

Required fields are shown with yellow backgrounds and asterisks.

Filing by NASDAQ OMX PHLX LLC.  
Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Initial *	Amendment *	Withdrawal	Section 19(b)(2) *	Section 19(b)(3)(A) *	Section 19(b)(3)(B) *
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Rule		
Pilot	Extension of Time Period for Commission Action *	Date Expires *	<input type="checkbox"/> 19b-4(f)(1)	<input type="checkbox"/> 19b-4(f)(4)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/> 19b-4(f)(2)	<input type="checkbox"/> 19b-4(f)(5)	
			<input type="checkbox"/> 19b-4(f)(3)	<input checked="" type="checkbox"/> 19b-4(f)(6)	

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010	Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934
Section 806(e)(1) *	Section 806(e)(2) *
<input type="checkbox"/>	<input type="checkbox"/>
	Section 3C(b)(2) *
	<input type="checkbox"/>

Exhibit 2 Sent As Paper Document	Exhibit 3 Sent As Paper Document
<input type="checkbox"/>	<input type="checkbox"/>

**Description**

Provide a brief description of the action (limit 250 characters, required when Initial is checked \*).

A proposal to replace current Rule 1092 entitled Obvious Errors and Catastrophic Errors, with new Rule 1092, entitled Nullification and Adjustment of Options Transactions including Obvious Errors.

**Contact Information**

Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.

First Name *	Edith	Last Name *	Hallahan
Title *	Principal Associate General Counsel		
E-mail *	edith.hallahan@nasdaq.com		
Telephone *	(215) 496-5179	Fax	(215) 496-6729

**Signature**

Pursuant to the requirements of the Securities Exchange Act of 1934,

has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

(Title \*)

Date	05/07/2015	Executive Vice President and General Counsel
By	Edward S. Knight	<div style="border: 1px solid black; width: 100%; height: 20px; background-color: #cccccc;"></div>
	(Name *)	<div style="border: 1px solid black; width: 100%; height: 20px; background-color: #cccccc; display: flex; justify-content: center; align-items: center;">edward.knight@nasdaq.com</div>

NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EFFF website.

**Form 19b-4 Information \***

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The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.

**Exhibit 1 - Notice of Proposed Rule Change \***

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

**Exhibit 1A- Notice of Proposed Rule Change, Security-Based Swap Submission, or Advance Notice by Clearing Agencies \***

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

**Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications**

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Exhibit Sent As Paper Document

Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.

**Exhibit 3 - Form, Report, or Questionnaire**

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Exhibit Sent As Paper Document

Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.

**Exhibit 4 - Marked Copies**

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The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.

**Exhibit 5 - Proposed Rule Text**

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The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change.

**Partial Amendment**

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If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

1. Text of the Proposed Rule Change

Pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> NASDAQ OMX PHLX LLC (“Exchange” or “Phlx”) is filing with the Securities and Exchange Commission (“Commission”) a proposal to replace current Rule 1092 (“Current Rule”), entitled “Obvious Errors and Catastrophic Errors,” with new Rule 1092 (“Proposed Rule”), entitled “Nullification and Adjustment of Options Transactions including Obvious Errors.” Rule 1092 relates to the adjustment and nullification of electronic options transactions that occur on the Exchange.<sup>3</sup>

A notice of the proposed rule change for publication in the Federal Register is attached hereto as Exhibit 1 and a copy of the applicable portion of the Exchange’s Rules is attached hereto as Exhibit 5.

(b) Not applicable.

(c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved by senior management of the Exchange pursuant to authority delegated by the Board of Directors of the Exchange (the “Board”) on July 16, 2014. Exchange staff will advise the Board of any action taken pursuant to delegated authority. No other action by the Exchange is necessary for the filing of the rule change.

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> Disputes regarding trades that occur on the options trading floor are addressed by Rule 124.

Questions and comments on the proposed rule change may be directed to Edith Hallahan, The NASDAQ OMX Group, Inc., at 215-496-5179.

3. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change.

(a) Purpose

**Background**

For several months the Exchange has been working with other options exchanges to identify ways to improve the process related to the adjustment and nullification of erroneous options transactions. The goal of the process that the options exchanges have undertaken is to adopt harmonized rules related to the adjustment and nullification of erroneous options transactions as well as a specific provision related to coordination in connection with large-scale events involving erroneous options transactions. As described below, the Exchange believes that the changes the options exchanges and the Exchange have agreed to propose will provide transparency and finality with respect to the adjustment and nullification of erroneous options transactions. Particularly, the proposed changes seek to achieve consistent results for participants across U.S. options exchanges while maintaining a fair and orderly market, protecting investors and protecting the public interest.

The Proposed Rule is the culmination of this coordinated effort and reflects discussions by the options exchanges to universally adopt: (1) certain provisions already in place on one or more options exchanges; and (2) new provisions that the options exchanges collectively believe will improve the handling of erroneous options transactions. Thus, although the Proposed Rule is in many ways similar to and based on the Exchange's Current Rule, the Exchange is adopting various provisions to conform

with existing rules of one or more options exchanges and also to adopt rules that are not currently in place on any options exchange. As noted above, in order to adopt a rule that is similar in most material respects to the rules adopted by other options exchanges, the Exchange proposes to delete the Current Rule in its entirety and to replace it with the Proposed Rule.

The Exchange notes that it has proposed additional objective standards in the Proposed Rule as compared to the Current Rule. The Exchange also notes that the Proposed Rule will ensure that the Exchange will have the same standards as all other options exchanges. However, there are still areas under the Proposed Rule where subjective determinations need to be made by Exchange personnel with respect to the calculation of Theoretical Price. The Exchange notes that the Exchange and all other options exchanges have been working to further improve the review of potentially erroneous transactions as well as their subsequent adjustment by creating an objective and universal way to determine Theoretical Price in the event a reliable NBBO is not available. For instance, the Exchange and all other options exchanges may utilize an independent third party to calculate and disseminate or make available Theoretical Price. However, this initiative requires additional exchange and industry discussion as well as additional time for development and implementation. The Exchange will continue to work with other options exchanges and the options industry towards the goal of additional objectivity and uniformity with respect to the calculation of Theoretical Price.

As additional background, the Exchange believes that the Proposed Rule supports an approach consistent with long-standing principles in the options industry under which the general policy is to adjust rather than nullify transactions. The Exchange

acknowledges that adjustment of transactions is contrary to the operation of analogous rules applicable to the equities markets, where erroneous transactions are typically nullified rather than adjusted and where there is no distinction between the types of market participants involved in a transaction. For the reasons set forth below, the Exchange believes that the distinctions in market structure between equities and options markets continue to support these distinctions between the rules for handling obvious errors in the equities and options markets. The Exchange also believes that the Proposed Rule properly balances several competing concerns based on the structure of the options markets.

Various general structural differences between the options and equities markets point toward the need for a different balancing of risks for options market participants and are reflected in the Proposed Rule. Option pricing is formulaic and is tied to the price of the underlying stock, the volatility of the underlying security and other factors. Because options market participants can generally create new open interest in response to trading demand, as new open interest is created, correlated trades in the underlying or related series are generally also executed to hedge a market participant's risk. This pairing of open interest with hedging interest differentiates the options market specifically (and the derivatives markets broadly) from the cash equities markets. In turn, the Exchange believes that the hedging transactions engaged in by market participants necessitates protection of transactions through adjustments rather than nullifications when possible and otherwise appropriate.

The options markets are also quote driven markets dependent on liquidity providers to an even greater extent than equities markets. In contrast to the

approximately 7,000 different securities traded in the U.S. equities markets each day, there are more than 500,000 unique, regularly quoted option series. Given this breadth in options series the options markets are more dependent on liquidity providers than equities markets; such liquidity is provided most commonly by registered market makers but also by other professional traders. With the number of instruments in which registered market makers must quote and the risk attendant with quoting so many products simultaneously, the Exchange believes that those liquidity providers should be afforded a greater level of protection. In particular, the Exchange believes that liquidity providers should be allowed protection of their trades given the fact that they typically engage in hedging activity to protect them from significant financial risk to encourage continued liquidity provision and maintenance of the quote-driven options markets.

In addition to the factors described above, there are other fundamental differences between options and equities markets which lend themselves to different treatment of different classes of participants that are reflected in the Proposed Rule. For example, there is no trade reporting facility in the options markets. Thus, all transactions must occur on an options exchange. This leads to significantly greater retail customer participation directly on exchanges than in the equities markets, where a significant amount of retail customer participation never reaches the Exchange but is instead executed in off-exchange venues such as alternative trading systems, broker-dealer market making desks and internalizers. In turn, because of such direct retail customer participation, the exchanges have taken steps to afford those retail customers - generally Priority Customers - more favorable treatment in some circumstances.

### **Definitions**

The Exchange proposes to adopt various definitions that will be used in the Proposed Rule, as described below.

First, the Exchange proposes to adopt a definition of “Customer,” to make clear that this term would not include any broker-dealer or professional.<sup>4</sup> Although other portions of the Exchange’s rules address the capacity of market participants, including customers, the proposed definition is consistent with such rules and the Exchange believes it is important for all options exchanges to have the same definition of Customer in the context of nullifying and adjusting trades in order to have harmonized rules. As set forth in detail below, orders on behalf of a Customer are in many cases treated differently than non-Customer orders in light of the fact that Customers are not necessarily immersed in the day-to-day trading of the markets, are less likely to be watching trading activity in a particular option throughout the day, and may have limited funds in their trading accounts.

Second, the Exchange proposes to adopt definitions for both an “erroneous sell transaction” and an “erroneous buy transaction.” As proposed, an erroneous sell transaction is one in which the price received by the person selling the option is erroneously low, and an erroneous buy transaction is one in which the price paid by the person purchasing the option is erroneously high. This provision helps to reduce the possibility that a party can intentionally submit an order hoping for the market to move in

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<sup>4</sup> The term "professional" means any person or entity that (i) is not a broker or dealer in securities, and (ii) places more than 390 orders in listed options per day on average during a calendar month for its own beneficial account(s). See Rule 1000(b)(14).

their favor while knowing that the transaction will be nullified or adjusted if the market does not. For instance, when a market participant who is buying options in a particular series sees an aggressively priced sell order posted on the Exchange, and the buyer believes that the price of the options is such that it might qualify for obvious error, the option buyer can trade with the aggressively priced order, then wait to see which direction the market moves. If the market moves in their direction, the buyer keeps the trade and if it moves against them, the buyer calls the Exchange hoping to get the trade adjusted or busted.

Third, the Exchange proposes to define the term “Official” to mean an "Options Exchange Official" as that term is currently defined in Rule 1(w). Specifically, an Options Exchange Official is an Exchange staff member or contract employee designated as such by the Chief Regulatory Officer.

Fourth, the Exchange proposes to adopt a new term, a “Size Adjustment Modifier,” which would apply to individual transactions and would modify the applicable adjustment for orders under certain circumstances, as discussed in further detail below. As proposed, the Size Adjustment Modifier will be applied to individual transactions as follows:

<b>Number of Contracts per Execution</b>	<b>Adjustment – TP Plus/Minus</b>
1-50	N/A
51-250	2 times adjustment amount
251-1000	2.5 times adjustment amount
1001 or more	3 times adjustment amount

The Size Adjustment Modifier attempts to account for the additional risk that the parties to the trade undertake for transactions that are larger in scope. The Exchange

believes that the Size Adjustment Modifier creates additional incentives to prevent more impactful Obvious Errors and it lessens the impact on the contra-party to an adjusted trade. The Exchange notes that these contra-parties may have preferred to only trade the size involved in the transaction at the price at which such trade occurred, and in trading larger size has committed a greater level of capital and bears a larger hedge risk.

When setting the proposed size adjustment modifier thresholds, the Exchange has tried to correlate the size breakpoints with typical small and larger “block” execution sizes of underlying stock. For instance, SEC Rule 10b-18(a)(5)(ii) defines a “block” as a quantity of stock that is at least 5,000 shares and a purchase price of at least \$50,000, among others.<sup>5</sup> Similarly, NYSE Rule 72 defines a “block” as an order to buy or sell “at least 10,000 shares or a quantity of stock having a market value of \$200,000 or more, whichever is less.” Thus, executions of 51 to 100 option contracts, which are generally equivalent to executions of 5,100 and 10,000 shares of underlying stock, respectively, are proposed to be subject to the lowest size adjustment modifier. An execution of over 1,000 contracts is roughly equivalent to a block transaction of more than 100,000 shares of underlying stock, and is proposed to be subject to the highest size adjustment modifier. The Exchange has correlated the proposed size adjustment modifier thresholds to smaller and larger scale blocks because the Exchange believes that the execution cost associated with transacting in block sizes scales according to the size of the block. In other words, in the same way that executing a 100,000 share stock order will have a proportionately larger market impact and will have a higher overall execution cost than executing a 500, 1,000 or 5,000 share order in the same stock, all other market factors being equal,

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<sup>5</sup> See 17 C.F.R. 240.10b-18(a)(5)(ii).

executing a 1,000 option contract order will have a larger market impact and higher overall execution cost than executing a 5, 10 or 50 contract option order.

### **Calculation of Theoretical Price**

#### ***Theoretical Price in Normal Circumstances***

Under both the Current Rule and the Proposed Rule, when reviewing a transaction as potentially erroneous, the Exchange needs to first determine the “Theoretical Price” of the option, i.e., the Exchange’s estimate of the correct market price for the option.

Pursuant to the Proposed Rule, if the applicable option series is traded on at least one other options exchange, then the Theoretical Price of an option series is the last national best bid (“NBB”) just prior to the trade in question with respect to an erroneous sell transaction or the last national best offer (“NBO”) just prior to the trade in question with respect to an erroneous buy transaction unless one of the exceptions described below exists. Thus, the Exchange proposes that whenever the Exchange has a reliable NBB or NBO, as applicable, just prior to the transaction, then the Exchange will use this NBB or NBO as the Theoretical Price.

The Exchange also proposes to specify in the Proposed Rule that when a single order received by the Exchange is executed at multiple price levels, the last NBB and last NBO just prior to the trade in question would be the last NBB and last NBO just prior to the Exchange’s receipt of the order.

The Exchange also proposes to set forth in the Proposed Rule various provisions governing specific situations where the NBB or NBO is not available or may not be reliable. Specifically, the Exchange is proposing additional detail specifying situations in which there are no quotes or no valid quotes (as defined below), when the national best

bid or offer (“NBBO”) is determined to be too wide to be reliable, and at the open of trading on each trading day.

*No Valid Quotes*

As is true under the Current Rule, pursuant to the Proposed Rule the Exchange will determine the Theoretical Price if there are no quotes or no valid quotes for comparison purposes. As proposed, quotes that are not valid are all quotes in the applicable option series published at a time where the last NBB is higher than the last NBO in such series (a “crossed market”), quotes published by the Exchange that were submitted by either party to the transaction in question, and quotes published by another options exchange against which the Exchange has declared self-help. Thus, in addition to scenarios where there are literally no quotes to be used as Theoretical Price, the Exchange will exclude quotes in certain circumstances if such quotes are not deemed valid. The Proposed Rule is consistent with the Exchange’s application of the Current Rule but the descriptions of the various scenarios where the Exchange considers quotes to be invalid represent additional detail that is not included in the Current Rule.

The Exchange notes that Exchange personnel currently are required to determine Theoretical Price in certain circumstances. While the Exchange continues to pursue alternative solutions that might further enhance the objectivity and consistency of determining Theoretical Price, the Exchange believes that the discretion currently afforded to Officials is appropriate in the absence of a reliable NBBO that can be used to set the Theoretical Price. Under the current Rule, Exchange personnel will generally consult and refer to data such as the prices of related series, especially the closest strikes in the option in question. Exchange personnel may also take into account the price of the

underlying security and the volatility characteristics of the option as well as historical pricing of the option and/or similar options.

