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**VIA EMAIL AND ELECTRONIC SUBMISSION**

Elizabeth M. Murphy  
Secretary  
Securities and Exchange Commission  
100 F. Street, NE  
Washington, D.C. 20549-1090

**Re: CBOE Proposed Rule Change to Adopt Rules in Connection With  
S&P 500 Option Variance Basket Trades,  
SR-CBOE-2011-007, Exchange Act Release No. 65725**

Dear Ms. Murphy:

The Chicago Board Options Exchange, Incorporated (the “**Exchange**” or “**CBOE**”) is writing in response to a request for comment by the Securities and Exchange Commission (the “**Commission**”) on our own proposed rule change (SR-CBOE-2011-007, the “**Proposed Rule**”).<sup>1</sup> The filing proposes an innovative offering called the S&P 500 variance trade (“**Variance Trade**”), a product intended to replicate S&P 500 implied variance in a single transaction.<sup>2</sup> The dramatic growth in volatility-based products in recent years reflects market demand to hedge or implement a view on volatility. Variance Trades will provide investors with a more efficient way to trade S&P 500 volatility. Unlike other products currently available in the marketplace, a Variance Trade represents a portfolio of S&P 500 index options (“SPX”) intended to replicate a precise economic exposure, namely implied variance. We urge the Commission to approve our proposal as

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<sup>1</sup> Securities Exchange Act Release No. 65725, 76 FR 71092 (November 16, 2011).

<sup>2</sup> The volatility of an asset can be expressed as the square root of its variance. In contrast to realized variance, implied variance refers to the market’s expectation of variance going forward.

it would give investors a powerful tool to isolate and hedge forward implied variance risk inherent in their portfolios without the cumbersome need to execute multiple trades to gain such an exposure.

### **Overview of a Variance Trade: Matching, Execution and Settlement**

As described in the Exchange's Proposed Rule filing, the unit of trading for a Variance Trade will be a "basket" consisting of a portfolio of SPX options. Each Variance Trade will be assigned a unique ticker symbol and will trade using a special quoting convention similar to the over-the-counter ("OTC") convention for quoting variance swaps. The display and trading of Variance Trades will be entirely electronic and will be handled in a manner analogous to the display and trading of typical listed options. Eligible Exchange participants will be able to submit orders in Variance Trades for interaction with resting Variance Trade orders. Each trading interest in the disseminated quote for a Variance Trade will be ranked by an established CBOE matching algorithm and, in all cases, exposed to contra interest. No Variance Trade order will be allowed to "trade-through" the CBOE's book of orders for Variance Trades.

Once a match occurs, the Exchange will use a formula to deconstruct the matched Variance Trade into constituent SPX options that compose the Variance Trade basket. An algorithm will be used to calculate and assign trade prices for each SPX option in the Variance Trade. Once trade prices are determined for each constituent series, the Exchange system will execute and report the underlying constituent trades on the Exchange. The execution prices of the constituent SPX options are assigned the simulated option prices that cause the interim volatility value to equal the price at which the Variance Trade order was matched. Therefore, the price of the constituent options cannot be determined by the existing market for the applicable option series. Requiring that each constituent SPX option order be separately exposed and executed at the Exchange's then market price would risk breaking up the constituent parts of the Variance Trade and thus would break up the Variance Trade itself, which depends on execution between the parties of *all* of the constituent options.

### **The Execution Method for Constituent SPX Option Trades Is Consistent With the Exchange Act**

The Commission requests comment on whether the execution and reporting of the constituent SPX option trades without regard to existing bids and offers in SPX on the Exchange at the time of the transaction is consistent with the Exchange Act and what, if any, potential impact the proposal might have on market participants.

