnight time period. Specifically, the Eurex trading session will commence at 10:10 p.m. in the evening and extend through 6:00 a.m. of the following morning.[9] The current CBOT open outcry trading session will continue to occur during the Exchange's regular business hours during the day.

At the commencement of trading on the Eurex system, the CBOT does not plan to conduct electronic trading on Eurex concurrently with open outcry trading. However, side-by-side open outcry and Eurex trading would be technically possible and may be proposed to be implemented by the Exchange some time in the future.

FEDERAL REGISTER COMMENTS

As noted, the proposed amendments were published in the Federal Register for public comment. The Commission received 133 comments in response to that notice.[10] All commenters objected to the proposed increases in the price fluctuation limits for the subject agricultural commodities. The commenters included the American Farm Bureau Federation, the National Farmers Union, the National Farmers Organization, the National Grain and Feed Association, the National Corn Growers Association, the National Association of Wheat

[9] According to information provided by the Exchange, a trading day will begin with the Eurex trading session extending from 10:10 p.m. the evening of the calendar day preceding the calendar day that is the nominal day to 6:00 a.m. on the nominal day. For example, trading will commence on Eurex at 10:10 p.m. on Sunday and then will extend to 6:00 a.m. on Monday, at which time trading in the Eurex system will end. Open outcry trading will then commence at the regular time on Monday morning for each contract month and will end at the regular time for each contract. Trading for the next trading day will commence at 10:10 p.m. on Monday.

[10] The comments included multiple responses from the same commenter, identical responses from different commenters, and responses from different commenters that originated from the same email or physical address. More than half of the comments merely stated that the commenter's oposition to the proposed amendments without providing a specific reason for that position. Many other comments alleged that implementation of the proposed amendments would "have an adverse impact" or "create severe ramifications to the entire industry" without elaboration as to what impact or effect was expected or specific reason why such impact or effect would be likely to be observed.

Growers, and the National Cattlemen's Beef Association, as well as several state level agricultural producer organizations and state government agencies. No comments were received in regard to the proposed amendments to the maximum daily price fluctuation limits for the subject gold and silver futures and option contracts.

The commenters' opposition to the proposed amendments is based, in part, on concerns that the increased maximum daily price fluctuation limits would cause an unnecessary increase in price volatility and, thus, impair the ability of price limits to prevent overreaction by prices to new market information. Commenters also expressed concern that margins for futures positions would be increased as a result of the increased limits, thereby increasing trading costs and limiting the ability of producers and other traders to utilize the subject agricultural futures and option markets for risk management purposes. In addition, commenters opposed the modified trading halt procedure the CBOT intends to use during the Eurex electronic trading session when prices are locked limit for one or more contract months. In regard to this concern, the commenters expressed the view that halting trading in all contract months whenever prices for one contract month become locked limit will significantly inhibit the contracts' hedging and pricing utility, and may cause buyers to offer lower cash prices to producers. The commenters concerns are addressed below.

ANALYSIS

The Division does not believe that proposed amendments violate any provision of the Act or the Commission's regulations and under Section 5a(a)(12) the proposed amendments must be approved.

Data provided by the Exchange indicate that the existing price limits for the grain and soybean/soybean product futures contracts do not unduly constrain futures prices. In this regard,

data provided by the Exchange show that, during the most recent ten-year period, January 1990 to December 1999 (which contains approximately 2,200 trading days), the corn futures contract experienced only 50 occurrences in which daily price changes increased or decreased by an amount equal to (or greater than)[11] the base daily price limit. Thirty two of these daily corn futures price changes occurred during one year (1996). In the same period, the oats futures contract experienced 27 such days, 19 days of which were in 1996, the wheat futures contract experienced 20 such days, of which 17 days were in 1996, and the soybean futures contract experienced 27 such days, of which 8 days were in 1997. These data indicate daily price changes equal to (or greater than) the base daily price limit amounted to no more than 2.3 percent of all trading days in the 1990-99 period for any individual commodity. These data indicate that the proposed increased daily price limits will be even less likely to constrain daily futures price fluctuations in the future and, thus, will not be overly restrictive in relation to price movements in the cash market.[12] Moreover, as discussed below, analysis of the isssues raised by the Federal Register commenters does not support disapproval.