***Wide Quotes***

Similarly, pursuant to the Proposed Rule the Exchange will determine the Theoretical Price if the bid/ask differential of the NBB and NBO for the affected series just prior to the erroneous transaction was equal to or greater than the Minimum Amount set forth below and there was a bid/ask differential less than the Minimum Amount during the 10 seconds prior to the transaction. If there was no bid/ask differential less than the Minimum Amount during the 10 seconds prior to the transaction then the Theoretical Price of an option series is the last NBB or NBO just prior to the transaction in question. The Exchange proposes to use the following chart to determine whether a quote is too wide to be reliable:

<b>Bid Price at Time of Trade</b>	<b>Minimum Amount</b>
Below \$2.00	\$0.75
\$2.00 to \$5.00	\$1.25
Above \$5.00 to \$10.00	\$1.50
Above \$10.00 to \$20.00	\$2.50
Above \$20.00 to \$50.00	\$3.00
Above \$50.00 to \$100.00	\$4.50
Above \$100.00	\$6.00

The Exchange notes that the values set forth above generally represent a multiple of 3 times the bid/ask differential requirements of other options exchanges, with certain rounding applied (e.g., \$1.25 as proposed rather than \$1.20).<sup>6</sup> The Exchange believes that basing the Wide Quote table on a multiple of the permissible bid/ask differential rule provides a reasonable baseline for quotations that are indeed so wide that they cannot be

<sup>6</sup> See, e.g., NYSE Arca Options Rule 6.37(b)(1).

considered reliable for purposes of determining Theoretical Price unless they have been consistently wide. As described above, while the Exchange will determine Theoretical Price when the bid/ask differential equals or exceeds the amount set forth in the chart above and within the previous 10 seconds there was a bid/ask differential smaller than such amount, if a quote has been persistently wide for at least 10 seconds the Exchange will use such quote for purposes of Theoretical Price. The Exchange believes that there should be a greater level of protection afforded to market participants that enter the market when there are liquidity gaps and price fluctuations. The Exchange does not believe that a similar level of protection is warranted when market participants choose to enter a market that is wide and has been consistently wide for some time. The Exchange notes that it has previously determined that, given the largely electronic nature of today's markets, as little as one second (or less) is a long enough time for market participants to receive, process and account for and respond to new market information.<sup>7</sup> While introducing this new provision the Exchange believes it is being appropriately cautious by selecting a time frame that is an order of magnitude above and beyond what the Exchange has previously determined is sufficient for information dissemination. The table above bases the wide quote provision off of bid price in order to provide a relatively straightforward beginning point for the analysis.

As an example, assume an option is quoted \$3.00 by \$6.00 with 50 contracts posted on each side of the market for an extended period of time. If a market participant

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<sup>7</sup> See, e.g., Rule 1080(c)(ii)(C), which requires certain orders to be exposed for at least one second before they can be executed; see also Securities Exchange Act Release No. 66306 (February 2, 2012), 77 FR 6608 (February 8, 2012) (SR-BX-2011-084) (order granting approval of proposed rule change to reduce the duration of the PIP from one second to one hundred milliseconds).

were to enter a market order to buy 20 contracts the Exchange believes that the buyer should have a reasonable expectation of paying \$6.00 for the contracts which they are buying. This should be the case even if immediately after the purchase of those options, the market conditions change and the same option is then quoted at \$3.75 by \$4.25. Although the quote was wide according to the table above at the time immediately prior to and the time of the execution of the market order, it was also well established and well known. The Exchange believes that an execution at the then prevailing market price should not in and of itself constitute an erroneous trade.

### ***Transactions at the Open***

Under the Proposed Rule, for a transaction occurring as part of the Opening Process<sup>8</sup> the Exchange will determine the Theoretical Price where there is no NBB or NBO for the affected series just prior to the erroneous transaction or if the bid/ask differential of the NBBO just prior to the erroneous transaction is equal to or greater than the Minimum Amount set forth in the chart proposed for the wide quote provision described above. The Exchange believes that this discretion is necessary because it is consistent with other scenarios in which the Exchange will determine the Theoretical Price if there are no quotes or no valid quotes for comparison purposes, including the wide quote provision proposed by the Exchange as described above. If, however, there are valid quotes and the bid/ask differential of the NBBO is less than the Minimum Amount set forth in the chart proposed for the wide quote provision described above, then the Exchange will use the NBB or NBO just prior to the transaction as it would in any other normal review scenario.

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<sup>8</sup> See Exchange Rule 1017 for a description of the Exchange's Opening Process.

As an example of an erroneous transaction for which the NBBO is wide at the open, assume the NBBO at the time of the opening transaction is \$1.00 x \$5.00 and the opening transaction takes place at \$1.25. The Exchange would be responsible for determining the Theoretical Price because the NBBO was wider than the applicable minimum amount set forth in the wide quote provision as described above. The Exchange believes that it is necessary to determine theoretical price at the open in the event of a wide quote at the open for the same reason that the Exchange has proposed to determine theoretical price during the remainder of the trading day pursuant to the proposed wide quote provision, namely that a wide quote cannot be reliably used to determine Theoretical Price because the Exchange does not know which of the two quotes, the NBB or the NBO, is closer to the real value of the option.

### **Obvious Errors**

The Exchange proposes to adopt numerical thresholds that would qualify transactions as “Obvious Errors.” These thresholds are similar to those in place under the Current Rule. As proposed, a transaction will qualify as an Obvious Error if the Exchange receives a properly submitted filing and the execution price of a transaction is higher or lower than the Theoretical Price for the series by an amount equal to at least the amount shown below:

<b>Theoretical Price</b>	<b>Minimum Amount</b>
Below \$2.00	\$0.25
\$2.00 to \$5.00	\$0.40
Above \$5.00 to \$10.00	\$0.50
Above \$10.00 to \$20.00	\$0.80
Above \$20.00 to \$50.00	\$1.00
Above \$50.00 to \$100.00	\$1.50
Above \$100.00	\$2.00

Applying the Theoretical Price, as described above, to determine the applicable threshold and comparing the Theoretical Price to the actual execution price provides the Exchange with an objective methodology to determine whether an Obvious Error occurred. The Exchange believes that the proposed amounts are reasonable as they are generally consistent with the standards of the Current Rule and reflect a significant disparity from Theoretical Price. The Exchange notes that the Minimum Amounts in the Proposed Rule and as set forth above are identical to the Current Rule except for the last two categories, for options where the Theoretical Price is above \$50.00 to \$100.00 and above \$100.00. The Exchange believes that this additional granularity is reasonable because given the proliferation of additional strikes that have been created in the past several years there are many more high-priced options that are trading with open interest for extended periods. The Exchange believes that it is appropriate to account for these high-priced options with additional Minimum Amount levels for options with Theoretical Prices above \$50.00.

Under the Proposed Rule, a party that believes that it participated in a transaction that was the result of an Obvious Error must notify an Official in the manner specified from time to time by the Exchange in a notice distributed to members and member organizations. The Exchange currently requires electronic notification through a web-based application but believes that maintaining flexibility in the Rule is important to allow for changes to the process.

The Exchange also proposes to adopt notification timeframes that must be met in order for a transaction to qualify as an Obvious Error. Specifically, as proposed a filing must be received by the Exchange within thirty (30) minutes of the execution with respect to an execution of a Customer order and within fifteen (15) minutes of the

execution for any other participant. The Exchange also proposes to provide additional time for trades that are routed through other options exchanges to the Exchange. Under the Proposed Rule, any other options exchange will have a total of forty-five (45) minutes for Customer orders and thirty (30) minutes for non-Customer orders, measured from the time of execution on the Exchange, to file with the Exchange for review of transactions routed to the Exchange from that options exchange and executed on the Exchange (“linkage trades”). This includes filings on behalf of another options exchange filed by a third-party routing broker if such third-party broker identifies the affected transactions as linkage trades. In order to facilitate timely reviews of linkage trades the Exchange will accept filings from either the other options exchange or, if applicable, the third-party routing broker that routed the applicable order(s). The additional fifteen (15) minutes provided with respect to linkage trades shall only apply to the extent the options exchange that originally received and routed the order to the Exchange itself received a timely filing from the entering participant (i.e., within 30 minutes if a Customer order or 15 minutes if a non-Customer order). The Exchange believes that additional time for filings related to Customer orders is appropriate in light of the fact that Customers are not necessarily immersed in the day-to-day trading of the markets and are less likely to be watching trading activity in a particular option throughout the day. The Exchange believes that the additional time afforded to linkage trades is appropriate given the interconnected nature of the markets today and the practical difficulty that an end user may face in getting requests for review filed in a timely fashion when the transaction originated at a different exchange than where the error took place. Without this additional time the Exchange believes it would be common for a market participant to

satisfy the filing deadline at the original exchange to which an order was routed but that requests for review of executions from orders routed to other options exchanges would not qualify for review as potential Obvious Errors by the time filings were received by such other options exchanges, in turn leading to potentially disparate results under the applicable rules of options exchanges to which the orders were routed.

Pursuant to the Proposed Rule, an Exchange Officer may review a transaction believed to be erroneous on his/her own motion in the interest of maintaining a fair and orderly market and for the protection of investors. This proposed provision is designed to give an Exchange Officer the ability to provide parties relief in those situations where they have failed to report an apparent error within the established notification period. A transaction reviewed pursuant to the proposed provision may be nullified or adjusted only if it is determined by the Exchange Officer that the transaction is erroneous in accordance with the provisions of the Proposed Rule, provided that the time deadlines for filing a request for review described above shall not apply. The Proposed Rule would require the Exchange Officer to act as soon as possible after becoming aware of the transaction; action by the Exchange Officer would ordinarily be expected on the same day that the transaction occurred. However, because a transaction under review may have occurred near the close of trading or due to unusual circumstances, the Proposed Rule provides that the Exchange Officer shall act no later than 8:30 a.m. Eastern Time on the next trading day following the date of the transaction in question.

The Exchange also proposes to state that a party affected by a determination to nullify or adjust a transaction after an Exchange Officer's review on his or her own motion may appeal such determination in accordance with paragraph (k), which is

described below. The Proposed Rule would make clear that a determination by an Exchange Officer not to review a transaction or determination not to nullify or adjust a transaction for which a review was conducted on an Exchange Officer's own motion is not appealable and further that if a transaction is reviewed and a determination is rendered pursuant to another provision of the Proposed Rule, no additional relief may be granted by an Exchange Officer.

If it is determined that an Obvious Error has occurred based on the objective numeric criteria and time deadlines described above, the Exchange will adjust or nullify the transaction as described below and promptly notify both parties to the trade electronically or via telephone. The Exchange proposes different adjustment and nullification criteria for Customers and non-Customers.

As proposed, where neither party to the transaction is a Customer, the execution price of the transaction will be adjusted by the Official pursuant to the table below.

<b>Theoretical Price (TP)</b>	<b>Buy Transaction Adjustment – TP Plus</b>	<b>Sell Transaction Adjustment – TP Minus</b>
Below \$3.00	\$0.15	\$0.15
At or above \$3.00	\$0.30	\$0.30

The Exchange believes that it is appropriate to adjust to prices a specified amount away from Theoretical Price rather than to adjust to Theoretical Price because even though the Exchange has determined a given trade to be erroneous in nature, the parties in question should have had some expectation of execution at the price or prices submitted. Also, it is common that by the time it is determined that an obvious error has occurred additional hedging and trading activity has already occurred based on the executions that previously happened. The Exchange is concerned that an adjustment to Theoretical Price in all cases

would not appropriately incentivize market participants to maintain appropriate controls to avoid potential errors.

Further, as proposed any non-Customer Obvious Error exceeding 50 contracts will be subject to the Size Adjustment Modifier described above. The Exchange believes that it is appropriate to apply the Size Adjustment Modifier to non-Customer orders because the hedging cost associated with trading larger sized options orders and the market impact of larger blocks of underlying can be significant.

As an example of the application of the Size Adjustment Modifier, assume Exchange A has a quoted bid to buy 50 contracts at \$2.50, Exchange B has a quoted bid to buy 100 contracts at \$2.05 and there is no other options exchange quoting a bid priced higher than \$2.00. Assume that the NBBO is \$2.50 by \$3.00. Finally, assume that all orders quoted and submitted to Exchange B in connection with this example are non-Customer orders.

- Assume Exchange A's quoted bid at \$2.50 is either executed or cancelled.
- Assume Exchange B immediately thereafter receives an incoming market order to sell 100 contracts.
- The incoming order would be executed against Exchange B's resting bid at \$2.05 for 100 contracts.
- Because the 100 contract execution of the incoming sell order was priced at \$2.05, which is \$0.45 below the Theoretical Price of \$2.50, the 100 contract execution would qualify for adjustment as an Obvious Error.
- The normal adjustment process would adjust the execution of the 100 contracts to \$2.35 per contract, which is the Theoretical Price minus

\$0.15.

- However, because the execution would qualify for the Size Adjustment Modifier of 2 times the adjustment price, the adjusted transaction would instead be to \$2.20 per contract, which is the Theoretical Price minus \$0.30.

By reference to the example above, the Exchange reiterates that it believes that a Size Adjustment Modifier is appropriate, as the buyer in this example was originally willing to buy 100 contracts at \$2.05 and ended up paying \$2.20 per contract for such execution. Without the Size Adjustment Modifier the buyer would have paid \$2.35 per contract. Such buyer may be advantaged by the trade if the Theoretical Price is indeed closer to \$2.50 per contract, however the buyer may not have wanted to buy so many contracts at a higher price and does incur increasing cost and risk due to the additional size of their quote. Thus, the proposed rule is attempting to strike a balance between various competing objectives, including recognition of cost and risk incurred in quoting larger size and incentivizing market participants to maintain appropriate controls to avoid errors.

In contrast to non-Customer orders, where trades will be adjusted if they qualify as Obvious Errors, pursuant the Proposed Rule a trade that qualifies as an Obvious Error will be nullified where at least one party to the Obvious Error is a Customer. The Exchange also proposes, however, that if any member or member organization submits requests to the Exchange for review of transactions pursuant to the Proposed Rule, and in aggregate that member or member organization has 200 or more Customer transactions under review concurrently and the orders resulting in such transactions were submitted

during the course of 2 minutes or less, where at least one party to the Obvious Error is a non-Customer, the Exchange will apply the non-Customer adjustment criteria described above to such transactions. The Exchange based its proposal of 200 transactions on the fact that the proposed level is reasonable as it is representative of an extremely large number of orders submitted to the Exchange that are, in turn, possibly erroneous. Similarly, the Exchange based its proposal of orders received in 2 minutes or less on the fact that this is a very short amount of time under which one member or member organization could generate multiple erroneous transactions. In order for a participant to have more than 200 transactions under review concurrently when the orders triggering such transactions were received in 2 minutes or less, the market participant will have far exceeded the normal behavior of customers deserving protected status.<sup>9</sup> While the Exchange continues to believe that it is appropriate to nullify transactions in such a circumstance if both participants to a transaction are Customers, the Exchange does not believe it is appropriate to place the overall risk of a significant number of trade breaks on non-Customers that in the normal course of business may have engaged in additional hedging activity or trading activity based on such transactions. Thus, the Exchange believes it is necessary and appropriate to protect non-Customers in such a circumstance by applying the non-Customer adjustment criteria, and thus adjusting transactions as set forth above, in the event a member or member organization has more than 200 transactions under review concurrently.

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<sup>9</sup> The Exchange notes that in the third quarter of this year across all options exchanges the average number of valid Customer orders received and executed was less than 38 valid orders every two minutes. The number of obvious errors resulting from valid orders is, of course, a very small fraction of such orders.

### **Catastrophic Errors**

Consistent with the Current Rule, the Exchange proposes to adopt separate numerical thresholds for review of transactions for which the Exchange does not receive a filing requesting review within the Obvious Error timeframes set forth above. Based on this review these transactions may qualify as “Catastrophic Errors.” As proposed, a Catastrophic Error will be deemed to have occurred when the execution price of a transaction is higher or lower than the Theoretical Price for the series by an amount equal to at least the amount shown below:

<b>Theoretical Price</b>	<b>Minimum Amount</b>
Below \$2.00	\$0.50
\$2.00 to \$5.00	\$1.00
Above \$5.00 to \$10.00	\$1.50
Above \$10.00 to \$20.00	\$2.00
Above \$20.00 to \$50.00	\$2.50
Above \$50.00 to \$100.00	\$3.00
Above \$100.00	\$4.00

Based on industry feedback on the Catastrophic Error thresholds set forth under the Current Rule, the thresholds proposed as set forth above are more granular and lower (i.e., more likely to qualify) than the thresholds under the Current Rule. As noted above, under the Proposed Rule as well as the Current Rule, parties have additional time to submit transactions for review as Catastrophic Errors. As proposed, notification requesting review must be received by an Official by 8:30 a.m. Eastern Time on the first trading day following the execution. For transactions in an expiring options series that take place on an expiration day, a party must notify an Official within 45 minutes after the close of trading that same day. As is true for requests for review under the Obvious

Error provision of the Proposed Rule, a party requesting review of a transaction as a Catastrophic Error must notify an Official in the manner specified from time to time by the Exchange in a notice distributed to members and member organizations. By definition, any execution that qualifies as a Catastrophic Error is also an Obvious Error. However, the Exchange believes it is appropriate to maintain these two types of errors because the Catastrophic Error provisions provide market participants with a longer notification period under which they may file a request for review with the Exchange of a potential Catastrophic Error than a potential Obvious Error. This provides an additional level of protection for transactions that are severely erroneous even in the event a participant does not submit a request for review in a timely fashion.

The Proposed Rule would specify the action to be taken by the Exchange if it is determined that a Catastrophic Error has occurred, as described below, and would require the Exchange to promptly notify both parties to the trade electronically or via telephone. In the event of a Catastrophic Error, the execution price of the transaction will be adjusted by an Official pursuant to the table below.