The Exchange believes that orders and quotes in individual SPX option series would not be disadvantaged because they would not be bidding for or offering the entire Variance Trade, which is really the relevant order being executed. As described above, the

product traded in a Variance Trade would be the SPX option basket as an aggregated bundle. Each Variance Trade order will be exposed to the Exchange's auction market for Variance Trade orders and matched according to an established CBOE matching algorithm, albeit executed and settled in component parts at a benchmark price. Not only would Exchange participants be fully aware that the constituent SPX option trades will not be exposed to bids and offers in SPX on the Exchange, imposing such a condition would impede and frustrate participants' desire to enter into Variance Trades and achieve their investment objectives. Introducing an exchange-listed product which allows investors to place a single order expressed in volatility terms that permits those investors to establish a specific volatility profile is consistent with Section 6(b)(5) of the Exchange Act in that it removes impediments to, and perfects the mechanism for, a free and open market.

Once a Variance Trade is matched with contra interest, the Variance Trade is deconstructed into constituent SPX orders which are then executed. These executions occur at prices that are not based, directly or indirectly, on the quoted prices of the applicable series at the time of execution and for which the material terms were not reasonably determinable at the time the commitment to execute the basket and constituent trades was made. The central material term that is not determinable at the time the commitment to trade the basket is made is the prices of the constituent orders. This makes the execution construct for constituent SPX orders analogous to "benchmark" trades. While the benchmark trade exception in the Options Linkage Plan is geared toward inter-market trade-throughs, the logic supporting the exemption should apply to Variance Trade constituent executions.

The Commission's approach in approving benchmark exceptions considered that the benefit to investors of benchmark trades coupled with the limiting and formulaic nature of benchmark pricing, warranted executions at prices through existing orders in the marketplace. A similar logic applies here. The fact that SPX is only traded on CBOE should not alter the conclusion that benchmark trades, because they utilize transparent pricing methods that do not take into account the quoted market in the applicable security, need to be exempt from certain priority considerations. The Commission has found the benchmark exceptions to be necessary and appropriate in the public interest and otherwise in furtherance of the Exchange Act. The balance of interest in exempting constituent SPX trades from certain priority considerations is even stronger here because, as explained above, the relevant trading interest – the Variance Trade itself – is fully exposed to the Exchange's auction market. The exception is only necessary at the level of constituent trades. Given that listed options may only trade on registered exchanges (unlike stocks), it makes eminent sense for the Commission to adopt a flexible approach to provide a tailored and limited exception to priority considerations for constituent SPX trades, by applying the principles underlying the benchmark exception in the Options Linkage Plan to this rule proposal.

The demand for exchange-listed volatility products has increased dramatically in recent years. The Variance Trade is an innovative product that allows investors to efficiently trade S&P 500 implied variance. It would be extremely difficult, if not impossible, for individual market participants to replicate this product. Our Variance

Trade offering would be useful to customers and market participants on many levels, including by:

- allowing customers to hedge volatility and variance swap trades;
- allowing trading of variance products on a regulated exchange instead of the OTC market, in accordance with the regulated exchange's rules and subject to the exchange's oversight; and
- encouraging product innovation of non-traditional order types for which there is growing market demand.

The Proposed Rule has been narrowly crafted to prevent abuse, while facilitating beneficial volatility trading and hedging activity that serves the needs of the marketplace. Specifically, the Variance Trade strategy would not unduly detract from the goals of ensuring competition and price discovery in the options markets because as discussed above, the Variance Trade order itself will be fully exposed to the Exchange's price discovery mechanism and will be matched with contra orders according to established matching rules. The parties to the Variance Trade will be focused on a singular volatility profile rather than on a potentially unmanageable grouping of individual component orders. To cause the interim volatility value to equal the price at which the Variance Trade order was matched, the execution prices of the constituent SPX options must be assigned the algorithm-generated values. Requiring that one or more constituent trades be separately executed from the package and at prices different than the prices assigned to achieve the necessary overall price would leave investors and other market participants without a means of executing this beneficial trading strategy.