A. IMPACT OF PRICE LIMITS ON PRICE VOLATILITY

Although price limits have been a fixture in futures markets for over 80 years, a literature review indicates that there is no consensus as to whether price limits actually influence

[11] The above price data include days on which price changes were greater than the base daily price limit due to the fact that the price limits were increased pursuant to the operation of the contracts' existing provisions providing expansion of the daily price limits under certain circumstances.

[12] The term "overly restrictive" in connection with price fluctuation limits historically has been interpreted by the Commission's staff to mean a limit that has resulted in relatively frequent lock-limit trading sessions. Exchanges, including the CBOT, have frequently included in their daily price fluctuation limit rules provisions to expand limits in trading sessions following lock-limit sessions in order to permit trading in periods when trading would have been otherwise prohibited by the limit rules.

volatility.[13] The three main possibilities are that price limits may lower, raise or have no impact on price volatility. For example, if price limits allow traders additional time to reassess and reevaluate market conditions during a volatile trading day, it is possible for price limits to provide a "cooling-off" period for market participants. However, it is just as likely for price limits to increase volatility because limits halt trading and prevent traders from trading. This trading disruption alters the degree of market liquidity and could lock traders into unwanted positions. Lastly, price limits may not directly affect price volatility, implying that price volatility is driven simply by market fundamentals.

If large price movements are being caused by fundamentals, price limits delay adjustment of futures prices to cash price levels, which reflect new supply and demand conditions. However, if substantial price movements are not based on changes in market fundamentals but are caused by traders overreacting to news, it is possible that a trading stoppage due to reaching a price limit lessens price volatility. Some research[14] indicates that under certain circumstances futures prices not only reverse themselves but that price volatility falls for the period after a limit is hit. This implies that price limits may be beneficial by reducing high price volatility in the post-limit period.

However, other research[15] indicates that the above conclusion is questionable: the conclusion may be a result of the data sample chosen by the researchers. Sample selectivity may

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[13] The New York Cotton Exchange (NYCE) first implemented price limits in 1917. The NYCE added a price rule to restrict daily price fluctuation.[1] In 1925, the Chicago Board of Trade began placing restrictions on price movement, and formally instituted limits on October 25, 1935.

[14] Ma, Rao, and Sears, Volatility, "Price Resolution, and the Effectiveness of Price Limits," *Journal of Financial Services Research* 3, 165-99.

[15] Miller, Merton, "Commentary: Volatility, Price Resolution, and the Effectiveness of Price Limits," *Journal of Financial Services Research* 3, 201-3. Also Lehmann and Bruce, "Commentary: Volatility, Price Resolution, and the Effectiveness of Price Limits, *Journal of Financial Services Research* 3, 205-9.

be the reason why volatility appears to be falling in the post-limit period, and not the imposition of price limits. Exclusion of multiple-limit days from the sample, as was the case, causes the remaining one-time limit events to exhibit a bias toward price volatility falling in the period after a limit day. Moreover, the research in question does not specifically account for changes in the supply and demand for liquidity.[16]

Other research[17] examines whether volatility spills over to the next trading day after a limit move. Assuming that volatility is driven mostly by the arrival of information, these researchers compare return volatility before and after limits are hit. Their comparisons reveal that volatility falls after a price limit move, hence supportive of an overreaction hypothesis. However, they warn, “a causal relation cannot be established with the current evidence.”

These findings run counter to other research[18] that found evidence against limits reducing volatility. Using both monthly and daily Taiwan stock market data, a researcher tested the hypothesis that narrowing price limits stems volatility. A comparison of the standard deviation of returns before and after a change in the price limit, indicated that *volatility does not fall when price limits are narrowed, but tends to rise*.

Researchers also investigated whether or not price limits are effective in reducing volatility for stocks on the Tokyo Stock Exchange. [19] In their tests, they used a 21-day event

[16] One researcher suggests dividing traders into two separate groups, patient and impatient. A patient trader is a long-term investor that makes decision based on value. An impatient trader has a short-term investment horizon and makes trades based on information, also known as a noise trader. An impatient trader demands liquidity while a patient one supplies liquidity. The collective behavior and action of traders determine the level of price volatility.