<b>Theoretical Price (TP)</b>	<b>Buy Transaction Adjustment – TP Plus</b>	<b>Sell Transaction Adjustment – TP Minus</b>
Below \$2.00	\$0.50	\$0.50
\$2.00 to \$5.00	\$1.00	\$1.00
Above \$5.00 to \$10.00	\$1.50	\$1.50
Above \$10.00 to \$20.00	\$2.00	\$2.00
Above \$20.00 to \$50.00	\$2.50	\$2.50
Above \$50.00 to \$100.00	\$3.00	\$3.00
Above \$100.00	\$4.00	\$4.00

Although Customer orders would be adjusted in the same manner as non-Customer

orders, any Customer order that qualifies as a Catastrophic Error will be nullified if the adjustment would result in an execution price higher (for buy transactions) or lower (for sell transactions) than the Customer's limit price. Based on industry feedback, the levels proposed above with respect to adjustment amounts are the same levels as the thresholds at which a transaction may be deemed a Catastrophic Error pursuant to the chart set forth above.

As is true for Obvious Errors as described above, the Exchange believes that it is appropriate to adjust to prices a specified amount away from Theoretical Price rather than to adjust to Theoretical Price because even though the Exchange has determined a given trade to be erroneous in nature, the parties in question should have had some expectation of execution at the price or prices submitted. Also, it is common that by the time it is determined that a Catastrophic Error has occurred additional hedging and trading activity has already occurred based on the executions that previously happened. The Exchange is concerned that an adjustment to Theoretical Price in all cases would not appropriately incentivize market participants to maintain appropriate controls to avoid potential errors. Further, the Exchange believes it is appropriate to maintain a higher adjustment level for Catastrophic Errors than Obvious Errors given the significant additional time that can potentially pass before an adjustment is requested and applied and the amount of hedging and trading activity that can occur based on the executions at issue during such time. For the same reasons, other than honoring the limit prices established for Customer orders, the Exchange has proposed to treat all market participants the same in the context of the Catastrophic Error provision. Specifically, the Exchange believes that treating market participants the same in this context will provide additional certainty to market

participants with respect to their potential exposure and hedging activities, including comfort that even if a transaction is later adjusted (i.e., past the standard time limit for filing under the Obvious Error provision), such transaction will not be fully nullified. However, as noted above, under the Proposed Rule where at least one party to the transaction is a Customer, the trade will be nullified if the adjustment would result in an execution price higher (for buy transactions) or lower (for sell transactions) than the Customer's limit price. The Exchange has retained the protection of a Customer's limit price in order to avoid a situation where the adjustment could be to a price that the Customer could not afford, which is less likely to be an issue for a market professional.

### **Significant Market Events**

In order to improve consistency for market participants in the case of a widespread market event and in light of the interconnected nature of the options exchanges, the Exchange proposes to adopt a new provision that calls for coordination between the options exchanges in certain circumstances and provides limited flexibility in the application of other provisions of the Proposed Rule in order to promptly respond to a widespread market event.<sup>10</sup> The Exchange proposes to describe such an event as a Significant Market Event, and to set forth certain objective criteria that will determine whether such an event has occurred. The Exchange developed these objective criteria in

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<sup>10</sup> Although the Exchange has proposed a specific provision related to coordination amongst options exchanges in the context of a widespread event, the Exchange does not believe that the Significant Market Event provision or any other provision of the proposed rule alters the Exchange's ability to coordinate with other options exchanges in the normal course of business with respect to market events or activity. The Exchange does already coordinate with other options exchanges to the extent possible if such coordination is necessary to maintain a fair and orderly market and/or to fulfill the Exchange's duties as a self-regulatory organization.

consultation with the other options exchanges by reference to historical patterns and events with a goal of setting thresholds that very rarely will be triggered so as to limit the application of the provision to truly significant market events. As proposed, a Significant Market Event will be deemed to have occurred when proposed criterion (A) below is met or exceeded or the sum of all applicable event statistics, where each is expressed as a percentage of the relevant threshold in criteria (A) through (D) below, is greater than or equal to 150% and 75% or more of at least one category is reached, provided that no single category can contribute more than 100% to the sum. All criteria set forth below will be measured in aggregate across all exchanges.

The proposed criteria for determining a Significant Market Event are as follows:

(A) Transactions that are potentially erroneous would result in a total Worst-Case Adjustment Penalty of \$30,000,000, where the Worst-Case Adjustment Penalty is computed as the sum, across all potentially erroneous trades, of: (i) \$0.30 (i.e., the largest Transaction Adjustment value listed in subparagraph (e)(3)(A) below); times; (ii) the contract multiplier for each traded contract; times (iii) the number of contracts for each trade; times (iv) the appropriate Size Adjustment Modifier for each trade, if any, as defined in subparagraph (e)(3)(A) below;

(B) Transactions involving 500,000 options contracts are potentially erroneous;

(C) Transactions with a notional value (i.e., number of contracts traded multiplied by the option premium multiplied by the contract multiplier) of \$100,000,000 are potentially erroneous;

(D) 10,000 transactions are potentially erroneous.

As described above, the Exchange proposes to adopt a the Worst Case Adjustment Penalty, proposed as criterion (A), which is the only criterion that can on its own result in an event being designated as a significant market event. The Worst Case Adjustment Penalty is intended to develop an objective criterion that can be quickly determined by the Exchange in consultation with other options exchanges that approximates the total overall exposure to market participants on the negatively impacted side of each transaction that occurs during an event. If the Worst Case Adjustment criterion equals or exceeds \$30,000,000, then an event is a Significant Market Event. As an example of the Worst Case Adjustment Penalty, assume that a single potentially erroneous transaction in an event is as follows: sale of 100 contracts of a standard option (i.e., an option with a 100 share multiplier). The highest potential adjustment penalty for this single transaction would be \$6,000, which would be calculated as \$0.30 times 100 (contract multiplier) times 100 (number of contracts) times 2 (applicable Size Adjustment Modifier). The Exchange would calculate the highest potential adjustment penalty for each of the potentially erroneous transactions in the event and the Worst Case Adjustment Penalty would be the sum of such penalties on the Exchange and all other options exchanges with affected transactions.

As described above, under the Proposed Rule if the Worst Case Adjustment Penalty does not equal or exceed \$30,000,000, then a Significant Market Event has occurred if the sum of all applicable event statistics (expressed as a percentage of the relevant thresholds), is greater than or equal to 150% and 75% or more of at least one category is reached. The Proposed Rule further provides that no single category can

contribute more than 100% to the sum. As an example of the application of this provision, assume that in a given event across all options exchanges that: (A) the Worst Case Adjustment Penalty is \$12,000,000 (40% of \$30,000,000), (B) 300,000 options contracts are potentially erroneous (60% of 500,000), (C) the notional value of potentially erroneous transactions is \$30,000,000 (30% of \$100,000,000), and (D) 12,000 transactions are potentially erroneous (120% of 10,000). This event would qualify as a Significant Market Event because the sum of all applicable event statistics would be 230%, far exceeding the 150% threshold. The 230% sum is reached by adding 40%, 60%, 30% and last, 100% (i.e., rounded down from 120%) for the number of transactions. The Exchange notes that no single category can contribute more than 100% to the sum and any category contributing more than 100% will be rounded down to 100%.

As an alternative example, assume a large-scale event occurs involving low-priced options with a small number of contracts in each execution. Assume in this event across all options exchanges that: (A) the Worst Case Adjustment Penalty is \$600,000 (2% of \$30,000,000), (B) 20,000 options contracts are potentially erroneous (4% of 500,000), (C) the notional value of potentially erroneous transactions is \$20,000,000 (20% of \$100,000,000), and (D) 20,000 transactions are potentially erroneous (200% of 10,000, but rounded down to 100%). This event would not qualify as a Significant Market Event because the sum of all applicable event statistics would be 126%, below the 150% threshold. The Exchange reiterates that as proposed, even when a single category other than criterion (A) is fully met, that does not necessarily qualify an event as a Significant Market Event.

The Exchange believes that the breadth and scope of the obvious error rules are appropriate and sufficient for handling of typical and common obvious errors. Coordination between and among the exchanges should generally not be necessary even when a member or member organization has an error that results in executions on more than one exchange. In setting the thresholds above the Exchange believes that the requirements will be met only when truly widespread and significant errors happen and the benefits of coordination and information sharing far outweigh the costs of the logistics of additional intra-exchange coordination. The Exchange notes that in addition to its belief that the proposed thresholds are sufficiently high, the Exchange has proposed the requirement that either criterion (A) is met or the sum of applicable event statistics for proposed (A) through (D) equals or exceeds 150% in order to ensure that an event is sufficiently large but also to avoid situations where an event is extremely large but just misses potential qualifying thresholds. For instance, the proposal is designed to help avoid a situation where the Worst Case Adjustment Penalty is \$15,000,000, so the event does not qualify based on criterion (A) alone, but there are transactions in 490,000 options contracts that are potentially erroneous (missing criterion (B) by 10,000 contracts), there transactions with a notional value of \$99,000,000 (missing criterion (C) by \$1,000,000), and there are 9,000 potentially erroneous transactions overall (missing criterion (D) by 1,000 transactions). The Exchange believes that the proposed formula, while slightly more complicated than simply requiring a certain threshold to be met in each category, may help to avoid inapplicability of the proposed provisions in the context of an event that would be deemed significant by most subjective measures but that barely misses each of the objective criteria proposed by the Exchange.

To ensure consistent application across options exchanges, in the event of a suspected Significant Market Event, the Exchange shall initiate a coordinated review of potentially erroneous transactions with all other affected options exchanges to determine the full scope of the event. Under the Proposed Rule, the Exchange will promptly coordinate with the other options exchanges to determine the appropriate review period as well as select one or more specific points in time prior to the transactions in question and use one or more specific points in time to determine Theoretical Price. Other than the selected points in time, if applicable, the Exchange will determine Theoretical Price as described above. For example, around the start of a Significant Market Event that is triggered by a large and aggressively priced buy order, three exchanges have multiple orders on the offer side of the market: Exchange A has offers priced at \$2.20, \$2.25, \$2.30 and several other price levels to \$3.00, Exchange B has offers at \$2.45, \$2.30 and several other price levels to \$3.00, Exchange C has offers at price levels between \$2.50 and \$3.00. Assume an event occurs starting at 10:05:25 a.m. ET and in this particular series the executions begin on Exchange A and subsequently begin to occur on Exchanges B and C. Without coordination and information sharing between the exchanges, Exchange B and Exchange C cannot know with certainty that whether or not the execution at Exchange A that happened at \$2.20 immediately prior to their executions at \$2.45 and \$2.50 is part of the same erroneous event or not. With proper coordination, the exchanges can determine that in this series, the proper point in time from which the event should be analyzed is 10:05:25 a.m. ET, and thus, the NBO of \$2.20 should be used as the Theoretical Price for purposes of all buy transactions in such options series that occurred during the event.

If it is determined that a Significant Market Event has occurred then, using the parameters agreed with respect to the times from which Theoretical Price will be calculated, if applicable, an Official will determine whether any or all transactions under review qualify as Obvious Errors. The Proposed Rule would require the Exchange to use the criteria in Proposed Rule 20.6(c), as described above, to determine whether an Obvious Error has occurred for each transaction that was part of the Significant Market Event. Upon taking any final action, the Exchange would be required to promptly notify both parties to the trade electronically or via telephone.

The execution price of each affected transaction will be adjusted by an Official to the price provided below, unless both parties agree to adjust the transaction to a different price or agree to bust the trade.

<b>Theoretical Price (TP)</b>	<b>Buy Transaction Adjustment – TP Plus</b>	<b>Sell Transaction Adjustment – TP Minus</b>
Below \$3.00	\$0.15	\$0.15
At or above \$3.00	\$0.30	\$0.30

Thus, the proposed adjustment criteria for Significant Market Events are identical to the proposed adjustment levels for Obvious Errors generally. In addition, in the context of a Significant Market Event, any error exceeding 50 contracts will be subject to the Size Adjustment Modifier described above. Also, the adjustment criteria would apply equally to all market participants (i.e., Customers and non-Customers) in a Significant Market Event. However, as is true for the proposal with respect to Catastrophic Errors, under the Proposed Rule where at least one party to the transaction is a Customer, the trade will be nullified if the adjustment would result in an execution price higher (for buy transactions) or lower (for sell transactions) than the Customer's limit price. The Exchange has

retained the protection of a Customer's limit price in order to avoid a situation where the adjustment could be to a price that the Customer could not afford, which is less likely to be an issue for a market professional. The Exchange has otherwise proposed to treat all market participants the same in the context of a Significant Market Event to provide additional certainty to market participants with respect to their potential exposure as soon as an event has occurred.

Another significant distinction between the proposed Obvious Error provision and the proposed Significant Market Event provision is that if the Exchange, in consultation with other options exchanges, determines that timely adjustment is not feasible due to the extraordinary nature of the situation, then the Exchange will nullify some or all transactions arising out of the Significant Market Event during the review period selected by the Exchange and other options exchanges. To the extent the Exchange, in consultation with other options exchanges, determines to nullify less than all transactions arising out of the Significant Market Event, those transactions subject to nullification will be selected based upon objective criteria with a view toward maintaining a fair and orderly market and the protection of investors and the public interest. For example, assume a Significant Market Event causes 25,000 potentially erroneous transactions and impacts 51 options classes. Of the 25,000 transactions, 24,000 of them are concentrated in a single options class. The exchanges may decide the most appropriate solution because it will provide the most certainty to participants and allow for the prompt resumption of regular trading is to bust all trades in the most heavily affected class between two specific points in time, while the other 1,000 trades across the other 50 classes are reviewed and adjusted as appropriate. A similar situation might arise

directionally where a Customer submits both erroneous buy and sell orders and the number of errors that happened that were erroneously low priced (i.e., erroneous sell orders) were 50,000 in number but the number of errors that were erroneously high (i.e., erroneous buy orders) were only 500 in number. The most effective and efficient approach that provides the most certainty to the marketplace in a reasonable amount of time while most closely following the generally prescribed obvious error rules could be to bust all of the erroneous sell transactions but to adjust the erroneous buy transactions.

With respect to rulings made pursuant to the proposed Significant Market Event provision the Exchange believes that the number of affected transactions is such that immediate finality is necessary to maintain a fair and orderly market and to protect investors and the public interest. Accordingly, rulings by the Exchange pursuant to the Significant Market Event provision would be non-appealable pursuant to the Proposed Rule.

### **Additional Provisions**

#### ***Mutual Agreement***

In addition to the objective criteria described above, the Proposed Rule also proposes to make clear that the determination as to whether a trade was executed at an erroneous price may be made by mutual agreement of the affected parties to a particular transaction. The Proposed Rule would state that a trade may be nullified or adjusted on the terms that all parties to a particular transaction agree, provided, however, that such agreement to nullify or adjust must be conveyed to the Exchange in a manner prescribed by the Exchange prior to 8:30 a.m. Eastern Time on the first trading day following the execution.

The Exchange also proposes to explicitly state that it is considered conduct inconsistent with just and equitable principles of trade for any member or member organization to use the mutual adjustment process to circumvent any applicable Exchange rule, the Act or any of the rules and regulations thereunder. Thus, for instance, a member or member organization is precluded from seeking to avoid applicable trade-through rules by executing a transaction and then adjusting such transaction to a price at which the Exchange would not have allowed it to execute at the time of the execution because it traded through the quotation of another options exchange. The Exchange notes that in connection with its obligations as a self-regulatory organization, the Exchange's Regulatory Department reviews adjustments to transactions to detect potential violations of Exchange rules or the Act and the rules and regulations thereunder.

### ***Trading Halts***

Exchange Rule 1047 describes the Exchange's authority to declare trading halts in one or more options traded on the Exchange. The Exchange proposes to make clear in the Proposed Rule that it will nullify any transaction that occurs during a trading halt in the affected option. If any trades occur notwithstanding a trading halt then the Exchange believes it appropriate to nullify such transactions. While the Exchange may halt options trading for various reasons, such a scenario almost certainly is due to extraordinary circumstances and is potentially the result of market-wide coordination to halt options trading or trading generally. Accordingly, the Exchange does not believe it is appropriate to allow trades to stand if such trades should not have occurred in the first place.

The Exchange proposes to adopt Commentary .03 to Rule 1092. Currently, Rule 1092(c)(iv) states that the Exchange will nullify any transaction that occurs: (a) during a

trading halt in the affected option on the Exchange; (b) with respect to equity options (including options overlying ETFs), during a trading halt on the primary listing market for the underlying security; (c) respecting index options, the trade occurred during a trading halt on the primary market in (1) underlying securities representing more than 10 percent of the current index value for stock index options, or (2) either component security of an Alpha Index for Alpha Index options; or (d) respecting Treasury security options, the trade occurred during a trading halt of the underlying Treasury security instituted by the United States Government. The Exchange proposes to relocate this provision to Commentary .03.

