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COMMENT

OFC. OF THE SECRETARIAT

December 4, 2001

Ms. Jean A. Webb
Office of the Secretariat
Commodity Futures Trading Commission
1155 21st Street, N.W.
Washington, D.C. 20581

Mr. Jonathan G. Katz
Secretary
Securities and Exchange Commission
450 Fifth Street, N.W.
Washington, D.C. 20549-0609

Re: File No. S7-16-01 (66 *Fed. Reg.* 50720, dated October 4, 2001)
Customer Margin Rules Relating to Security Futures Products.

Dear Ms. Webb and Mr. Katz:

Chicago Mercantile Exchange Inc. and the Board of Trade of the City of Chicago, Inc. ("CME" and "CBOT®" or together the "Exchanges") are pleased to offer comments on a proposal published on October 4, 2001 by the Commodity Futures Trading Commission and the Securities and Exchange Commission ("CFTC" and "SEC" or together the "Commissions") proposing rules which would govern customer margin requirements for Security Futures Products ("SFPs") per the Commodity Futures Modernization Act of 2000 ("CFMA"). [1] These proposals have been offered by the Commissions per their authority as delegated by the Federal Reserve Board ("FRB"). [2]

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[1] File No. S7-16-01 (66 *Fed. Reg.* 50720, dated October 4, 2001), Customer Margin Rules Relating to Security Futures.

[2] We note that "[s]ection 206(b) of the Commodity Futures Modernization Act of 2000 (CFMA) amends the Securities Exchange Act of 1934 (SEA), in part by adding a new section 7(c)(2) to provide the Board of Governors of the Federal Reserve System with authority to prescribe margin regulations for brokers, dealers, and members of national securities exchanges extending credit to or collecting margin from customers on security futures products." See letter dated March 6, 2001 from Jennifer J. Johnson, Secretary of the Board, Federal Reserve Board to Mr. James E. Newsome, Acting Chairman, Commodity Futures Trading Commission and Ms. Laura S. Unger, Acting Chairman, Securities and Exchange Commission.

The Exchanges maintain an interest in these matters to the extent that we are participating, along with the Chicago Board Options Exchange ("CBOE"), in a joint venture to launch OneChicago, LLC., a new exchange dedicated specifically to the trade of SFPs.

1. Reg T Account Administration

We understand that it is the Commissions' intent that "a Full FCM/Full BD ... [may] hold customer SFPs in either a futures account or a securities account." [3] Given the hybrid nature of the product and our anticipation that participation may be expected from both the futures and securities communities, such option to carry SFPs in either type of account is a necessary and worthwhile feature of the regulatory program.

But the release accompanying the proposed regulations suggests that the Commissions' approach to account administration practices "which is reflected in the proposed rules, would require that Regulation T apply to financial relations, including margin arrangements, between a creditor and a customer with respect to security futures and any related securities or futures contracts that are used to offset positions in such security futures ... Regulation T establishes and defines the various types of accounts where securities subject to Regulation T may be carried and held. These accounts include the Margin Account, SMA, the Good Faith Account, the Broker-Dealer Credit Account, and the Cash Account." [4]

Force-Fitting Securities Practices - The Exchanges are concerned to the extent that the current proposal represents a wholesale application of Reg T account administration practices without regard to prevailing futures market practices, placing the futures community at a distinct competitive disadvantage. We observe that there is no mention of a futures account, whose administration is fundamentally different than that of a securities account.

These differences are rooted in the fact that futures margin systems are essentially debt-free while the stock margin system provides for extensions of credit. [5] The Commissions acknowledge that their recurrent characterization of the relationship between broker and customer as between creditor and customer "is not intended to indicate that there is an extension of credit involved in the margining of security futures." [6] This characterization nonetheless seems to establish the tone for the Commissions' proposed regulations.