[17] Ma, Rao, and Sears, "Limit Moves and Price Resolution: The Case of the Treasury Bond Futures Market," *The Journal of Futures Market* 9, 321-35.

[18] Chen, Yea-Mow, 1993, "Price limits and stock market volatility in Taiwan," *Pacific-Basin Finance Journal* 1, 139-53.

[19] Kim, Kenneth and S. Ghon Rhee, "Price Limit Performance: Evidence From the Tokyo Stock Exchange," *The Journal of Finance* 52, 885-901.

window (ten days before a limit day, the limit day, and ten days after the limit day) and measured the daily price volatility for each day. They compared the volatility of stocks that hit a limit to those that nearly hit a limit.[20] Their results imply that volatility spills over to the next trading day. Therefore, they provide evidence against price limits decreasing volatility.

Other recent work[21] tests how volatility is influenced by price limit movements for agricultural futures. The work shows volatility either rising or falling the day after a limit move, depending on the underlying commodity. The lack of consistency across the different futures contracts led the researcher to conclude that *price limits are not directly related to either a rise or fall in volatility*. Although price limits are correlated with volatility, it is difficult to link any specific change in volatility to price limits.

In summary, the above empirical literature on whether limits affect price volatility is mixed and inconclusive.

Maximum price fluctuation limits commonly are established by exchanges using recently observed price volatility in the affected market and the level of price volatility expected to be observed in that market. That is, increased volatility in a market engenders wider price fluctuation limits in those cases where limits are applicable, not the reverse. Expanded price fluctuation limits typically are a response to increased volatility, not a cause of increased volatility.

Most futures contracts provide for trading without maximum daily price fluctuation limits over at least some portion of the trading lives of individual contract months. For example, all of

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[20] The nonparametric test used is the Wilcoxon signed-rank test, which indicates whether one sample of volatility is significantly different from another. The stocks that nearly reach a limit are for price changes that are 90% and 80% of the limit size.

[21] Park, Chul, "Examining Futures Price Changes and Volatility on the Trading Day After a Limit-Lock Day," *The Journal of Futures Markets* 20, 445-66.

the Exchange's grain contracts trade without price fluctuation limits in the expiring contract month. Nevertheless, data provided by the Exchange indicates that there are numerous instances of margins[22] being reduced for trading in the spot month following the removal of price fluctuation limits, indicating an expected *decrease* in price volatility.

B. IMPACT OF PRICE LIMITS ON FUTURES MARGIN REQUIREMENTS

The CBOT indicates that margins are reviewed on a monthly basis or more frequently when emergency or volatile market conditions indicate that review is necessary. The primary concern of exchanges in setting margins is to limit the exposure of the Exchange, its members and brokers to the possibility of default in the case of a major market move that may deplete current margin accounts.

Historically, margins have been set at levels ranging from less than the amount by which the contract price may change in one day to 100% of the current contract price, depending on the expected price volatility. In addition, margins for expiring contract months may be based on other factors such as the relationship between the economically available deliverable supply, volume, and current open interest for such month. The level at which margins are set is not greatly affected by the amount by which prices could change in one day (the maximum daily price fluctuation limit, where such a limit exists), but the amount by which prices are expected to change in one day.[23]

Maximum daily price fluctuation limits do not limit in any way the minimum margins required by the Exchange nor do they limit the amount of margin that may be required by a

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[22] Margins are set with reference to expected volatility. See the discussion in the following section.