***Erroneous Print and Quotes in Underlying Security***

Market participants on the Exchange likely base the pricing of their orders submitted to the Exchange on the price of the underlying security for the option. Thus, the Exchange believes it is appropriate to adopt provisions that allow adjustment or nullification of transactions based on erroneous prints or erroneous quotes in the underlying security.

The Exchange proposes to adopt language in the Proposed Rule stating that a trade resulting from an erroneous print(s) disseminated by the underlying market that is later nullified by that underlying market shall be adjusted or busted as set forth in the Obvious Error provisions of the Proposed Rule, provided a party notifies an Official in a timely manner, as further described below. The Exchange proposes to define a trade resulting from an erroneous print(s) as any options trade executed during a period of time for which one or more executions in the underlying security are nullified and for one second thereafter. The Exchange believes that one second is an appropriate amount of

time in which an options trade would be directly based on executions in the underlying equity security. The Exchange also proposes to require that if a party believes that it participated in an erroneous transaction resulting from an erroneous print(s) pursuant to the proposed erroneous print provision it must notify an Official within the timeframes set forth in the Obvious Error provision described above. The Exchange has also proposed to state that the allowed notification timeframe commences at the time of notification by the underlying market(s) of nullification of transactions in the underlying security. Further, the Exchange proposes that if multiple underlying markets nullify trades in the underlying security, the allowed notification timeframe will commence at the time of the first market's notification.

As an example of a situation in which a trade results from an erroneous print disseminated by the underlying market that is later nullified by the underlying market, assume that a given underlying is trading in the \$49.00 - \$50.00 price range then has an erroneous print at \$5.00. Given that there is the potential perception that the underlying has gone through a dramatic price revaluation, numerous options trades could promptly trigger based off of this new price. However, because the price that triggered them was not a valid price it would be appropriate to review said option trades when the underlying print that triggered them is removed.

The Exchange also proposes to add a provision stating that a trade resulting from an erroneous quote(s) in the underlying security shall be adjusted or busted as set forth in the Obvious Error provisions of the Proposed Rule, provided a party notifies an Official in a timely manner, as further described below. Pursuant to the Proposed Rule, an erroneous quote occurs when the underlying security has a width of at least \$1.00 and has

a width at least five times greater than the average quote width for such underlying security during the time period encompassing two minutes before and after the dissemination of such quote. For purposes of the Proposed Rule, the average quote width will be determined by adding the quote widths of sample quotations at regular 15-second intervals during the four-minute time period referenced above (excluding the quote(s) in question) and dividing by the number of quotes during such time period (excluding the quote(s) in question).<sup>11</sup> Similar to the proposal with respect to erroneous prints described above, if a party believes that it participated in an erroneous transaction resulting from an erroneous quote(s) it must notify an Official in accordance with the notification provisions of the Obvious Error provision described above. The Proposed Rule, therefore, puts the onus on each member or member organization to notify the Exchange if such member or member organization believes that a trade should be reviewed pursuant to either of the proposed provisions, as the Exchange is not in position to determine the impact of erroneous prints or quotes on individual members or member organizations. The Exchange notes that it does not believe that additional time is necessary with respect to a trade based on an erroneous quote because a member or member organization has all information necessary to detect the error at the time of an option transaction that was triggered by an erroneous quote, which is in contrast to the proposed erroneous print provision that includes a dependency on an action by the market

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<sup>11</sup> The Exchange has proposed the price and time parameters for quote width and average quote width used to determine whether an erroneous quote has occurred based on established rules of options exchanges that currently apply such parameters. See e.g., CBOE Rule 6.25(a)(5); NYSE Arca Rule 6.87(a)(5). Based on discussions with these exchanges, the Exchange believes that the parameters are a reasonable approach to determine whether an erroneous quote has occurred for purposes of the proposed rule.

where the underlying security traded.

As an example of a situation in which a trade results from an erroneous quote in the underlying security, assume again that a given underlying is quoting and trading in the \$49.00 - \$50.00 price range then a liquidity gap occurs, with bidders not representing quotes in the market place and an offer quoted at \$5.00. Quoting may quickly return to normal, again in the \$49.00 - \$50.00 price range, but due to the potential perception that the underlying has gone through a dramatic price revaluation, numerous options trades could trigger based off of this new quoted price in the interim. Because the price that triggered such trades was not a valid price, it would be appropriate to review said option trades.

***Stop (and Stop-Limit) Order Trades Triggered by Erroneous Trades***

The Exchange notes that certain market participants and their customers enter stop or stop limit orders that are triggered based on executions in the marketplace. As proposed, transactions resulting from the triggering of a stop or stop-limit order by an erroneous trade in an option contract shall be nullified by the Exchange, provided a party notifies an Official in a timely manner as set forth below. The Exchange believes it is appropriate to nullify executions of stop or stop-limit orders that were wrongly triggered because such transactions should not have occurred. If a party believes that it participated in an erroneous transaction pursuant to the Proposed Rule it must notify an Official within the timeframes set forth in the Obvious Error Rule above, with the allowed notification timeframe commencing at the time of notification of the nullification of transaction(s) that triggered the stop or stop-limit order.

***Linkage Trades***

The Exchange also proposes to adopt language that clearly provides the Exchange with authority to take necessary actions when another options exchange nullifies or adjusts a transaction pursuant to its respective rules and the transaction resulted from an order that has passed through the Exchange and been routed on to another options exchange on behalf of the Exchange. Specifically, if the Exchange routes an order pursuant to the Options Order Protection and Locked/Crossed Market Plan<sup>12</sup> that results in a transaction on another options exchange (a “Linkage Trade”) and such options exchange subsequently nullifies or adjusts the Linkage Trade pursuant to its rules, the Exchange will perform all actions necessary to complete the nullification or adjustment of the Linkage Trade. Although the Exchange is not utilizing its own authority to nullify or adjust a transaction related to an action taken on a Linkage Trade by another options exchange, the Exchange does have to assist in the processing of the adjustment or nullification of the order, such as notification to the member or member organization and The Options Clearing Corporation (“OCC”) of the adjustment or nullification. Thus, the Exchange believes that the proposed provision adds additional transparency to the Proposed Rule.

***Verifiable Disruption or Malfunction of Exchange Systems***

The Exchange proposes to retain its provision regarding a verifiable disruption or malfunction in Exchange systems, which appears in subparagraphs (c)(ii)(A) and (B) of the Current Rule. Specifically, parties to a trade may have a trade nullified or its price adjusted if the trade resulted from a verifiable disruption or malfunction of an Exchange

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<sup>12</sup> See Rule 1083(n).

execution, dissemination, or communication system that caused a quote/order to trade in excess of its disseminated size (e.g. a quote/order that is frozen, because of an Exchange system error, and repeatedly traded). Similarly, parties to a trade may have a trade nullified or its price adjusted if it resulted from a verifiable disruption or malfunction of an Exchange dissemination or communication system that prevented a member from updating or canceling a quote/order for which the member is responsible where there is Exchange documentation providing that the member sought to update or cancel the quote/order.

### *Appeals*

The Exchange proposes to maintain its current appeals process (currently in Rule 1092(g)) in connection with the Proposed Rule. Specifically, if a party affected by a determination made under the Proposed Rule so requests within the time permitted, the Market Operations Review Committee will review decisions made under the Proposed Rule in accordance with Exchange Rule 124(d). A request for review under this paragraph must be made within 30 minutes after a party receives verbal notification of a final determination by an Official under this Rule, except that if such notification is made after 3:30 p.m. Eastern Time, either party has until 9:30 a.m. Eastern Time on the next trading day to request a review. Such a request for review must be in writing or otherwise documented. The Market Operations Review Committee shall review the facts and render a decision on the day of the transaction, or the next trade day in the case where a request is properly made after 3:30 p.m. on the day of the transaction or where the request is properly made the next trade day. In addition, the Exchange is proposing to harmonize with other exchanges that any determination by an Official or the Market Operations

Review Committee shall be rendered without prejudice as to the rights of the parties to the transaction to submit their dispute to arbitration.<sup>13</sup>

In order to maintain a diverse group of participants, the Market Operations Review Committee will continue to consist of a number of Member Representative members<sup>14</sup> that is equal to at least 20 percent of the total number of members of the Market Operations Review Committee; no more than 50 percent of the members of the Market Operations Review Committee shall be engaged in market making activity or employed by a Member firm whose revenues from market making activity exceed 10 percent of its total revenues.<sup>15</sup> The Market Operations Review Committee may continue to act as a panel with a minimum of three Committee members, of which no more than 50% can be engaged in market making activity or employed by an Exchange member organization whose revenues from market making activity exceed ten percent of its total revenues.<sup>16</sup> To assure fairness, members of the Market Operations Review Committee, like all members of Board Committees, are subject to a conflict of interest prohibition.<sup>17</sup>

### *Complex Orders*

The Exchange is proposing to adopt Commentary .01 to the Proposed Rule to

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<sup>13</sup> See e.g., The NASDAQ Options Market Rules, Chapter V, Section 6(g)(iv).

<sup>14</sup> A Member Representative Member is a member appointed by the Board of Directors who has been elected or appointed after having been nominated by the Member Nominating Committee pursuant to the Exchange's By-Laws. See By-Law Article I, Section 1(x).

<sup>15</sup> See By-Law Article V, Section 5-3(d).

<sup>16</sup> See Rule 124(d)(i)

<sup>17</sup> See By-Law Article III, Section 3-4(a).

provide for how the Exchange will treat Obvious and Catastrophic Errors respecting complex order executions.<sup>18</sup> The Proposed Rule will be identical to the Current Rule.<sup>19</sup> If both parties to a trade that is one component of a complex order execution are parties to all of the trades that together comprise the execution of a complex order at a single net debit or credit, then if one of those component trades can be nullified under this Rule 1092, all component trades that were part of the same complex order shall be nullified as well. This is intended to mitigate the risk to parties using complex orders, where part or all of a complex order traded at an erroneous price.<sup>20</sup>

***No Adjustments to a Worse Price***

Finally, the Exchange proposes to include Commentary .02 to the Proposed Rule, which would make clear that to the extent the provisions of the proposed Rule would result in the Exchange applying an adjustment of an erroneous sell transaction to a price lower than the execution price or an erroneous buy transaction to a price higher than the execution price, the Exchange will not adjust or nullify the transaction, but rather, the execution price will stand.

***Limit Up-Limit Down Plan***

The Exchange proposes to amend Rule 1047(f)(v) to reflect the numbering and content of the Proposed Rule. It will then continue to cover how the Exchange will treat Obvious and Catastrophic Errors in response to the Regulation NMS Plan to Address

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<sup>18</sup> The process for complex order executions is governed by Rule 1080.07.

<sup>19</sup> See Rule 1092(c)(v).

<sup>20</sup> See Securities Exchange Act Release No. 63692 (January 11, 2011), 76 FR 2940 (January 18, 2011).

Extraordinary Market Volatility Pursuant to Rule 608 of Regulation NMS under the Act (the “Limit Up-Limit Down Plan” or the “Plan”),<sup>21</sup> which is applicable to all NMS stocks, as defined in Regulation NMS Rule 600(b)(47).<sup>22</sup>

***Implementation Date***

In order to ensure that other options exchanges are able to adopt rules consistent with this proposal and to coordinate the effectiveness of such harmonized rules, the Exchange proposes to delay the operative date of this proposal to May 8, 2015.

(b) Statutory Basis

The Exchange believes that its proposal is consistent with the requirements of the Act and the rules and regulations thereunder that are applicable to a national securities exchange, and, in particular, with the requirements of Section 6(b) of the Act.<sup>23</sup> Specifically, the proposal is consistent with Section 6(b)(5) of the Act<sup>24</sup> because it would promote just and equitable principles of trade, remove impediments to, and perfect the mechanism of, a free and open market and a national market system, and, in general, protect investors and the public interest.

As described above, the Exchange and other options exchanges are seeking to adopt harmonized rules related to the adjustment and nullification of erroneous options transactions. The Exchange believes that the Proposed Rule will provide greater

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<sup>21</sup> Securities Exchange Act Release No. 67091 (May 31, 2012), 77 FR 33498 (June 6, 2012).

<sup>22</sup> 17 CFR 242.600(b)(47).

<sup>23</sup> 15 U.S.C. 78f(b).

<sup>24</sup> 15 U.S.C. 78f(b)(5).

transparency and clarity with respect to the adjustment and nullification of erroneous options transactions. Particularly, the proposed changes seek to achieve consistent results for participants across U.S. options exchanges while maintaining a fair and orderly market, protecting investors and protecting the public interest. Based on the foregoing, the Exchange believes that the proposal is consistent with Section 6(b)(5) of the Act<sup>25</sup> in that the Proposed Rule will foster cooperation and coordination with persons engaged in regulating and facilitating transactions.

The Exchange believes the various provisions allowing or dictating adjustment rather than nullification of a trade are necessary given the benefits of adjusting a trade price rather than nullifying the trade completely. Because options trades are used to hedge, or are hedged by, transactions in other markets, including securities and futures, many members and member organizations, and their customers, would rather adjust prices of executions rather than nullify the transactions and, thus, lose a hedge altogether. As such, the Exchange believes it is in the best interest of investors to allow for price adjustments as well as nullifications. The Exchange further discusses specific aspects of the Proposed Rule below.

The Exchange does not believe that the proposal is unfairly discriminatory, even though it differentiates in many places between Customers and non-Customers. The rules of the options exchanges, including the Exchange's existing Obvious Error provision, often treat Customers differently, often affording them preferential treatment. This treatment is appropriate in light of the fact that Customers are not necessarily immersed in the day-to-day trading of the markets, are less likely to be watching trading activity in

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<sup>25</sup> 15 U.S.C. 78f(b)(5).

a particular option throughout the day, and may have limited funds in their trading accounts. At the same time, the Exchange reiterates that in the U.S. options markets generally there is significant retail customer participation that occurs directly on (and only on) options exchanges such as the Exchange. Accordingly, differentiating among market participants with respect to the adjustment and nullification of erroneous options transactions is not unfairly discriminatory because it is reasonable and fair to provide Customers with additional protections as compared to non-Customers.

The Exchange believes that its proposal with respect to the allowance of mutual agreed upon adjustments or nullifications is appropriate and consistent with the Act, as such proposal removes impediments to and perfects the mechanism of a free and open market and a national market system, allowing participants to mutually agree to correct an erroneous transactions without the Exchange mandating the outcome. The Exchange also believes that its proposal with respect to mutual adjustments is consistent with the Act because it is designed to prevent fraudulent and manipulative acts and practices by explicitly stating that it is considered conduct inconsistent with just and equitable principles of trade for any member or member organization to use the mutual adjustment process to circumvent any applicable Exchange rule, the Act or any of the rules and regulations thereunder.

The Exchange believes its proposal to provide within the Proposed Rule definitions of Customer, erroneous sell transaction and erroneous buy transaction, and Official is consistent with Section 6(b)(5) of the Act because such terms will provide more certainty to market participants as to the meaning of the Proposed Rule and reduce the possibility that a party can intentionally submit an order hoping for the market to

move in their favor in reliance on the Rule as a safety mechanism, thereby promoting just and fair principles of trade. Similarly, the Exchange believes that proposed Commentary .02 is consistent with the Act as it would make clear that the Exchange will not adjust or nullify a transaction, but rather, the execution price will stand when the applicable adjustment criteria would actually adjust the price of the transaction to a worse price (i.e., higher for an erroneous buy or lower for an erroneous sell order).

As set forth below, the Exchange believes it is consistent with Section 6(b)(5) of the Act for the Exchange to determine Theoretical Price when the NBBO cannot reasonably be relied upon because the alternative could result in transactions that cannot be adjusted or nullified even when they are otherwise clearly at a price that is significantly away from the appropriate market for the option. Similarly, reliance on an NBBO that is not reliable could result in adjustment to prices that are still significantly away from the appropriate market for the option.

The Exchange believes that its proposal with respect to determining Theoretical Price is consistent with the Act in that it has retained the standard of the current rule, which is to rely on the NBBO to determine Theoretical Price if such NBBO can reasonably be relied upon. Because, however, there is not always an NBBO that can or should be used in order to administer the rule, the Exchange has proposed various provisions that provide the Exchange with the authority to determine a Theoretical Price. The Exchange believes that the Proposed Rule is transparent with respect to the circumstances under which the Exchange will determine Theoretical Price, and has sought to limit such circumstances as much as possible. The Exchange notes that Exchange personnel currently are required to determine Theoretical Price in certain

circumstances. While the Exchange continues to pursue alternative solutions that might further enhance the objectivity and consistency of determining Theoretical Price, the Exchange believes that the discretion currently afforded to Officials is appropriate in the absence of a reliable NBBO that can be used to set the Theoretical Price.