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[3] File No. S7-17-01 (66 *Fed. Reg.* 50786, dated October 4, 2001), Applicability of CFTC and SEC Customer Protection, Recordkeeping, Reporting, and Bankruptcy Rules and the Securities Investor Protection Act of 1970 to Accounts Holding Security Futures Products.
[4] 66 *Fed. Reg.* 50721, dated October 4, 2001.
[5] Of course, a futures margin is fundamentally unlike a security margin in the sense that a security margin may be characterized as a down payment on an equity interest in a firm while a futures margin represents surety associated with a commitment to buy or sell a specified instrument in the future. Accordingly, the term "performance bond" is a more apt term than "margin" to describe the monies used to secure a futures position.
[6] 66 *Fed Reg.* 50721, dated October 4, 2001.

Effectively, the Commissions are attempting to force-fit a futures contract into a securities system, thereby creating something that may be unrecognizable as a futures contract. Further, the Commissions' proposals leave numerous unanswered questions regarding the extent to which security account administration practices must be applied in the context of a futures account carrying SFPs. For example, the Commissions are silent with respect to the application of truth in lending rules; and, day trading rules applicable to maintenance margins as prescribed by the New York Stock Exchange and Nasdaq. This magnifies the risk of potentially costly errors or oversights on the part of back office operations specifically within the futures community.

Not only do the proposed regulations appear to force-fit security futures into a securities framework but they would require "any related securities or futures contracts that are used to offset positions in such security futures" similarly to be carried in a securities style account. [7] *I.e.,* futures and options on futures based on non-narrow based equity indexes could likewise become subject to security style account administration, presenting another set of operational difficulties. Or, if held in a standard futures account, become unavailable for the purposes of availing the Commissions' strategy-based margin breaks.

As such, it will be operationally difficult or impossible to carry SFPs in a standard futures account without costly and time-consuming reprogramming, if at all.

Use of Open Trade Equity – The Commissions explain that "[u]nder the proposed rules, security futures transactions would be recorded in a Margin Account because the proposed margin level requirements represent a performance bond to guarantee contract performance by both the buyer and seller of such contact. Any daily net gain (or loss) on a security future ('settlement variation') would be credited to (or debited from) the Margin Account. Broker-dealers registered with the SEC under Section 15(b)(1) of the Exchange Act may journal any margin excess in the SMA." [8] [9] (We note that no provision is made in this regard for notice-registered broker-dealers.)

The release further explains that the credit in the SMA account "would remain until the customer uses such credit by withdrawing it from the account or by applying the credit in the SMA as margin on a new securities transaction." [10]

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[7] See proposed CFTC Rule 41.43(b)(1) and SEC Rule 400(b)(1).
[8] 66 *Fed Reg*. 50722, dated October 4, 2001.
[9] We note that no provision is made in this regard for notice-registered broker-dealers. This implies that any positive OTE on the customer accounts of notice-registered broker-dealers would be forced to reside in the margin account while the position is open.
[10] 66 *Fed. Reg*. 50722, dated October 4, 2001.

As such, the Commissions appear to contemplate a procedure whereby positive settlement variations, or positive Open Trade Equity ("OTE"), could be applied to secure other securities futures or securities positions – within the framework of a securities account. But the release is silent with respect to the use of such OTE within a futures account structure or how such OTE could be used to secure other futures positions.

We are concerned to the extent that a strict read of the Commissions' proposals may deny the use of OTE as acceptable collateral within a futures framework which does not contemplate posting of excess monies to a SMA. This result would of course contradict normal futures bookkeeping systems which recognize OTE as acceptable cover for other futures positions and do not require such excess to be posted into another account for use to cover other positions. In the futures world, OTE is recognized as equivalent to cash, noting that futures accounts are marked-to-market ("MTM") on a daily basis. This MTM results in actual cash flows between the clearinghouse and clearing member – and between broker and customer.

These concerns are reinforced to the extent that the proposed rules specify that "[a] broker, dealer or member of a national securities exchange may accept" various forms of margin collateral. [11] We note that notice registered broker-dealers are not mentioned in this regard.