[23] Minimum margins have also been increased intra-day in some very volatile markets.

member or broker (brokers and exchange members are free to set margins for their customers at any level above the Exchange's minimum margin requirement). In this regard, an Exchange official stated that the proposed increased maximum daily price fluctuation limits, if approved by the Commission, would not by themselves affect the level of margins required by the Exchange. This official indicated that price volatility rather than price limits is the primary factor used by the Exchange to determine margin requirements.[24]

The Exchange indicates that, in order to verify that proper minimum margin levels are being applied, the Margin Review Group of the Exchange[25] considers various factors. These factors include:

- The absolute value of price changes and maintenance margin levels for all futures contracts;
- The absolute value of implied volatility and volatility scan range on options on futures;
- Futures volume;
- Percent of spread margin rates;
- The dollar value of spread margin rates;
- Maximum, minimum absolute value of the mean and median, and three standard deviations of daily price changes and implied volatility for the last 30 days, 90 days and six months;
- Average daily trading volume in futures and options; and
- The largest changes in price and implied volatility over the last 90 days.

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[24] Maximum daily price limits will only have a measurable impact on price volatility, and margins, when those limits are set at levels that unduly constrain price movements consistent with changed expectations about supply and demand conditions for the commodity.

[25] The Margin Review Group consists of the Senior Vice President of the Exchange's Office of Investigations and Audits (OIA), a Senior Manager of OIA, a Director of the Exchange's Market and Product Development Department, and representatives of the Board of Trade Clearing Corporation. Other staff also attends meetings of the Margin Review Group when their particular expertise is required to address a product or market related issue.

In addition to the above factors, the CBOT considers ten-year average daily volatility at 95% and 99% confidence levels because those measures are relevant to determinations for seasonal agricultural products.

C. TRADING HALT PROCEDURES FOR MAXIMUM DAILY PRICE FLUCTUATION LIMITS

As noted, a number of Federal Register commenters expressed concerns about the trading halt procedure the CBOT intends to apply to trading in the overnight Eurex trading session. In particular, the commenters expressed the view that halting trading in all contract months for the rest of the overnight electronic trading session when one or more contract months are locked limit could adversely affect pricing and hedging utility of the contracts and may cause cash market buyers to lower their bid prices to producers. In regard to these concerns, the Division believes that any effect on hedging and pricing likely will be very limited for several reasons. First, the indicated trading halt procedure would apply only during the Eurex trading session, not the entire trading day. The existing trading halt procedures, which halt trading in only those months that are locked limit and permit trading in such months to resume later in the trading session if market conditions warrant, would continue to apply to the open outcry trading session. In addition, as indicated by data provided by the CBOT, limit price moves have been infrequent in the grain and soybean complex futures markets historically. These data suggest that the proposed increased maximum daily price fluctuation limits likely will further reduce the frequency with which trading halts occur, thus reducing the extent of any negative impact. Moreover, the Eurex electronic trading session would coincide with a part of the day in which very little cash market activity typically occurs in the U.S. Trading in the open-outcry trading

session, which corresponds with the time of day when a significant part of U.S. cash market trading is conducted, could resume in all months that are not locked limit at that time.

Nevertheless, the Division believes that potential policy issues may arise in the future in regard to the CBOT's proposed trading halt procedure for the Eurex electronic trading system in the event the CBOT were to permit at a later date the use of such procedures during open outcry trading, or in situations involving simultaneous trading in the open outcry and electronic trading sessions. Application of such procedures to the existing actively traded open outcry trading session, regardless of whether there is simultaneous electronic trading, raises questions as to whether the markets can effectively carry out their price discovery and risk management functions if they are subject to trading halt procedures which could require the shutdown of a market for an entire trading day. Alternatively, if electronic trading were offered concurrently with open outcry trading, application of the proposed trading halt procedure to Eurex trading and the continued use of the current procedures in open outcry trading could adversely affect the ability of the electronic trading market to carry out these functions.

Accordingly, the Division recommends that the Commission advise the CBOT in any approval letter regarding the proposals that it understands that the CBOT intends to apply the procedures for manually stopping trading in any futures or option contract month only during the overnight Eurex electronic trading session and that the existing trading halt procedures will continue to apply to the existing open outcry trading session. Further, the Division recommends that the Commission advise the CBOT that any Commission action to approve the CBOT's proposed rules relating to the trading halt procedure does not represent the taking of a position on the compliance of the rules with the Act and Commission regulations were it to be implemented on a side-by-side basis with open outcry trading, or with respect to open outcry trading alone.

Such rule changes would raise issues regarding the potential for unduly stopping trading in a futures market which would require additional consideration by the Commission.