With respect to the specific proposed provisions for determining Theoretical Price for transactions that occur as part of the Exchange's Opening Process and in situations where there is a wide quote, the Exchange believes both provisions are consistent with the Act because they provide objective criteria that will determine Theoretical Price with limited exceptions for situations where the Exchange does not believe the NBBO is a reasonable benchmark or there is no NBBO. The Exchange notes in particular with respect to the wide quote provision that the Proposed Rule will result in the Exchange determining Theoretical Price less frequently than it would pursuant to wide quote provisions that have previously been approved. The Exchange believes that it is appropriate and consistent with the Act to afford protections to market participants by not relying on the NBBO to determine Theoretical Price when the quote is extremely wide but had been, in the prior 10 seconds, at much more reasonable width. The Exchange also believes it is appropriate and consistent with the Act to use the NBBO to determine Theoretical Price when the quote has been wider than the applicable amount for more than 10 seconds, as the Exchange does not believe it is necessary to apply any other criteria in such a circumstance. The Exchange believes that market participants can easily use or adopt safeguards to prevent errors when such market conditions exist. When entering an order into a market with a persistently wide quote, the Exchange does not believe that the entering party should reasonably expect anything other than the quoted

price of an option.

The Exchange believes that its proposal to adopt clear but disparate standards with respect to the deadline for submitting a request for review of Customer and non-Customer transactions is consistent with the Act, particularly in that it creates a greater level of protection for Customers. As noted above, the Exchange believes that this is appropriate and not unfairly discriminatory in light of the fact that Customers are not necessarily immersed in the day-to-day trading of the markets and are less likely to be watching trading activity in a particular option throughout the day. Thus, members or member organizations representing Customer orders reasonably may need additional time to submit a request for review. The Exchange also believes that its proposal to provide additional time for submission of requests for review of linkage trades is reasonable and consistent with the protection of investors and the public interest due to the time that it might take an options exchange or third-party routing broker to file a request for review with the Exchange if the initial notification of an error is received by the originating options exchange near the end of such options exchange's filing deadline. Without this additional time, there could be disparate results based purely on the existence of intermediaries and an interconnected market structure.

In relation to the aspect of the proposal giving Officials the ability to review transactions for obvious errors on their own motion, the Exchange notes that an Official can adjust or nullify a transaction under the authority granted by this provision only if the transaction meets the specific and objective criteria for an Obvious Error under the Proposed Rule. As noted above, this is designed to give an Official the ability to provide parties relief in those situations where they have failed to report an apparent error within

the established notification period. However, the Exchange will only grant relief if the transaction meets the requirements for an Obvious Error as described in the Proposed Rule.

The Exchange believes that its proposal to adjust non-Customer transactions and to nullify Customer transactions that qualify as Obvious Errors is appropriate for reasons consistent with those described above. In particular, Customers are not necessarily immersed in the day-to-day trading of the markets, are less likely to be watching trading activity in a particular option throughout the day, and may have limited funds in their trading accounts.

The Exchange acknowledges that the proposal contains some uncertainty regarding whether a trade will be adjusted or nullified, depending on whether one of the parties is a Customer, because a party may not know whether the other party to a transaction was a Customer at the time of entering into the transaction. However, the Exchange believes that the proposal nevertheless promotes just and equitable principles of trade and protects investors as well as the public interest because it eliminates the possibility that a Customer's order will be adjusted to a significantly different price. As noted above, the Exchange believes it is consistent with the Act to afford Customers greater protections under the Proposed Rule than are afforded to non-Customers. Thus, the Exchange believes that its proposal is consistent with the Act in that it protects investors and the public interest by providing additional protections to those that are less informed and potentially less able to afford an adjustment of a transaction that was executed in error. Customers are also less likely to have engaged in significant hedging or other trading activity based on earlier transactions, and thus, are less in need of

maintaining a position at an adjusted price than non-Customers.

If any member or member organization submits requests to the Exchange for review of transactions pursuant to the Proposed Rule, and in aggregate that member or member organization has 200 or more Customer transactions under review concurrently and the orders resulting in such transactions were submitted during the course of 2 minutes or less, the Exchange believes it is appropriate for the Exchange apply the non-Customer adjustment criteria described above to such transactions. The Exchange believes that the proposed aggregation is reasonable as it is representative of an extremely large number of orders submitted to the Exchange over a relatively short period of time that are, in turn, possibly erroneous (and within a time frame significantly less than an entire day), and thus is most likely to occur because of a systems issue experienced by a member or member organization representing Customer orders or a systems issue coupled with the erroneous marking of orders. The Exchange does not believe it is possible at a level of 200 Customer orders over a 2 minute period that are under review at one time that multiple, separate Customers were responsible for the errors in the ordinary course of trading. In the event of a large-scale issue caused by an member or member organization that has submitted orders over a 2 minute period marked as Customer that resulted in more than 200 transactions under review, the Exchange does not believe it is appropriate to nullify all such transactions because of the negative impact that nullification could have on the market participants on the contra-side of such transactions, who might have engaged in hedging and trading activity following such transactions. In order for a participant to have more than 200 transactions under review concurrently when the orders triggering such transactions were received in 2 minutes or

less, the Exchange believes that a market participant will have far exceeded the normal behavior of customers deserving protected status. While the Exchange continues to believe that it is appropriate to nullify transactions in such a circumstance if both participants to a transaction are Customers, the Exchange does not believe it is appropriate to place the overall risk of a significant number of trade breaks on non-Customers that in the normal course of business may have engaged in additional hedging activity or trading activity based on such transactions. Thus, the Exchange believes it is necessary and appropriate to protect non-Customers in such a circumstance by applying the non-Customer adjustment criteria, and thus adjusting transactions as set forth above, in the event a member or member organization has more than 200 transactions under review concurrently. In summary, due to the extreme level at which the proposal is set, the Exchange believes that the proposal is consistent with Section 6(b)(5) of the Act in that it promotes just and equitable principles of trade by encouraging market participants to retain appropriate controls over their systems to avoid submitting a large number of erroneous orders in a short period of time.

Similarly, the Exchange believes that the proposed Size Adjustment Modifier, which would increase the adjustment amount for non-Customer transactions, is appropriate because it attempts to account for the additional risk that the parties to the trade undertake for transactions that are larger in scope. The Exchange believes that the Size Adjustment Modifier creates additional incentives to prevent more impactful Obvious Errors and it lessens the impact on the contra-party to an adjusted trade. The Exchange notes that these contra-parties may have preferred to only trade the size involved in the transaction at the price at which such trade occurred, and in trading larger

size has committed a greater level of capital and bears a larger hedge risk.

The Exchange similarly believes that its Proposed Rule with respect to Catastrophic Errors is consistent with the Act as it affords additional time for market participants to file for review of erroneous transactions that were further away from the Theoretical Price. At the same time, the Exchange believes that the Proposed Rule is consistent with the Act in that it generally would adjust transactions, including Customer transactions, because this will protect against hedge risk, particularly for transactions that may have occurred several hours earlier and thus, which all parties to the transaction might presume are protected from further modification. Similarly, by providing larger adjustment amounts away from Theoretical Price than are set forth under the Obvious Error provision, the Catastrophic Error provision also takes into account the possibility that the party that was advantaged by the erroneous transaction has already taken actions based on the assumption that the transaction would stand. The Exchange believes it is reasonable to specifically protect Customers from adjustments through their limit prices for the reasons stated above, including that Customers are less likely to be watching trading throughout the day and that they may have less capital to afford an adjustment price. The Exchange believes that the proposal provides a fair process that will ensure that Customers are not forced to accept a trade that was executed in violation of their limit order price. In contrast, market professionals are more likely to have engaged in hedging or other trading activity based on earlier trading activity, and thus, are more likely to be willing to accept an adjustment rather than a nullification to preserve their positions even if such adjustment is to a price through their limit price.

The Exchange believes that proposed rule change to adopt the Significant Market

Event provision is consistent with Section 6(b)(5) of the Act in that it will foster cooperation and coordination with persons engaged in regulating the options markets. In particular, the Exchange believes it is important for options exchanges to coordinate when there is a widespread and significant event, as commonly, multiple options exchanges are impacted in such an event. Further, while the Exchange recognizes that the Proposed Rule will not guarantee a consistent result for all market participants on every market, the Exchange does believe that it will assist in that outcome. For instance, if options exchanges are able to agree as to the time from which Theoretical Price should be determined and the period of time that should be reviewed, the likely disparity between the Theoretical Prices used by such exchanges should be very slight and, in turn, with otherwise consistent rules, the results should be similar. The Exchange also believes that the Proposed Rule is consistent with the Act in that it generally would adjust transactions, including Customer transactions, because this will protect against hedge risk, particularly for liquidity providers that might have been quoting in thousands or tens of thousands of different series and might have affected executions throughout such quoted series. The Exchange believes that when weighing the competing interests between preferring a nullification for a Customer transaction and an adjustment for a transaction of a market professional, while nullification is appropriate in a typical one-off situation that it is necessary to protect liquidity providers in a widespread market event because, presumably, they will be the most affected by such an event (in contrast to a Customer who, by virtue of their status as such, likely would not have more than a small number of affected transactions). The Exchange believes that the protection of liquidity providers by favoring adjustments in the context of Significant Market Events can also

benefit Customers indirectly by better enabling liquidity providers, which provides a cumulative benefit to the market. Also, as stated above with respect to Catastrophic Errors, the Exchange believes it is reasonable to specifically protect Customers from adjustments through their limit prices for the reasons stated above, including that Customers are less likely to be watching trading throughout the day and that they may have less capital to afford an adjustment price. The Exchange believes that the proposal provides a fair process that will ensure that Customers are not forced to accept a trade that was executed in violation of their limit order price. In contrast, market professionals are more likely to have engaged in hedging or other trading activity based on earlier trading activity, and thus, are more likely to be willing to accept an adjustment rather than a nullification to preserve their positions even if such adjustment is to a price through their limit price. In addition, the Exchange believes it is important to have the ability to nullify some or all transactions arising out of a Significant Market Event in the event timely adjustment is not feasible due to the extraordinary nature of the situation. In particular, although the Exchange has worked to limit the circumstances in which it has to determine Theoretical Price, in a widespread event it is possible that hundreds if not thousands of series would require an Exchange determination of Theoretical Price. In turn, if there are hundreds or thousands of trades in such series, it may not be practicable for the Exchange to determine the adjustment levels for all non-Customer transactions in a timely fashion, and in turn, it would be in the public interest to instead more promptly deliver a simple, consistent result of nullification.

The Exchange believes that proposed rule change related to an erroneous print in the underlying security, an erroneous quote in the underlying security, or an erroneous

transaction in the option with respect to stop and stop limit orders is likewise consistent with Section 6(b)(5) of the Act because the proposal provides for the adjustment or nullification of trades executed at erroneous prices through no fault on the part of the trading participants. Allowing for Exchange review in such situations will promote just and fair principles of trade by protecting investors from harm that is not of their own making. Specifically with respect to the proposed provisions governing erroneous prints and quotes in the underlying security, the Exchange notes that market participants on the Exchange base the value of their quotes and orders on the price of the underlying security. The provisions regarding errors in prints and quotes in the underlying security cover instances where the information market participants use to price options is erroneous through no fault of their own. In these instances, market participants have little, if any, chance of pricing options accurately. Thus, these provisions are designed to provide relief to market participants harmed by such errors in the prints or quotes of the underlying security.

The Exchange believes that the proposed provision related to Linkage Trades is consistent with the Act because it adds additional transparency to the Proposed Rule and makes clear that when a Linkage Trade is adjusted or nullified by another options exchange, the Exchange will take necessary actions to complete the nullification or adjustment of the Linkage Trade.

The Exchange believes that retaining the same appeals process as the Exchange maintains under the Current Rule is consistent with the Act because such process provides members and member organizations with due process in connection with decisions made by Officials under the Proposed Rule. The Exchange believes that this

process provides fair representation of members and member organizations by ensuring diversity amongst the members of any review panel, which is consistent with Sections 6(b)(3) and 6(b)(7) of the Act.

4. Self-Regulatory Organization's Statement on Burden on Competition

Phlx believes the entire proposal is consistent with Section 6(b)(8) of the Act<sup>26</sup> in that it does not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act as explained below.

Importantly, the Exchange believes the proposal will not impose a burden on intermarket competition but will rather alleviate any burden on competition because it is the result of a collaborative effort by all options exchanges to harmonize and improve the process related to the adjustment and nullification of erroneous options transactions. The Exchange does not believe that the rules applicable to such process is an area where options exchanges should compete, but rather, that all options exchanges should have consistent rules to the extent possible. Particularly where a market participant trades on several different exchanges and an erroneous trade may occur on multiple markets nearly simultaneously, the Exchange believes that a participant should have a consistent experience with respect to the nullification or adjustment of transactions. The Exchange understands that all other options exchanges intend to file proposals that are substantially similar to this proposal.

The Exchange does not believe that the proposed rule change imposes a burden on intramarket competition because the provisions apply to all market participants equally within each participant category (i.e., Customers and non-Customers). With

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<sup>26</sup> 15 U.S.C. 78f(b)(8).

respect to competition between Customer and non-Customer market participants, the Exchange believes that the Proposed Rule acknowledges competing concerns and tries to strike the appropriate balance between such concerns. For instance, as noted above, the Exchange believes that protection of Customers is important due to their direct participation in the options markets as well as the fact that they are not, by definition, market professionals. At the same time, the Exchange believes due to the quote-driven nature of the options markets, the importance of liquidity provision in such markets and the risk that liquidity providers bear when quoting a large breadth of products that are derivative of underlying securities, that the protection of liquidity providers and the practice of adjusting transactions rather than nullifying them is of critical importance. As described above, the Exchange will apply specific and objective criteria to determine whether an erroneous transaction has occurred and, if so, how to adjust or nullify a transaction.

5. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants or Others

Not applicable.

6. Extension of Time Period for Commission Action

Not applicable.

7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)<sup>27</sup> of the Act and Rule 19b-4(f)(6) thereunder<sup>28</sup> in that it effects a change that: (i) does not

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<sup>27</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>28</sup> 17 CFR 240.19b-4(f)(6).

significantly affect the protection of investors or the public interest; (ii) does not impose any significant burden on competition; and (iii) by its terms, does not become operative for 30 days after the date of the filing, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest.

Specifically, it does not significantly affect the protection of investors or the public interest because the Proposed Rule will provide greater transparency and clarity with respect to the adjustment and nullification of erroneous options transactions. In addition, the proposed changes seek to achieve consistent results for participants across U.S. options exchanges, modelled on SR-BATS-2014-067. The proposal does not impose any significant burden on competition, as explained above. For the same reasons, the Exchange requests a waiver of the 30 day operative delay. The Exchange does not believe that the proposal raises any new substantive issues, because it is designed to harmonize the rules among options exchanges. The provisions that differ are based on the existing rule. Furthermore, the proposal is intended to bring greater certainty regarding how erroneous options transactions are handled.

Furthermore, Rule 19b-4(f)(6)(iii) requires a self-regulatory organization to give the Commission written notice of its intent to file a proposed rule change under that subsection at least five business days prior to the date of filing, or such shorter time as designated by the Commission. The Exchange has provided such notice.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) otherwise in furtherance of the purposes of the Act. If

the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

8. Proposed Rule Change Based on Rule of Another Self-Regulatory Organization or of the Commission

The proposal is substantially similar to SR-BATS-2014-067, as amended, except that: (i) the Exchange requires an officer of the Exchange to act on the Exchange's own motion, as opposed to a designated "Official;" (ii) the Exchange's appeals process uses a different type of review committee than BATS; (iii) the Exchange is not amending its trading halt Rule 1047 because it is consistent with the Proposed Rule; (iv) the Exchange is retaining its provision relating to transactions resulting from a verifiable disruption or malfunction of an Exchange execution, dissemination, or communication system; (v) the Exchange is retaining its provision relating to complex orders, which BATS does not offer; and (vi) the Exchange will continue to apply its Rule 1092 to electronic trades only rather than all trades.

9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act

Not applicable.

10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act

Not applicable.

11. Exhibits

Exhibit 1: Completed Notice of the Proposed Rule Change for publication in the Federal Register.

Exhibit 5: Text of Proposed Rule Change.