Absent recognition of OTE as cash, significant and costly renovations to futures bookkeeping systems would be required. Or, participating firms would simply carry SFPs in security accounts to the disadvantage of the futures industry. Accordingly, we would urge the Commissions to exercise their authority under the proposed regulations to prescribe "margin collateral requirements ... including the type, form, and use of collateral for security futures ..." in such a manner as explicitly to equate OTE with cash.

Valid Collateral – The proposed regulations, based upon the requirements of Reg T, do not appear to recognize other instruments that are commonly accepted as valid collateral within a futures account. For example, letters of credit ("LCs") - amongst other instruments - are recognized as valid for use to secure futures positions. However, the proposed regulations appear to deny the use of collateral generally considered valid in the context of a futures account such as LCs. This further disadvantages the futures community rendering it increasingly unlikely that customers will exercise their option to carry SFPs in a futures account.

Collection of Margins - The proposed rules "would require that the amount of initial and maintenance margin required ... be obtained as promptly as possible and, in any event, within three business days after the position is established." [12] This requirement is not patterned after practices prevailing in the futures industry. [13]

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[11] See proposed CFTC Rule 41.47(a) and SEC Rule 404(a).
[12] *Ibid.*
[13] Although not explicitly discussed in the Commissions' proposal, we note that security market practices require Broker/Dealers to liquidate positions held in accounts that are undermargined beyond five days absent an explicit extension. The Commissions' intent with regard to this practice in the context of SFPs is not explicit based on a

We suggest that, if SFPs are carried in futures accounts, the collection process should conform to current futures industry practices. Note, of course, that the timeliness of margin collection may profoundly impact upon the adequacy of margin levels.

2. Portfolio- vs. Strategy-Based Margining

The Commissions have implicitly proposed a two-tiered margin system for SFPs. This dichotomy effectively would subject customers to a margin system based on the particulars of the specific strategy practiced thereby. As such, initial and maintenance margin levels would be established for a wide variety of positions including simple outright, spread, synthetic and arbitrage strategies.

On the other hand, some professional traders, including clearing members and market makers, would be exempt from the Commissions' customer margining requirements. In particular, "[t]he authority delegated by the Board is limited to customer margin requirements imposed by brokers, dealers, and members of national securities exchanges. It does not cover requirements imposed by clearing agencies on their members." [14]

As such, the industry would be free to adopt a portfolio-based margining system - such as the CME's Standard Portfolio Analysis of Risk ("SPAN") system – or the Options Clearing Corporation's ("OCC") Theoretical Intermarket Margin System ("TIMS"). But only with respect to clearing members and market makers – not with respect to customers who would be bound to the archaic strategy-based system.

Intent of FRB – It is clear that the Federal Reserve Board's intent is to promote the application of portfolio-based margining systems in the context of clearing firms, market makers and customers alike. In support of this statement, we note that the FRB requests that "the Commissions provide an assessment of progress toward adopting more risk-sensitive, portfolio-based approaches to margining security futures products. The Board has encouraged the development of such approaches by, for example, amending its Regulation T so that portfolio margining systems approved by the Securities Exchange Commission can be used in lieu of the strategy-based system embodied in the Board's regulation." [15]

Towards that end, Sec. 220.12 of Reg T provides that the required margin for "puts and calls issued by a registered clearing corporation and listed or traded on a registered national securities exchange or a registered securities association ... [shall be] ... the amount, or other position specified by the rules of the registered national securities exchange or the registered securities association authorized to trade the option or warrant, provided that all such rules have been approved or amended by the SEC."

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read of the proposed regulations. However, such practice departs from practices prevailing in the futures industry and, as such, would result in further disadvantage to the futures trading community.
[14] *Op. Cit.*, Federal Reserve Board Letter dated March 6, 2001.
[15] *Ibid.*

Reg T does not explicitly require the application of strategy-based margining programs. And, of course, portfolio-based margining systems are currently applied to good effect in the context of stock option markets with respect to the positions of clearing members and market makers where the application of OCC's TIMS system has won regulatory approval. But … these systems have not been extended to customer margin accounts in the securities world. By contrast, portfolio-based margining procedures have been applied to good effect in the context of futures markets at both the clearing member and customer levels since 1990.