PROPOSED IMPLEMENTATION PLAN

The Exchange intends to make the proposed amendments effective following approval by the Commission concurrently with implementation of the CBOT-Eurex Alliance trading platform by the Exchange for application to all then currently listed contract months and subsequent contract months.

The proposed implementation plan is acceptable. In this regard, the CBOT issued a press release on May 17, 2000 advising the general public of its intention to adopt the proposed amendments at the time trading in the subject contracts commences on the Eurex trading system (Attachment I).[26] Therefore, the CBOT has given sufficient advance notice of the Exchange's intention to apply the proposed amendments to existing positions to allow traders time to make any desired adjustments to their positions to accommodate the amendments. In addition, the proposed increases in maximum daily price fluctuation limits are price neutral in that they will have no predictable impact on the futures price levels. Accordingly, application of the proposed amendments to currently listed contract months will not affect the value of any existing position. Implementation of the proposed amendments will not significantly affect the pricing or hedging utility of any affected contract.

[26] The Division of Trading and Markets is completing its review of the CBOT/Eurex alliance agreement and expects to forward a memorandum to the Commission summarizing its findings and recommending that the CBOT be permitted to implement its proposal absent objection by the Commission. In this regard, the Exchange, on July 24, 2000, issued a press release advising the public that trading on the CBOT/Eurex trading system will commence on August 27, 2000.

CONCLUSION

In view of the above, the Division does not believe that the proposed amendments violate the Act or the Commission's regulations. However, the trading halt procedures that the CBOT intends to apply during the Eurex overnight trading session, if applied during the day trading session, would raise issues of public policy that the Commission may wish to consider, specifically the degree and nature of the trading halts under the rule and the effect of such a rule on the markets utility for hedging and price discovery.

The comments received by the Commission in response to its Federal Register notice overwhelmingly rejected and questioned the need for the proposed increased maximum daily price fluctuation limits for the subject agricultural futures contracts. However, the available research on the subject of the effects of maximum daily price fluctuation limits on price volatility has been inconclusive. In addition, as noted, the Exchange's existing procedures for determining margin levels do not consider price limits in the course of setting margins and, thus, increased price limits appear to be capable of affecting margin requirements only if there is an increase in price volatility associated with the increased price limits. The CBOT's intention to stop trading in the overnight Eurex trading session whenever prices in one or more contract months reach the maximum daily price fluctuation limits appears to be a business decision related to accommodating electronic trading on the Eurex trading system. The CBOT's proposals, despite their apparent unpopularity with large numbers of potential hedging customers, in the Division's view do not meet the legal standard for disapproval as set forth in the Act. Nevertheless, as noted, were the procedures for halting trading to be applied to the day trading session, a number of policy issues would need to be considered separately.

Attachments[27]

A. Draft Approval Letters to the CBOT and MCE.
B. CBOT Submission dated May 25,2000
C. CBOT Submission dated June 22, 2000
D. CBOT Submission dated July 26, 2000
E. MCE Submission dated June 21, 2000
F. MCE Submission dated August 4, 2000
G. *Federal Register* Notice dated June 8, 2000
H. *Federal Register* Notice dated June 29, 2000
I. CBOT Press Release Dated May 17, 2000

[27] The Division of Economic Analysis also has separate background materials that are not included as part of this document, but are available to the Commission upon request.

August 10, 2000

Mr. Paul J. Draths
Vice President and Secretary
Chicago Board of Trade
141 West Jackson Boulevard
Chicago, Illinois 60604-2994

Re: Proposed Amendments to Chicago Board of Trade Regulation 1008.01 regarding maximum daily price fluctuation limits for the Exchange's corn, corn yield insurance (six contracts), oats, rough rice, soybeans, soybean meal, soybean oil, wheat, kilo gold, 100 ounce gold, 1000 ounce silver, and 5000 ounce silver futures and option contracts. (Exchange Reference File #2015.01)

Dear Mr. Draths:

In correspondence dated May 25, 2000, the Chicago Board of Trade (Exchange or CBOT) submitted the subject proposed amendments. The proposed amendments were submitted for Commission approval pursuant to Section 5a(a)(12)(A) of the Commodity Exchange Act and Commission Regulation 1.41(b).