**EXHIBIT 1**

SECURITIES AND EXCHANGE COMMISSION  
(Release No. \_\_\_\_\_ ; File No. SR-Phlx-2015-43)

May \_\_, 2015

Self-Regulatory Organizations; NASDAQ OMX PHLX LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend Rule 1092

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup>, and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on May 7, 2015, NASDAQ OMX PHLX LLC (“Phlx” or “Exchange”) filed with the Securities and Exchange Commission (“SEC” or “Commission”) the proposed rule change as described in Items I, II, and III, below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to replace current Rule 1092 (“Current Rule”), entitled “Obvious Errors and Catastrophic Errors,” with new Rule 1092 (“Proposed Rule”), entitled “Nullification and Adjustment of Options Transactions including Obvious Errors.” Rule 1092 relates to the adjustment and nullification of electronic options transactions that occur on the Exchange.<sup>3</sup>

The text of the proposed rule change is available on the Exchange’s Website at <http://nasdaqomxphlx.cchwallstreet.com/>, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> Disputes regarding trades that occur on the options trading floor are addressed by Rule 124.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

**Background**

For several months the Exchange has been working with other options exchanges to identify ways to improve the process related to the adjustment and nullification of erroneous options transactions. The goal of the process that the options exchanges have undertaken is to adopt harmonized rules related to the adjustment and nullification of erroneous options transactions as well as a specific provision related to coordination in connection with large-scale events involving erroneous options transactions. As described below, the Exchange believes that the changes the options exchanges and the Exchange have agreed to propose will provide transparency and finality with respect to the adjustment and nullification of erroneous options transactions. Particularly, the proposed changes seek to achieve consistent results for participants across U.S. options exchanges while maintaining a fair and orderly market, protecting investors and protecting the public interest.

The Proposed Rule is the culmination of this coordinated effort and reflects

discussions by the options exchanges to universally adopt: (1) certain provisions already in place on one or more options exchanges; and (2) new provisions that the options exchanges collectively believe will improve the handling of erroneous options transactions. Thus, although the Proposed Rule is in many ways similar to and based on the Exchange's Current Rule, the Exchange is adopting various provisions to conform with existing rules of one or more options exchanges and also to adopt rules that are not currently in place on any options exchange. As noted above, in order to adopt a rule that is similar in most material respects to the rules adopted by other options exchanges, the Exchange proposes to delete the Current Rule in its entirety and to replace it with the Proposed Rule.

The Exchange notes that it has proposed additional objective standards in the Proposed Rule as compared to the Current Rule. The Exchange also notes that the Proposed Rule will ensure that the Exchange will have the same standards as all other options exchanges. However, there are still areas under the Proposed Rule where subjective determinations need to be made by Exchange personnel with respect to the calculation of Theoretical Price. The Exchange notes that the Exchange and all other options exchanges have been working to further improve the review of potentially erroneous transactions as well as their subsequent adjustment by creating an objective and universal way to determine Theoretical Price in the event a reliable NBBO is not available. For instance, the Exchange and all other options exchanges may utilize an independent third party to calculate and disseminate or make available Theoretical Price. However, this initiative requires additional exchange and industry discussion as well as additional time for development and implementation. The Exchange will continue to

work with other options exchanges and the options industry towards the goal of additional objectivity and uniformity with respect to the calculation of Theoretical Price.

As additional background, the Exchange believes that the Proposed Rule supports an approach consistent with long-standing principles in the options industry under which the general policy is to adjust rather than nullify transactions. The Exchange acknowledges that adjustment of transactions is contrary to the operation of analogous rules applicable to the equities markets, where erroneous transactions are typically nullified rather than adjusted and where there is no distinction between the types of market participants involved in a transaction. For the reasons set forth below, the Exchange believes that the distinctions in market structure between equities and options markets continue to support these distinctions between the rules for handling obvious errors in the equities and options markets. The Exchange also believes that the Proposed Rule properly balances several competing concerns based on the structure of the options markets.

Various general structural differences between the options and equities markets point toward the need for a different balancing of risks for options market participants and are reflected in the Proposed Rule. Option pricing is formulaic and is tied to the price of the underlying stock, the volatility of the underlying security and other factors. Because options market participants can generally create new open interest in response to trading demand, as new open interest is created, correlated trades in the underlying or related series are generally also executed to hedge a market participant's risk. This pairing of open interest with hedging interest differentiates the options market specifically (and the derivatives markets broadly) from the cash equities markets. In turn,

the Exchange believes that the hedging transactions engaged in by market participants necessitates protection of transactions through adjustments rather than nullifications when possible and otherwise appropriate.

The options markets are also quote driven markets dependent on liquidity providers to an even greater extent than equities markets. In contrast to the approximately 7,000 different securities traded in the U.S. equities markets each day, there are more than 500,000 unique, regularly quoted option series. Given this breadth in options series the options markets are more dependent on liquidity providers than equities markets; such liquidity is provided most commonly by registered market makers but also by other professional traders. With the number of instruments in which registered market makers must quote and the risk attendant with quoting so many products simultaneously, the Exchange believes that those liquidity providers should be afforded a greater level of protection. In particular, the Exchange believes that liquidity providers should be allowed protection of their trades given the fact that they typically engage in hedging activity to protect them from significant financial risk to encourage continued liquidity provision and maintenance of the quote-driven options markets.

In addition to the factors described above, there are other fundamental differences between options and equities markets which lend themselves to different treatment of different classes of participants that are reflected in the Proposed Rule. For example, there is no trade reporting facility in the options markets. Thus, all transactions must occur on an options exchange. This leads to significantly greater retail customer participation directly on exchanges than in the equities markets, where a significant amount of retail customer participation never reaches the Exchange but is instead

executed in off-exchange venues such as alternative trading systems, broker-dealer market making desks and internalizers. In turn, because of such direct retail customer participation, the exchanges have taken steps to afford those retail customers - generally Priority Customers - more favorable treatment in some circumstances.

### **Definitions**

The Exchange proposes to adopt various definitions that will be used in the Proposed Rule, as described below.

First, the Exchange proposes to adopt a definition of “Customer,” to make clear that this term would not include any broker-dealer or professional.<sup>4</sup> Although other portions of the Exchange’s rules address the capacity of market participants, including customers, the proposed definition is consistent with such rules and the Exchange believes it is important for all options exchanges to have the same definition of Customer in the context of nullifying and adjusting trades in order to have harmonized rules. As set forth in detail below, orders on behalf of a Customer are in many cases treated differently than non-Customer orders in light of the fact that Customers are not necessarily immersed in the day-to-day trading of the markets, are less likely to be watching trading activity in a particular option throughout the day, and may have limited funds in their trading accounts.

Second, the Exchange proposes to adopt definitions for both an “erroneous sell transaction” and an “erroneous buy transaction.” As proposed, an erroneous sell transaction is one in which the price received by the person selling the option is

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<sup>4</sup> The term "professional" means any person or entity that (i) is not a broker or dealer in securities, and (ii) places more than 390 orders in listed options per day on average during a calendar month for its own beneficial account(s). See Rule 1000(b)(14).

erroneously low, and an erroneous buy transaction is one in which the price paid by the person purchasing the option is erroneously high. This provision helps to reduce the possibility that a party can intentionally submit an order hoping for the market to move in their favor while knowing that the transaction will be nullified or adjusted if the market does not. For instance, when a market participant who is buying options in a particular series sees an aggressively priced sell order posted on the Exchange, and the buyer believes that the price of the options is such that it might qualify for obvious error, the option buyer can trade with the aggressively priced order, then wait to see which direction the market moves. If the market moves in their direction, the buyer keeps the trade and if it moves against them, the buyer calls the Exchange hoping to get the trade adjusted or busted.

Third, the Exchange proposes to define the term “Official” to mean an "Options Exchange Official" as that term is currently defined in Rule 1(w). Specifically, an Options Exchange Official is an Exchange staff member or contract employee designated as such by the Chief Regulatory Officer.

Fourth, the Exchange proposes to adopt a new term, a “Size Adjustment Modifier,” which would apply to individual transactions and would modify the applicable adjustment for orders under certain circumstances, as discussed in further detail below. As proposed, the Size Adjustment Modifier will be applied to individual transactions as follows:

<b>Number of Contracts per Execution</b>	<b>Adjustment – TP Plus/Minus</b>
1-50	N/A
51-250	2 times adjustment amount

251-1000	2.5 times adjustment amount
1001 or more	3 times adjustment amount

The Size Adjustment Modifier attempts to account for the additional risk that the parties to the trade undertake for transactions that are larger in scope. The Exchange believes that the Size Adjustment Modifier creates additional incentives to prevent more impactful Obvious Errors and it lessens the impact on the contra-party to an adjusted trade. The Exchange notes that these contra-parties may have preferred to only trade the size involved in the transaction at the price at which such trade occurred, and in trading larger size has committed a greater level of capital and bears a larger hedge risk.

When setting the proposed size adjustment modifier thresholds, the Exchange has tried to correlate the size breakpoints with typical small and larger “block” execution sizes of underlying stock. For instance, SEC Rule 10b-18(a)(5)(ii) defines a “block” as a quantity of stock that is at least 5,000 shares and a purchase price of at least \$50,000, among others.<sup>5</sup> Similarly, NYSE Rule 72 defines a “block” as an order to buy or sell “at least 10,000 shares or a quantity of stock having a market value of \$200,000 or more, whichever is less.” Thus, executions of 51 to 100 option contracts, which are generally equivalent to executions of 5,100 and 10,000 shares of underlying stock, respectively, are proposed to be subject to the lowest size adjustment modifier. An execution of over 1,000 contracts is roughly equivalent to a block transaction of more than 100,000 shares of underlying stock, and is proposed to be subject to the highest size adjustment modifier. The Exchange has correlated the proposed size adjustment modifier thresholds to smaller and larger scale blocks because the Exchange believes that the execution cost associated

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<sup>5</sup> See 17 C.F.R. 240.10b-18(a)(5)(ii).

with transacting in block sizes scales according to the size of the block. In other words, in the same way that executing a 100,000 share stock order will have a proportionately larger market impact and will have a higher overall execution cost than executing a 500, 1,000 or 5,000 share order in the same stock, all other market factors being equal, executing a 1,000 option contract order will have a larger market impact and higher overall execution cost than executing a 5, 10 or 50 contract option order.

### **Calculation of Theoretical Price**

#### ***Theoretical Price in Normal Circumstances***

Under both the Current Rule and the Proposed Rule, when reviewing a transaction as potentially erroneous, the Exchange needs to first determine the “Theoretical Price” of the option, i.e., the Exchange’s estimate of the correct market price for the option.

Pursuant to the Proposed Rule, if the applicable option series is traded on at least one other options exchange, then the Theoretical Price of an option series is the last national best bid (“NBB”) just prior to the trade in question with respect to an erroneous sell transaction or the last national best offer (“NBO”) just prior to the trade in question with respect to an erroneous buy transaction unless one of the exceptions described below exists. Thus, the Exchange proposes that whenever the Exchange has a reliable NBB or NBO, as applicable, just prior to the transaction, then the Exchange will use this NBB or NBO as the Theoretical Price.

The Exchange also proposes to specify in the Proposed Rule that when a single order received by the Exchange is executed at multiple price levels, the last NBB and last

NBO just prior to the trade in question would be the last NBB and last NBO just prior to the Exchange's receipt of the order.

The Exchange also proposes to set forth in the Proposed Rule various provisions governing specific situations where the NBB or NBO is not available or may not be reliable. Specifically, the Exchange is proposing additional detail specifying situations in which there are no quotes or no valid quotes (as defined below), when the national best bid or offer ("NBBO") is determined to be too wide to be reliable, and at the open of trading on each trading day.

### *No Valid Quotes*

As is true under the Current Rule, pursuant to the Proposed Rule the Exchange will determine the Theoretical Price if there are no quotes or no valid quotes for comparison purposes. As proposed, quotes that are not valid are all quotes in the applicable option series published at a time where the last NBB is higher than the last NBO in such series (a "crossed market"), quotes published by the Exchange that were submitted by either party to the transaction in question, and quotes published by another options exchange against which the Exchange has declared self-help. Thus, in addition to scenarios where there are literally no quotes to be used as Theoretical Price, the Exchange will exclude quotes in certain circumstances if such quotes are not deemed valid. The Proposed Rule is consistent with the Exchange's application of the Current Rule but the descriptions of the various scenarios where the Exchange considers quotes to be invalid represent additional detail that is not included in the Current Rule.

The Exchange notes that Exchange personnel currently are required to determine Theoretical Price in certain circumstances. While the Exchange continues to pursue

alternative solutions that might further enhance the objectivity and consistency of determining Theoretical Price, the Exchange believes that the discretion currently afforded to Officials is appropriate in the absence of a reliable NBBO that can be used to set the Theoretical Price. Under the current Rule, Exchange personnel will generally consult and refer to data such as the prices of related series, especially the closest strikes in the option in question. Exchange personnel may also take into account the price of the underlying security and the volatility characteristics of the option as well as historical pricing of the option and/or similar options.

### ***Wide Quotes***

Similarly, pursuant to the Proposed Rule the Exchange will determine the Theoretical Price if the bid/ask differential of the NBB and NBO for the affected series just prior to the erroneous transaction was equal to or greater than the Minimum Amount set forth below and there was a bid/ask differential less than the Minimum Amount during the 10 seconds prior to the transaction. If there was no bid/ask differential less than the Minimum Amount during the 10 seconds prior to the transaction then the Theoretical Price of an option series is the last NBB or NBO just prior to the transaction in question. The Exchange proposes to use the following chart to determine whether a quote is too wide to be reliable:

<b>Bid Price at Time of Trade</b>	<b>Minimum Amount</b>
Below \$2.00	\$0.75
\$2.00 to \$5.00	\$1.25
Above \$5.00 to \$10.00	\$1.50
Above \$10.00 to \$20.00	\$2.50
Above \$20.00 to \$50.00	\$3.00
Above \$50.00 to \$100.00	\$4.50
Above \$100.00	\$6.00

The Exchange notes that the values set forth above generally represent a multiple of 3 times the bid/ask differential requirements of other options exchanges, with certain rounding applied (e.g., \$1.25 as proposed rather than \$1.20).<sup>6</sup> The Exchange believes that basing the Wide Quote table on a multiple of the permissible bid/ask differential rule provides a reasonable baseline for quotations that are indeed so wide that they cannot be considered reliable for purposes of determining Theoretical Price unless they have been consistently wide. As described above, while the Exchange will determine Theoretical Price when the bid/ask differential equals or exceeds the amount set forth in the chart above and within the previous 10 seconds there was a bid/ask differential smaller than such amount, if a quote has been persistently wide for at least 10 seconds the Exchange will use such quote for purposes of Theoretical Price. The Exchange believes that there should be a greater level of protection afforded to market participants that enter the market when there are liquidity gaps and price fluctuations. The Exchange does not believe that a similar level of protection is warranted when market participants choose to enter a market that is wide and has been consistently wide for some time. The Exchange notes that it has previously determined that, given the largely electronic nature of today's markets, as little as one second (or less) is a long enough time for market participants to receive, process and account for and respond to new market information.<sup>7</sup> While introducing this new provision the Exchange believes it is being appropriately cautious by selecting a time frame that is an order of magnitude above and beyond what the

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<sup>6</sup> See, e.g., NYSE Arca Options Rule 6.37(b)(1).

<sup>7</sup> See, e.g., Rule 1080(c)(ii)(C), which requires certain orders to be exposed for at least one second before they can be executed; see also Securities Exchange Act Release No. 66306 (February 2, 2012), 77 FR 6608 (February 8, 2012) (SR-BX-2011-084) (order granting approval of proposed rule change to reduce the duration of the PIP from one second to one hundred milliseconds).

Exchange has previously determined is sufficient for information dissemination. The table above bases the wide quote provision off of bid price in order to provide a relatively straightforward beginning point for the analysis.

As an example, assume an option is quoted \$3.00 by \$6.00 with 50 contracts posted on each side of the market for an extended period of time. If a market participant were to enter a market order to buy 20 contracts the Exchange believes that the buyer should have a reasonable expectation of paying \$6.00 for the contracts which they are buying. This should be the case even if immediately after the purchase of those options, the market conditions change and the same option is then quoted at \$3.75 by \$4.25. Although the quote was wide according to the table above at the time immediately prior to and the time of the execution of the market order, it was also well established and well known. The Exchange believes that an execution at the then prevailing market price should not in and of itself constitute an erroneous trade.

### ***Transactions at the Open***

Under the Proposed Rule, for a transaction occurring as part of the Opening Process<sup>8</sup> the Exchange will determine the Theoretical Price where there is no NBB or NBO for the affected series just prior to the erroneous transaction or if the bid/ask differential of the NBBO just prior to the erroneous transaction is equal to or greater than the Minimum Amount set forth in the chart proposed for the wide quote provision described above. The Exchange believes that this discretion is necessary because it is consistent with other scenarios in which the Exchange will determine the Theoretical Price if there are no quotes or no valid quotes for comparison purposes, including the

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<sup>8</sup> See Exchange Rule 1017 for a description of the Exchange's Opening Process.

wide quote provision proposed by the Exchange as described above. If, however, there are valid quotes and the bid/ask differential of the NBBO is less than the Minimum Amount set forth in the chart proposed for the wide quote provision described above, then the Exchange will use the NBB or NBO just prior to the transaction as it would in any other normal review scenario.