We appreciate the Commissions' concerns that a portfolio margining system "used to calculate customer margin requirements appropriately takes into account the trading characteristics and historical market performance of the applicable securities products … [and that the Commissions] … need to be confident that the system provides a sufficient cushion of margin or capital against extraordinary price movements." [16] We further recognize that some progress has been made towards the introduction of a pilot program which would extend the benefits of portfolio margining systems to a somewhat wider base of participants in broad-based stock index option and futures products.

Still, we wonder whether the Commissions' caution and the incremental approach of the pilot program are conducive with a timely implementation of portfolio margining consistent with the intent of the FRB. In particular, we believe that the merits of a portfolio margining system are well established as discussed below.

Economic Efficiencies – Margin requirements are intended to secure the financial integrity of the marketplace and stem systemic risks. Accordingly, higher requirements will provide greater assurance against a deficiency. But added assurances are not necessarily costless.

Research suggests that burdensome margin requirements may detract from open interest and "[a]ny reduction in market participation that owes to unnecessarily high margin requirements will reduce the economic benefits of risk-sharing and may adversely effect market liquidity." [17]

This point is reiterated by Tomek … "[l]ogic indicates … that other factors held constant, open interest and volume are inversely related to margins. Larger margins mean higher costs to traders, and this is true even if margins are posted in the form of Treasury bills." [18]

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[16] 66 *Fed Reg.* 50724, dated October 4, 2001.
[17] "Regulatory Competition and the Efficiency of Alternative Derivative Product Margining Systems," Paul H. Kupiec and A. Patricia White, June 11, 1996.
[18] "Margins on Futures Contracts: Their Economic Roles and Regulation," William G. Tomek, Futures Markets: Regulatory Issues, Anne E. Peck, editor, (American Enterprise Institute for Public Policy Research).

In further support of that conclusion, Fishe and Goldberg found that … "[O]pen interest of futures contracts varies inversely with margin requirements. The empirical results [of their study] support this hypothesis for contracts with nearby delivery months, but for more distant delivery months, margins do not have a significant affect on open interest."[19] Of course, the plurality of volume and open interest in stock index futures is concentrated in the nearby month. We expect similar patterns of activity in the context of security futures products, thus, Fishe and Goldberg's latter remark is of little consolation.

We note further that the SEC, CFTC, FRB and Treasury recognized in their Working Group Report (May 1988) that futures margins provide an adequate level of protection, acknowledging that margins designed to protect against all possible price movements would impose unacceptable costs, adversely impacting upon market liquidity and efficiency.

Independent research by Kupiec and White (1996) underscores the efficiency of portfolio-based margining systems. In what may be regarded as the most definitive study comparing the relative merits of portfolio and strategy based margining systems, the authors concluded …

> "The portfolio margining system embodied in SPAN provides substantially the same market risk protection as the strategy based system of Reg T but with collateral levels that are mere fractions of those required by Reg T. The efficiency gains of SPAN arise from two sources. First, SPAN used option pricing simulations to accurately measure potential one-day risk exposures on instruments. In contrast, Reg T implicitly estimates the potential risk exposure as a percentage of the value of the underlying instrument, an amount which is only indirectly related to the risk of a contract. These implicit risk exposure estimates grossly overstate the one-day market risk in individual options positions. Secondly, SPAN uses the option pricing simulations to accurately estimate the appropriate collateral requirement offsets within a portfolio of futures options. In contrast, Reg T only accords collateral value to options in specifically recognized strategies. Even within these strategies, the Reg T estimate of the recognized option's collateral value is inaccurate, erring on the side of prudential caution."[20]

To summarize, portfolio-based systems serve the purposes that margins are intended to serve - but with greater economic efficiency. But the implications are even broader than that …