Notably, the algorithm used to deconstruct a matched Variance Trade is based on a body of knowledge that sets forth the construction of a precise portfolio of options that replicates implied variance, in which both the trade prices *and* trade quantities of constituent SPX options are impacted by the price of the Variance Trade. The implied variance exposure that the investor seeks to achieve when entering a Variance Trade can be gained *only* if positions in *all* constituent option series are transacted in the assigned quantities in their entirety. Requiring that some constituent trades be executed separately from the Variance Trade would materially alter the pricing of the Variance Trade as well as its variance exposure, and would require the investor to execute separate trades in one or more constituent SPX options in an attempt to achieve the objective variance exposure. Requiring that positions be assigned different prices than those assigned by the algorithm would mean that either 1) the Variance Trade execution price must be modified or 2) a different and less efficient algorithm would be required to assign prices to certain constituent SPX options to reach the trade's stated execution price. Both alternatives destroy the appeal and elegance of the Variance Trade process.

The Commission has in the past recognized the value of innovative products that respond to investor needs and has encouraged them, by providing carefully tailored, limited exceptions to investor protection rules such as price protection rules. Variance Trades are consistent with existing exceptions and would promote more efficient markets by allowing investors and other market participants to replicate S&P 500 implied variance

in a single transaction. Approval of the proposal would permit the constituent SPX option trades of a Variance Trade to be executed and reported without regard to existing bids and offers in SPX on the Exchange, *where the Variance Trade itself has been fully exposed to the Exchange's price discovery mechanism*, and would strike an appropriate balance to further both the goals of price protection and promoting more efficient markets.

### **The Constituent SPX Trades Should Be Reported With a Distinct Indicator**

The Commission requests comment on the use of a benchmark trade indicator for informational purposes when reporting the constituent SPX trades of a Variance Trade, “though such trades would not be benchmark trades pursuant to Section 5(b)(xi) of the Linkage Plan, which by its terms applies only to inter-market order protection.” CBOE believes that constituent executions, because they clearly fall within the definition of a benchmark trade, are more than analogous to benchmark trades. We proposed the use of the benchmark trade indicator so that SPX participants would know that the prices of the executed SPX constituent trades were not related to the quoted SPX prices at the time of execution, which is how the benchmark indicator would be used in the context of options traded on more than one exchange. The objective is to mark these trades appropriately to alert SPX market participants of the nature of the constituent trades, so as to avoid any market confusion, and to facilitate surveillance of these trades.

### **The Commission Should Approve the Rule Filing**

Pursuant to Section 19(b)(2)(C) of the Exchange Act, the Commission must approve a proposed rule change of an SRO if it finds that the proposal is consistent with the requirements of the Act and the rules and regulations thereunder. For the reasons described in this letter, the Proposed Rule fulfills this standard. Specifically, the Proposed Rule is consistent with Section 6(b)(5) of the Exchange Act, which requires, among other things, that the Exchange's rules be designed to promote just and equitable principles of trade and be designed to remove impediments to, and to perfect the mechanism for, a free and open market. The introduction of the Variance Trade will allow market participants to more efficiently trade an entire option portfolio replicating S&P 500 implied variance. Currently, comparable investment strategies can only be effectuated in the OTC market, and not as efficiently as the proposed Variance Trade process would be. Variance Trades will allow market participants to trade S&P 500 implied variance in an environment subject to exchange-based rules that provides price transparency and eliminates contra-party risk. In addition, availability on an exchange would make this trading strategy available to a wider range of investors at lower costs.

For all of these reasons, the Proposed Rule is consistent with the requirements of the Act and should be approved. We believe the record, including the rule proposal, this letter, market principles and the fact that no opposing comments have been filed, strongly supports the benefits of the rule and compels approval.

We appreciate the opportunity to submit these comments and respectfully request that the Commission approve the Proposed Rule. Please contact me at 312-786-7464 if you have any questions regarding this letter.

Sincerely,

A handwritten signature in cursive script that reads "Angelo Evangelou".

Angelo Evangelou

cc: Robert Cook, SEC Division of Trading & Markets  
Heather Seidel, SEC Division of Trading & Markets  
Richard Holley, SEC Division of Trading & Markets