As an example of an erroneous transaction for which the NBBO is wide at the open, assume the NBBO at the time of the opening transaction is \$1.00 x \$5.00 and the opening transaction takes place at \$1.25. The Exchange would be responsible for determining the Theoretical Price because the NBBO was wider than the applicable minimum amount set forth in the wide quote provision as described above. The Exchange believes that it is necessary to determine theoretical price at the open in the event of a wide quote at the open for the same reason that the Exchange has proposed to determine theoretical price during the remainder of the trading day pursuant to the proposed wide quote provision, namely that a wide quote cannot be reliably used to determine Theoretical Price because the Exchange does not know which of the two quotes, the NBB or the NBO, is closer to the real value of the option.

### **Obvious Errors**

The Exchange proposes to adopt numerical thresholds that would qualify transactions as “Obvious Errors.” These thresholds are similar to those in place under the Current Rule. As proposed, a transaction will qualify as an Obvious Error if the Exchange receives a properly submitted filing and the execution price of a transaction is higher or lower than the Theoretical Price for the series by an amount equal to at least the amount shown below:

<b>Theoretical Price</b>	<b>Minimum Amount</b>
Below \$2.00	\$0.25
\$2.00 to \$5.00	\$0.40
Above \$5.00 to \$10.00	\$0.50
Above \$10.00 to \$20.00	\$0.80
Above \$20.00 to \$50.00	\$1.00
Above \$50.00 to \$100.00	\$1.50
Above \$100.00	\$2.00

Applying the Theoretical Price, as described above, to determine the applicable threshold and comparing the Theoretical Price to the actual execution price provides the Exchange with an objective methodology to determine whether an Obvious Error occurred. The Exchange believes that the proposed amounts are reasonable as they are generally consistent with the standards of the Current Rule and reflect a significant disparity from Theoretical Price. The Exchange notes that the Minimum Amounts in the Proposed Rule and as set forth above are identical to the Current Rule except for the last two categories, for options where the Theoretical Price is above \$50.00 to \$100.00 and above \$100.00. The Exchange believes that this additional granularity is reasonable because given the proliferation of additional strikes that have been created in the past several years there are many more high-priced options that are trading with open interest for extended periods. The Exchange believes that it is appropriate to account for these high-priced options with additional Minimum Amount levels for options with Theoretical Prices above \$50.00.

Under the Proposed Rule, a party that believes that it participated in a transaction that was the result of an Obvious Error must notify an Official in the manner specified from time to time by the Exchange in a notice distributed to members and member organizations. The Exchange currently requires electronic notification through a web-

based application but believes that maintaining flexibility in the Rule is important to allow for changes to the process.

The Exchange also proposes to adopt notification timeframes that must be met in order for a transaction to qualify as an Obvious Error. Specifically, as proposed a filing must be received by the Exchange within thirty (30) minutes of the execution with respect to an execution of a Customer order and within fifteen (15) minutes of the execution for any other participant. The Exchange also proposes to provide additional time for trades that are routed through other options exchanges to the Exchange. Under the Proposed Rule, any other options exchange will have a total of forty-five (45) minutes for Customer orders and thirty (30) minutes for non-Customer orders, measured from the time of execution on the Exchange, to file with the Exchange for review of transactions routed to the Exchange from that options exchange and executed on the Exchange (“linkage trades”). This includes filings on behalf of another options exchange filed by a third-party routing broker if such third-party broker identifies the affected transactions as linkage trades. In order to facilitate timely reviews of linkage trades the Exchange will accept filings from either the other options exchange or, if applicable, the third-party routing broker that routed the applicable order(s). The additional fifteen (15) minutes provided with respect to linkage trades shall only apply to the extent the options exchange that originally received and routed the order to the Exchange itself received a timely filing from the entering participant (i.e., within 30 minutes if a Customer order or 15 minutes if a non-Customer order). The Exchange believes that additional time for filings related to Customer orders is appropriate in light of the fact that Customers are not necessarily immersed in the day-to-day trading of the markets and are less likely to be

watching trading activity in a particular option throughout the day. The Exchange believes that the additional time afforded to linkage trades is appropriate given the interconnected nature of the markets today and the practical difficulty that an end user may face in getting requests for review filed in a timely fashion when the transaction originated at a different exchange than where the error took place. Without this additional time the Exchange believes it would be common for a market participant to satisfy the filing deadline at the original exchange to which an order was routed but that requests for review of executions from orders routed to other options exchanges would not qualify for review as potential Obvious Errors by the time filings were received by such other options exchanges, in turn leading to potentially disparate results under the applicable rules of options exchanges to which the orders were routed.

Pursuant to the Proposed Rule, an Exchange Officer may review a transaction believed to be erroneous on his/her own motion in the interest of maintaining a fair and orderly market and for the protection of investors. This proposed provision is designed to give an Exchange Officer the ability to provide parties relief in those situations where they have failed to report an apparent error within the established notification period. A transaction reviewed pursuant to the proposed provision may be nullified or adjusted only if it is determined by the Exchange Officer that the transaction is erroneous in accordance with the provisions of the Proposed Rule, provided that the time deadlines for filing a request for review described above shall not apply. The Proposed Rule would require the Exchange Officer to act as soon as possible after becoming aware of the transaction; action by the Exchange Officer would ordinarily be expected on the same day that the transaction occurred. However, because a transaction under review may have occurred

near the close of trading or due to unusual circumstances, the Proposed Rule provides that the Exchange Officer shall act no later than 8:30 a.m. Eastern Time on the next trading day following the date of the transaction in question.

The Exchange also proposes to state that a party affected by a determination to nullify or adjust a transaction after an Exchange Officer's review on his or her own motion may appeal such determination in accordance with paragraph (k), which is described below. The Proposed Rule would make clear that a determination by an Exchange Officer not to review a transaction or determination not to nullify or adjust a transaction for which a review was conducted on an Exchange Officer's own motion is not appealable and further that if a transaction is reviewed and a determination is rendered pursuant to another provision of the Proposed Rule, no additional relief may be granted by an Exchange Officer.

If it is determined that an Obvious Error has occurred based on the objective numeric criteria and time deadlines described above, the Exchange will adjust or nullify the transaction as described below and promptly notify both parties to the trade electronically or via telephone. The Exchange proposes different adjustment and nullification criteria for Customers and non-Customers.

As proposed, where neither party to the transaction is a Customer, the execution price of the transaction will be adjusted by the Official pursuant to the table below.

<b>Theoretical Price (TP)</b>	<b>Buy Transaction Adjustment – TP Plus</b>	<b>Sell Transaction Adjustment – TP Minus</b>
Below \$3.00	\$0.15	\$0.15
At or above \$3.00	\$0.30	\$0.30

The Exchange believes that it is appropriate to adjust to prices a specified amount away

from Theoretical Price rather than to adjust to Theoretical Price because even though the Exchange has determined a given trade to be erroneous in nature, the parties in question should have had some expectation of execution at the price or prices submitted. Also, it is common that by the time it is determined that an obvious error has occurred additional hedging and trading activity has already occurred based on the executions that previously happened. The Exchange is concerned that an adjustment to Theoretical Price in all cases would not appropriately incentivize market participants to maintain appropriate controls to avoid potential errors.

Further, as proposed any non-Customer Obvious Error exceeding 50 contracts will be subject to the Size Adjustment Modifier described above. The Exchange believes that it is appropriate to apply the Size Adjustment Modifier to non-Customer orders because the hedging cost associated with trading larger sized options orders and the market impact of larger blocks of underlying can be significant.

As an example of the application of the Size Adjustment Modifier, assume Exchange A has a quoted bid to buy 50 contracts at \$2.50, Exchange B has a quoted bid to buy 100 contracts at \$2.05 and there is no other options exchange quoting a bid priced higher than \$2.00. Assume that the NBBO is \$2.50 by \$3.00. Finally, assume that all orders quoted and submitted to Exchange B in connection with this example are non-Customer orders.

- Assume Exchange A's quoted bid at \$2.50 is either executed or cancelled.
- Assume Exchange B immediately thereafter receives an incoming market order to sell 100 contracts.
- The incoming order would be executed against Exchange B's resting bid

at \$2.05 for 100 contracts.

- Because the 100 contract execution of the incoming sell order was priced at \$2.05, which is \$0.45 below the Theoretical Price of \$2.50, the 100 contract execution would qualify for adjustment as an Obvious Error.
- The normal adjustment process would adjust the execution of the 100 contracts to \$2.35 per contract, which is the Theoretical Price minus \$0.15.
- However, because the execution would qualify for the Size Adjustment Modifier of 2 times the adjustment price, the adjusted transaction would instead be to \$2.20 per contract, which is the Theoretical Price minus \$0.30.

By reference to the example above, the Exchange reiterates that it believes that a Size Adjustment Modifier is appropriate, as the buyer in this example was originally willing to buy 100 contracts at \$2.05 and ended up paying \$2.20 per contract for such execution. Without the Size Adjustment Modifier the buyer would have paid \$2.35 per contract. Such buyer may be advantaged by the trade if the Theoretical Price is indeed closer to \$2.50 per contract, however the buyer may not have wanted to buy so many contracts at a higher price and does incur increasing cost and risk due to the additional size of their quote. Thus, the proposed rule is attempting to strike a balance between various competing objectives, including recognition of cost and risk incurred in quoting larger size and incentivizing market participants to maintain appropriate controls to avoid errors.

In contrast to non-Customer orders, where trades will be adjusted if they qualify

as Obvious Errors, pursuant the Proposed Rule a trade that qualifies as an Obvious Error will be nullified where at least one party to the Obvious Error is a Customer. The Exchange also proposes, however, that if any member or member organization submits requests to the Exchange for review of transactions pursuant to the Proposed Rule, and in aggregate that member or member organization has 200 or more Customer transactions under review concurrently and the orders resulting in such transactions were submitted during the course of 2 minutes or less, where at least one party to the Obvious Error is a non-Customer, the Exchange will apply the non-Customer adjustment criteria described above to such transactions. The Exchange based its proposal of 200 transactions on the fact that the proposed level is reasonable as it is representative of an extremely large number of orders submitted to the Exchange that are, in turn, possibly erroneous. Similarly, the Exchange based its proposal of orders received in 2 minutes or less on the fact that this is a very short amount of time under which one member or member organization could generate multiple erroneous transactions. In order for a participant to have more than 200 transactions under review concurrently when the orders triggering such transactions were received in 2 minutes or less, the market participant will have far exceeded the normal behavior of customers deserving protected status.<sup>9</sup> While the Exchange continues to believe that it is appropriate to nullify transactions in such a circumstance if both participants to a transaction are Customers, the Exchange does not believe it is appropriate to place the overall risk of a significant number of trade breaks on non-Customers that in the normal course of business may have engaged in additional

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<sup>9</sup> The Exchange notes that in the third quarter of this year across all options exchanges the average number of valid Customer orders received and executed was less than 38 valid orders every two minutes. The number of obvious errors resulting from valid orders is, of course, a very small fraction of such orders.

hedging activity or trading activity based on such transactions. Thus, the Exchange believes it is necessary and appropriate to protect non-Customers in such a circumstance by applying the non-Customer adjustment criteria, and thus adjusting transactions as set forth above, in the event a member or member organization has more than 200 transactions under review concurrently.

### **Catastrophic Errors**

Consistent with the Current Rule, the Exchange proposes to adopt separate numerical thresholds for review of transactions for which the Exchange does not receive a filing requesting review within the Obvious Error timeframes set forth above. Based on this review these transactions may qualify as “Catastrophic Errors.” As proposed, a Catastrophic Error will be deemed to have occurred when the execution price of a transaction is higher or lower than the Theoretical Price for the series by an amount equal to at least the amount shown below:

<b>Theoretical Price</b>	<b>Minimum Amount</b>
Below \$2.00	\$0.50
\$2.00 to \$5.00	\$1.00
Above \$5.00 to \$10.00	\$1.50
Above \$10.00 to \$20.00	\$2.00
Above \$20.00 to \$50.00	\$2.50
Above \$50.00 to \$100.00	\$3.00
Above \$100.00	\$4.00

Based on industry feedback on the Catastrophic Error thresholds set forth under the Current Rule, the thresholds proposed as set forth above are more granular and lower (i.e., more likely to qualify) than the thresholds under the Current Rule. As noted above, under the Proposed Rule as well as the Current Rule, parties have additional time to

submit transactions for review as Catastrophic Errors. As proposed, notification requesting review must be received by an Official by 8:30 a.m. Eastern Time on the first trading day following the execution. For transactions in an expiring options series that take place on an expiration day, a party must notify an Official within 45 minutes after the close of trading that same day. As is true for requests for review under the Obvious Error provision of the Proposed Rule, a party requesting review of a transaction as a Catastrophic Error must notify an Official in the manner specified from time to time by the Exchange in a notice distributed to members and member organizations. By definition, any execution that qualifies as a Catastrophic Error is also an Obvious Error. However, the Exchange believes it is appropriate to maintain these two types of errors because the Catastrophic Error provisions provide market participants with a longer notification period under which they may file a request for review with the Exchange of a potential Catastrophic Error than a potential Obvious Error. This provides an additional level of protection for transactions that are severely erroneous even in the event a participant does not submit a request for review in a timely fashion.

The Proposed Rule would specify the action to be taken by the Exchange if it is determined that a Catastrophic Error has occurred, as described below, and would require the Exchange to promptly notify both parties to the trade electronically or via telephone. In the event of a Catastrophic Error, the execution price of the transaction will be adjusted by an Official pursuant to the table below.

<b>Theoretical Price (TP)</b>	<b>Buy Transaction Adjustment – TP Plus</b>	<b>Sell Transaction Adjustment – TP Minus</b>
Below \$2.00	\$0.50	\$0.50
\$2.00 to \$5.00	\$1.00	\$1.00

Above \$5.00 to \$10.00	\$1.50	\$1.50
Above \$10.00 to \$20.00	\$2.00	\$2.00
Above \$20.00 to \$50.00	\$2.50	\$2.50
Above \$50.00 to \$100.00	\$3.00	\$3.00
Above \$100.00	\$4.00	\$4.00

Although Customer orders would be adjusted in the same manner as non-Customer orders, any Customer order that qualifies as a Catastrophic Error will be nullified if the adjustment would result in an execution price higher (for buy transactions) or lower (for sell transactions) than the Customer's limit price. Based on industry feedback, the levels proposed above with respect to adjustment amounts are the same levels as the thresholds at which a transaction may be deemed a Catastrophic Error pursuant to the chart set forth above.

As is true for Obvious Errors as described above, the Exchange believes that it is appropriate to adjust to prices a specified amount away from Theoretical Price rather than to adjust to Theoretical Price because even though the Exchange has determined a given trade to be erroneous in nature, the parties in question should have had some expectation of execution at the price or prices submitted. Also, it is common that by the time it is determined that a Catastrophic Error has occurred additional hedging and trading activity has already occurred based on the executions that previously happened. The Exchange is concerned that an adjustment to Theoretical Price in all cases would not appropriately incentivize market participants to maintain appropriate controls to avoid potential errors. Further, the Exchange believes it is appropriate to maintain a higher adjustment level for Catastrophic Errors than Obvious Errors given the significant additional time that can potentially pass before an adjustment is requested and applied and the amount of hedging

and trading activity that can occur based on the executions at issue during such time. For the same reasons, other than honoring the limit prices established for Customer orders, the Exchange has proposed to treat all market participants the same in the context of the Catastrophic Error provision. Specifically, the Exchange believes that treating market participants the same in this context will provide additional certainty to market participants with respect to their potential exposure and hedging activities, including comfort that even if a transaction is later adjusted (i.e., past the standard time limit for filing under the Obvious Error provision), such transaction will not be fully nullified. However, as noted above, under the Proposed Rule where at least one party to the transaction is a Customer, the trade will be nullified if the adjustment would result in an execution price higher (for buy transactions) or lower (for sell transactions) than the Customer's limit price. The Exchange has retained the protection of a Customer's limit price in order to avoid a situation where the adjustment could be to a price that the Customer could not afford, which is less likely to be an issue for a market professional.

### **Significant Market Events**

In order to improve consistency for market participants in the case of a widespread market event and in light of the interconnected nature of the options exchanges, the Exchange proposes to adopt a new provision that calls for coordination between the options exchanges in certain circumstances and provides limited flexibility in the application of other provisions of the Proposed Rule in order to promptly respond to a widespread market event.<sup>10</sup> The Exchange proposes to describe such an event as a

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<sup>10</sup> Although the Exchange has proposed a specific provision related to coordination amongst options exchanges in the context of a widespread event, the Exchange does not believe that the Significant Market Event provision or any other

Significant Market Event, and to set forth certain objective criteria that will determine whether such an event has occurred. The Exchange developed these objective criteria in consultation with the other options exchanges by reference to historical patterns and events with a goal of setting thresholds that very rarely will be triggered so as to limit the application of the provision to truly significant market events. As proposed, a Significant Market Event will be deemed to have occurred when proposed criterion (A) below is met or exceeded or the sum of all applicable event statistics, where each is expressed as a percentage of the relevant threshold in criteria (A) through (D) below, is greater than or equal to 150% and 75% or more of at least one category is reached, provided that no single category can contribute more than 100% to the sum. All criteria set forth below will be measured in aggregate across all exchanges.