> "Choices between portfolio simulation-based systems and strategy-based systems arise in other contexts besides margins, however. Similar kinds of choices are being decided with regard to the market-risk capital requirement for the trading portfolios of banks and are relevant for the design of bilateral collateralization agreements for over-the-counter derivatives contracts. These results argue for consideration of a portfolio approach."[21]

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[19] "The Effects of Margins on Trading in Futures Markets," Raymond P.H. Fishe and Lawrence G. Goldberg, The Journal of Futures Markets, Vol. 6, No. 2, 261-271 (1986).
[20] *Op. cit*., Kupiec and White.
[21] *Ibid.*

The CFTC seems to concur … "[t]he CFTC believes … that the [proposed] rules fall short of achieving the maximum benefits at the lowest possible cost. The CFTC believes that portfolio margining for security futures would foster greater market efficiency and provide greater benefits to all market participants, without compromising the financial integrity of the markets or giving rise to systemic risk." [22]

Proposal Perpetuates Market Inefficiency - We harbor serious concerns that the proposed customer margin requirements for SFPs would serve to perpetuate the market inefficiencies discussed above – detracting from the utility of a promising new product. Of course, we recognize the mandate of the CFMA to the extent that the "rules must require that: (1) the margin requirements for a security future be consistent with margin requirements for comparable option contracts … and (2) the initial and maintenance margin levels for a security future not be lower than the lowest level of margin, exclusive of premium, required for any comparable option contracts." [23]

Still, we must question the wisdom of perpetuating and extending capital inefficiencies in the interest of regulatory parity. The simple fact is that security and futures margins "are intended for different purposes; and, in addition, the performance margins of futures markets are set within a quite different institutional framework from that of the credit margins for securities. These differences include elaborate clearing arrangements and collection procedures for futures contracts that do not exist in securities transactions." [24]

The Commissions' approach to account administration practices may be cited as a contributing factor to the perpetuation of the archaic strategy-based margining system to the extent that such approach would invalidate those "elaborate clearing arrangements and collection procedures for futures contracts that do not exist in securities transactions" as cited above.

Examples - In order to illustrate the magnitude of the inefficiencies that are implied by the proposed regulations, consider the following scenarios depicting the level of margin requirements per SPAN and per the Commissions' proposal. Specifically, consider the margins that would be required to secure an outright position in a hypothetical futures contract based on one-hundred (100) shares of IBM. [25]

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[22] 66 *Fed. Reg.* 50733, dated October 4, 2001.
[23] 66 *Fed. Reg.* 50721, dated October 4, 2001.
[24] *Op. cit.* Tomek.
[25] Based on a 100-share contract - stock valued at $99.40 per share. SPAN requirements calculated using a 5% volatility scan range.

Pro-Forma Margin Requirements for Outright Long or Short IBM Futures

	Per SPAN	Per Proposal
Initial Margin	$1,250 per contract	$1,988 per contract (= 20% of $9,940)
Maintenance Margin	$1,000 per contract	$1,988 per contract (= 20% of $9,940)

Portfolio-based margining systems permit the user to identify the acceptable level of risk and calibrate the system accordingly. This example was constructed assuming that the SPAN system would be calibrated to cover 99% of day-to-day price movements. We believe that the application of a 99% confidence level to maintenance margins is sufficient, efficient and indicative of Exchange intentions in this regard.

SEC staff have estimated "that the proposed margin levels would reduce the chances that a margin account would not contain sufficient funds to cover a given day's price movement from approximately 5 percent using traditional risk-based futures margining to 0.3% … while the margin levels proposed for security futures may impose a cost, the SEC believes that the proposed margin levels would lower chances of customer default and therefore lower systemic risk to the markets." [26] But the coverage levels generally applied by CME in the context of equity index products can be confirmed through independent research …