The proposed amendments will increase the maximum daily price fluctuation limits for the Exchange's corn, corn yield insurance (six contracts), oats, rough rice, soybeans, soybean meal, soybean oil, wheat, kilo gold, 100 ounce gold, 1000 ounce silver, and 5000 ounce silver futures contracts. The proposed amendments also will increase the maximum daily premium fluctuation limits for the option contracts based on the subject futures contracts. In addition, the proposed amendments will delete existing provisions that provide for expanded daily price limits under specified conditions. The CBOT also represented in its submissions of May 25 and July 26, 2000, that, for the Eurex electronic trading session only, special trading halt procedures will apply when prices for a contract month reach the maximum daily price fluctuation limits. Specifically, whenever transactions in any contract month cannot be executed at prices that fall within the maximum daily price fluctuation limits, trading in all contract months will cease for the remainder of the electronic trading session.

The Exchange intends to make the proposed amendments effective following approval by the Commission concurrently with implementation of the CBOT-Eurex Alliance trading platform by the Exchange for application to all then currently listed contract months and subsequent newly listed contract months.

Section 5a(a)(12) of the Act specifies that the Commission must approve rules proposed by an exchange if such rules are determined by the Commission not to be in violation of the Act or the regulations of the Commission. Accordingly, acting pursuant to Section 5a(a)(12) of the Act, the Commission hereby approves the proposed regulations and implementation plan. In approving the subject amendments, the Commission understands that the trading halt procedures which entail manually stopping trading in all futures or option contract months when transactions cannot be executed within the prescribed maximum daily price limits in any single contract month will apply only during the Eurex electronic trading session and that the existing trading halt procedures will continue to apply to open outcry trading. Thus, any other proposed use of these procedures, such as during the open outcry day trading session, would raise issues regarding the potential for unduly stopping trading in a futures market which would require additional consideration by the Commission. In this regard, the Commission notes that, in approving the CBOT's rules, it is not taking a position on the compliance of the rules with the Act and Commission regulations were the Eurex trading system to be implemented on a side-by-side basis with open outcry trading or at any time other than during the overnight trading hours.

Sincerely,

Edward W. Colbert
Deputy Secretary of the Commission

August 10, 2000

Mr. Paul J. Draths
Vice President and Secretary
MidAmerica Commodity Exchange
141 West Jackson Boulevard
Chicago, Illinois 60604-2994

Re: Proposed Amendments to MidAmerica Commodity Exchange Rules 624.00, 625.00, 2604, and 2704 regarding maximum daily price fluctuation limits for the Exchange's corn, oats, soybeans, soybean meal, soybean oil, and wheat futures and option contracts. (Exchange Reference File #513.01)

Dear Mr. Draths:

In correspondence dated May 25, 2000, the MidAmerica Commodity Exchange (Exchange or MCE) submitted the subject proposed amendments. The proposed amendments were submitted for Commission approval pursuant to Section 5a(a)(12)(A) of the Commodity Exchange Act and Commission Regulation 1.41(b).

The proposed amendments will increase the maximum daily price fluctuation limits for the Exchange's corn, oats, soybeans, soybean meal, soybean oil, and wheat futures contracts. The proposed amendments also will increase the maximum daily premium fluctuation limits for those option contracts of the MCE that are based on the subject futures contracts. In addition, the proposed amendments will delete existing provisions that provide for expanded daily price limits under specified conditions.

The Exchange intends to make the proposed amendments effective following approval by the Commission concurrently with the Chicago Board of Trade's implementation of identical amendments to that exchange's corresponding futures contracts for application to all then currently listed contract months and subsequent newly listed contract months.

Section 5a(a)(12) of the Act specifies that the Commission must approve rules proposed by an exchange if such rules are determined by the Commission not to be in violation of the Act

or the regulations of the Commission. Accordingly, acting pursuant to Section 5a(a)(12) of the Act, the Commission hereby approves the proposed regulations and implementation plan.

Sincerely,

Edward W. Colbert
Deputy Secretary of the Commission