> "[O]n many portfolios, SPAN clearinghouse margin coverage exceeds 99% … the historical coverage on both naked futures and naked futures-option contracts exceeds 99.5%. The historical coverage afforded by SPAN clearinghouse margins to the alternative portfolios of futures-options … [such as portfolios including futures and options] … is also in excess of 99.5% … From a risk management efficiency standpoint, estimates suggest that the SPAN margining system is substantially more efficient than the strategy-based margin system it replaced … for naked futures-option positions, SPAN margins provide virtually the same coverage as strategy-based margins, but on average, require substantially less collateral to achieve this coverage." [27]

Further, we recognize the very realistic possibility that SPAN computed margins may be in excess of the levels required by the Commissions' proposals. This is underscored by recent sharp fluctuations in stock prices. In other words, there is a probability that day-to-day price movements cannot be covered by the proposed margin levels with the 99.7% confidence level implied by SEC staff remarks.

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[26] 66 *Fed. Reg.* 50734, dated October 4, 2001.
[27] "The Performance of S&P 500 Futures Product Margins Under the SPAN Margining System," Paul H. Kupiec, The Journal of Futures Markets, Vol. 14, No. 7, 789-811 (1994).

Of course, we are aware that the proposals specify minimum requirements and permit firms to collect excess funds. The point is that the consistent application of a portfolio-based system would identify situations where the appropriate margin level was both less than or greater than the proposed levels.

Finally, the adoption of any finite list of recognized risk-offsetting strategies ignores the fact that there are an infinite variety of ways in which to construct a portfolio. Adding strategies to the list simply renders the margin process more cumbersome. Portfolio-based margining systems are not limited in this regard and will automatically identify risk-offsetting positions without reference to predefined strategies. For example, the Commissions list of recognized risk-offsetting positions does not account for risk offsets associated with inter-market spreads between two single stock futures positions.

3. Conclusion

The Exchanges are concerned that the proposed regulations imply that futures accounting and bookkeeping systems must be retooled per a Reg T framework in order to carry SFPs. Such retooling promises to be extremely expensive and time consuming and as a result severely disadvantages the futures community. Accordingly, we urge the Commissions explicitly to recognize futures accounts, per current structure and administrative practices, as appropriate vessels within which to carry SFPs.

Further, we believe it is imprudent to extend the application of inherently inefficient and archaic strategy-based margining practices to SFPs under the guise of regulatory parity. To the extent that the proposed customer margining rules for security futures products may often result in margins that are far higher than necessary, we concur with Professor Chance that "[a]ny attempt to bring cash and futures margins closer should *not* be done by raising futures margins." [Italics added.] [28] In other cases, a rigid application of the proposed standards would result in insufficient sureties.

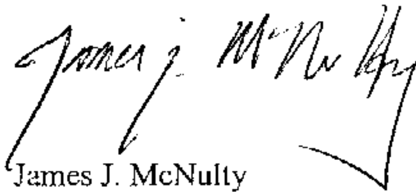
Rather, we believe that it is most appropriate to permit exchanges that would list security futures products to enact rules in this regard that are consistent with maximum market efficiency. This approach is in keeping with the intent of the Fed and would provide the emerging SFP market a much better chance to grow and thrive.

[28] "The Effect of Margins on the Volatility of Stock and Derivative Markets: A Review of the Evidence," Don M. Chance. Monograph Series in Finance and Economics, Monograph 1990-2. Dr. Chance is First Union Professor of Financial Risk Management at Virginia Tech University and the author of numerous academic articles regarding the futures, derivatives and securities industries.

Thank you for the opportunity to comment on the proposed regulations. If any questions arise during your review of this letter, please do not hesitate to contact John W. Labuszewski, Director, Clearing Development, Chicago Mercantile Exchange Inc. at 312-466-7469.

Respectfully submitted,

Chicago Mercantile Exchange Inc.



James J. McNulty

Board of Trade of the City of Chicago, Inc.

David J. Vitale

/jwl

cc: The Honorable James E. Newsome
The Honorable Harvey L. Pitt
The Honorable Thomas J. Erickson
The Honorable Barbara Pederson Holum
The Honorable Isaac C. Hunt, Jr.
The Honorable David D. Spears
The Honorable Laura S. Unger