The proposed criteria for determining a Significant Market Event are as follows:

(A) Transactions that are potentially erroneous would result in a total Worst-Case Adjustment Penalty of \$30,000,000, where the Worst-Case Adjustment Penalty is computed as the sum, across all potentially erroneous trades, of: (i) \$0.30 (i.e., the largest Transaction Adjustment value listed in subparagraph (e)(3)(A) below); times; (ii) the contract multiplier for each traded contract; times (iii) the number of contracts for each trade; times (iv) the appropriate Size Adjustment Modifier for each trade, if any, as defined in subparagraph (e)(3)(A) below;

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provision of the proposed rule alters the Exchange's ability to coordinate with other options exchanges in the normal course of business with respect to market events or activity. The Exchange does already coordinate with other options exchanges to the extent possible if such coordination is necessary to maintain a fair and orderly market and/or to fulfill the Exchange's duties as a self-regulatory organization.

(B) Transactions involving 500,000 options contracts are potentially erroneous;

(C) Transactions with a notional value (i.e., number of contracts traded multiplied by the option premium multiplied by the contract multiplier) of \$100,000,000 are potentially erroneous;

(D) 10,000 transactions are potentially erroneous.

As described above, the Exchange proposes to adopt a the Worst Case Adjustment Penalty, proposed as criterion (A), which is the only criterion that can on its own result in an event being designated as a significant market event. The Worst Case Adjustment Penalty is intended to develop an objective criterion that can be quickly determined by the Exchange in consultation with other options exchanges that approximates the total overall exposure to market participants on the negatively impacted side of each transaction that occurs during an event. If the Worst Case Adjustment criterion equals or exceeds \$30,000,000, then an event is a Significant Market Event. As an example of the Worst Case Adjustment Penalty, assume that a single potentially erroneous transaction in an event is as follows: sale of 100 contracts of a standard option (i.e., an option with a 100 share multiplier). The highest potential adjustment penalty for this single transaction would be \$6,000, which would be calculated as \$0.30 times 100 (contract multiplier) times 100 (number of contracts) times 2 (applicable Size Adjustment Modifier). The Exchange would calculate the highest potential adjustment penalty for each of the potentially erroneous transactions in the event and the Worst Case Adjustment Penalty would be the sum of such penalties on the Exchange and all other options exchanges with affected transactions.

As described above, under the Proposed Rule if the Worst Case Adjustment Penalty does not equal or exceed \$30,000,000, then a Significant Market Event has occurred if the sum of all applicable event statistics (expressed as a percentage of the relevant thresholds), is greater than or equal to 150% and 75% or more of at least one category is reached. The Proposed Rule further provides that no single category can contribute more than 100% to the sum. As an example of the application of this provision, assume that in a given event across all options exchanges that: (A) the Worst Case Adjustment Penalty is \$12,000,000 (40% of \$30,000,000), (B) 300,000 options contracts are potentially erroneous (60% of 500,000), (C) the notional value of potentially erroneous transactions is \$30,000,000 (30% of \$100,000,000), and (D) 12,000 transactions are potentially erroneous (120% of 10,000). This event would qualify as a Significant Market Event because the sum of all applicable event statistics would be 230%, far exceeding the 150% threshold. The 230% sum is reached by adding 40%, 60%, 30% and last, 100% (i.e., rounded down from 120%) for the number of transactions. The Exchange notes that no single category can contribute more than 100% to the sum and any category contributing more than 100% will be rounded down to 100%.

As an alternative example, assume a large-scale event occurs involving low-priced options with a small number of contracts in each execution. Assume in this event across all options exchanges that: (A) the Worst Case Adjustment Penalty is \$600,000 (2% of \$30,000,000), (B) 20,000 options contracts are potentially erroneous (4% of 500,000), (C) the notional value of potentially erroneous transactions is \$20,000,000 (20% of \$100,000,000), and (D) 20,000 transactions are potentially erroneous (200% of

10,000, but rounded down to 100%). This event would not qualify as a Significant Market Event because the sum of all applicable event statistics would be 126%, below the 150% threshold. The Exchange reiterates that as proposed, even when a single category other than criterion (A) is fully met, that does not necessarily qualify an event as a Significant Market Event.

The Exchange believes that the breadth and scope of the obvious error rules are appropriate and sufficient for handling of typical and common obvious errors. Coordination between and among the exchanges should generally not be necessary even when a member or member organization has an error that results in executions on more than one exchange. In setting the thresholds above the Exchange believes that the requirements will be met only when truly widespread and significant errors happen and the benefits of coordination and information sharing far outweigh the costs of the logistics of additional intra-exchange coordination. The Exchange notes that in addition to its belief that the proposed thresholds are sufficiently high, the Exchange has proposed the requirement that either criterion (A) is met or the sum of applicable event statistics for proposed (A) through (D) equals or exceeds 150% in order to ensure that an event is sufficiently large but also to avoid situations where an event is extremely large but just misses potential qualifying thresholds. For instance, the proposal is designed to help avoid a situation where the Worst Case Adjustment Penalty is \$15,000,000, so the event does not qualify based on criterion (A) alone, but there are transactions in 490,000 options contracts that are potentially erroneous (missing criterion (B) by 10,000 contracts), there transactions with a notional value of \$99,000,000 (missing criterion (C) by \$1,000,000), and there are 9,000 potentially erroneous transactions overall (missing

criterion (D) by 1,000 transactions). The Exchange believes that the proposed formula, while slightly more complicated than simply requiring a certain threshold to be met in each category, may help to avoid inapplicability of the proposed provisions in the context of an event that would be deemed significant by most subjective measures but that barely misses each of the objective criteria proposed by the Exchange.

To ensure consistent application across options exchanges, in the event of a suspected Significant Market Event, the Exchange shall initiate a coordinated review of potentially erroneous transactions with all other affected options exchanges to determine the full scope of the event. Under the Proposed Rule, the Exchange will promptly coordinate with the other options exchanges to determine the appropriate review period as well as select one or more specific points in time prior to the transactions in question and use one or more specific points in time to determine Theoretical Price. Other than the selected points in time, if applicable, the Exchange will determine Theoretical Price as described above. For example, around the start of a Significant Market Event that is triggered by a large and aggressively priced buy order, three exchanges have multiple orders on the offer side of the market: Exchange A has offers priced at \$2.20, \$2.25, \$2.30 and several other price levels to \$3.00, Exchange B has offers at \$2.45, \$2.30 and several other price levels to \$3.00, Exchange C has offers at price levels between \$2.50 and \$3.00. Assume an event occurs starting at 10:05:25 a.m. ET and in this particular series the executions begin on Exchange A and subsequently begin to occur on Exchanges B and C. Without coordination and information sharing between the exchanges, Exchange B and Exchange C cannot know with certainty that whether or not the execution at Exchange A that happened at \$2.20 immediately prior to their executions

at \$2.45 and \$2.50 is part of the same erroneous event or not. With proper coordination, the exchanges can determine that in this series, the proper point in time from which the event should be analyzed is 10:05:25 a.m. ET, and thus, the NBO of \$2.20 should be used as the Theoretical Price for purposes of all buy transactions in such options series that occurred during the event.

If it is determined that a Significant Market Event has occurred then, using the parameters agreed with respect to the times from which Theoretical Price will be calculated, if applicable, an Official will determine whether any or all transactions under review qualify as Obvious Errors. The Proposed Rule would require the Exchange to use the criteria in Proposed Rule 20.6(c), as described above, to determine whether an Obvious Error has occurred for each transaction that was part of the Significant Market Event. Upon taking any final action, the Exchange would be required to promptly notify both parties to the trade electronically or via telephone.

The execution price of each affected transaction will be adjusted by an Official to the price provided below, unless both parties agree to adjust the transaction to a different price or agree to bust the trade.

<b>Theoretical Price (TP)</b>	<b>Buy Transaction Adjustment – TP Plus</b>	<b>Sell Transaction Adjustment – TP Minus</b>
Below \$3.00	\$0.15	\$0.15
At or above \$3.00	\$0.30	\$0.30

Thus, the proposed adjustment criteria for Significant Market Events are identical to the proposed adjustment levels for Obvious Errors generally. In addition, in the context of a Significant Market Event, any error exceeding 50 contracts will be subject to the Size Adjustment Modifier described above. Also, the adjustment criteria would apply equally

to all market participants (i.e., Customers and non-Customers) in a Significant Market Event. However, as is true for the proposal with respect to Catastrophic Errors, under the Proposed Rule where at least one party to the transaction is a Customer, the trade will be nullified if the adjustment would result in an execution price higher (for buy transactions) or lower (for sell transactions) than the Customer's limit price. The Exchange has retained the protection of a Customer's limit price in order to avoid a situation where the adjustment could be to a price that the Customer could not afford, which is less likely to be an issue for a market professional. The Exchange has otherwise proposed to treat all market participants the same in the context of a Significant Market Event to provide additional certainty to market participants with respect to their potential exposure as soon as an event has occurred.

Another significant distinction between the proposed Obvious Error provision and the proposed Significant Market Event provision is that if the Exchange, in consultation with other options exchanges, determines that timely adjustment is not feasible due to the extraordinary nature of the situation, then the Exchange will nullify some or all transactions arising out of the Significant Market Event during the review period selected by the Exchange and other options exchanges. To the extent the Exchange, in consultation with other options exchanges, determines to nullify less than all transactions arising out of the Significant Market Event, those transactions subject to nullification will be selected based upon objective criteria with a view toward maintaining a fair and orderly market and the protection of investors and the public interest. For example, assume a Significant Market Event causes 25,000 potentially erroneous transactions and impacts 51 options classes. Of the 25,000 transactions, 24,000 of them are concentrated

in a single options class. The exchanges may decide the most appropriate solution because it will provide the most certainty to participants and allow for the prompt resumption of regular trading is to bust all trades in the most heavily affected class between two specific points in time, while the other 1,000 trades across the other 50 classes are reviewed and adjusted as appropriate. A similar situation might arise directionally where a Customer submits both erroneous buy and sell orders and the number of errors that happened that were erroneously low priced (i.e., erroneous sell orders) were 50,000 in number but the number of errors that were erroneously high (i.e., erroneous buy orders) were only 500 in number. The most effective and efficient approach that provides the most certainty to the marketplace in a reasonable amount of time while most closely following the generally prescribed obvious error rules could be to bust all of the erroneous sell transactions but to adjust the erroneous buy transactions.

With respect to rulings made pursuant to the proposed Significant Market Event provision the Exchange believes that the number of affected transactions is such that immediate finality is necessary to maintain a fair and orderly market and to protect investors and the public interest. Accordingly, rulings by the Exchange pursuant to the Significant Market Event provision would be non-appealable pursuant to the Proposed Rule.

### **Additional Provisions**

#### ***Mutual Agreement***

In addition to the objective criteria described above, the Proposed Rule also proposes to make clear that the determination as to whether a trade was executed at an erroneous price may be made by mutual agreement of the affected parties to a particular

transaction. The Proposed Rule would state that a trade may be nullified or adjusted on the terms that all parties to a particular transaction agree, provided, however, that such agreement to nullify or adjust must be conveyed to the Exchange in a manner prescribed by the Exchange prior to 8:30 a.m. Eastern Time on the first trading day following the execution.

The Exchange also proposes to explicitly state that it is considered conduct inconsistent with just and equitable principles of trade for any member or member organization to use the mutual adjustment process to circumvent any applicable Exchange rule, the Act or any of the rules and regulations thereunder. Thus, for instance, a member or member organization is precluded from seeking to avoid applicable trade-through rules by executing a transaction and then adjusting such transaction to a price at which the Exchange would not have allowed it to execute at the time of the execution because it traded through the quotation of another options exchange. The Exchange notes that in connection with its obligations as a self-regulatory organization, the Exchange's Regulatory Department reviews adjustments to transactions to detect potential violations of Exchange rules or the Act and the rules and regulations thereunder.

### ***Trading Halts***

Exchange Rule 1047 describes the Exchange's authority to declare trading halts in one or more options traded on the Exchange. The Exchange proposes to make clear in the Proposed Rule that it will nullify any transaction that occurs during a trading halt in the affected option. If any trades occur notwithstanding a trading halt then the Exchange believes it appropriate to nullify such transactions. While the Exchange may halt options trading for various reasons, such a scenario almost certainly is due to extraordinary

circumstances and is potentially the result of market-wide coordination to halt options trading or trading generally. Accordingly, the Exchange does not believe it is appropriate to allow trades to stand if such trades should not have occurred in the first place.

The Exchange proposes to adopt Commentary .03 to Rule 1092. Currently, Rule 1092(c)(iv) states that the Exchange will nullify any transaction that occurs: (a) during a trading halt in the affected option on the Exchange; (b) with respect to equity options (including options overlying ETFs), during a trading halt on the primary listing market for the underlying security; (c) respecting index options, the trade occurred during a trading halt on the primary market in (1) underlying securities representing more than 10 percent of the current index value for stock index options, or (2) either component security of an Alpha Index for Alpha Index options; or (d) respecting Treasury security options, the trade occurred during a trading halt of the underlying Treasury security instituted by the United States Government. The Exchange proposes to relocate this provision to Commentary .03.

#### ***Erroneous Print and Quotes in Underlying Security***

Market participants on the Exchange likely base the pricing of their orders submitted to the Exchange on the price of the underlying security for the option. Thus, the Exchange believes it is appropriate to adopt provisions that allow adjustment or nullification of transactions based on erroneous prints or erroneous quotes in the underlying security.

The Exchange proposes to adopt language in the Proposed Rule stating that a trade resulting from an erroneous print(s) disseminated by the underlying market that is later nullified by that underlying market shall be adjusted or busted as set forth in the

Obvious Error provisions of the Proposed Rule, provided a party notifies an Official in a timely manner, as further described below. The Exchange proposes to define a trade resulting from an erroneous print(s) as any options trade executed during a period of time for which one or more executions in the underlying security are nullified and for one second thereafter. The Exchange believes that one second is an appropriate amount of time in which an options trade would be directly based on executions in the underlying equity security. The Exchange also proposes to require that if a party believes that it participated in an erroneous transaction resulting from an erroneous print(s) pursuant to the proposed erroneous print provision it must notify an Official within the timeframes set forth in the Obvious Error provision described above. The Exchange has also proposed to state that the allowed notification timeframe commences at the time of notification by the underlying market(s) of nullification of transactions in the underlying security. Further, the Exchange proposes that if multiple underlying markets nullify trades in the underlying security, the allowed notification timeframe will commence at the time of the first market's notification.

As an example of a situation in which a trade results from an erroneous print disseminated by the underlying market that is later nullified by the underlying market, assume that a given underlying is trading in the \$49.00 - \$50.00 price range then has an erroneous print at \$5.00. Given that there is the potential perception that the underlying has gone through a dramatic price revaluation, numerous options trades could promptly trigger based off of this new price. However, because the price that triggered them was not a valid price it would be appropriate to review said option trades when the underlying print that triggered them is removed.

The Exchange also proposes to add a provision stating that a trade resulting from an erroneous quote(s) in the underlying security shall be adjusted or busted as set forth in the Obvious Error provisions of the Proposed Rule, provided a party notifies an Official in a timely manner, as further described below. Pursuant to the Proposed Rule, an erroneous quote occurs when the underlying security has a width of at least \$1.00 and has a width at least five times greater than the average quote width for such underlying security during the time period encompassing two minutes before and after the dissemination of such quote. For purposes of the Proposed Rule, the average quote width will be determined by adding the quote widths of sample quotations at regular 15-second intervals during the four-minute time period referenced above (excluding the quote(s) in question) and dividing by the number of quotes during such time period (excluding the quote(s) in question).<sup>11</sup> Similar to the proposal with respect to erroneous prints described above, if a party believes that it participated in an erroneous transaction resulting from an erroneous quote(s) it must notify an Official in accordance with the notification provisions of the Obvious Error provision described above. The Proposed Rule, therefore, puts the onus on each member or member organization to notify the Exchange if such member or member organization believes that a trade should be reviewed pursuant to either of the proposed provisions, as the Exchange is not in position to determine the impact of erroneous prints or quotes on individual members or member

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<sup>11</sup> The Exchange has proposed the price and time parameters for quote width and average quote width used to determine whether an erroneous quote has occurred based on established rules of options exchanges that currently apply such parameters. See e.g., CBOE Rule 6.25(a)(5); NYSE Arca Rule 6.87(a)(5). Based on discussions with these exchanges, the Exchange believes that the parameters are a reasonable approach to determine whether an erroneous quote has occurred for purposes of the proposed rule.

organizations. The Exchange notes that it does not believe that additional time is necessary with respect to a trade based on an erroneous quote because a member or member organization has all information necessary to detect the error at the time of an option transaction that was triggered by an erroneous quote, which is in contrast to the proposed erroneous print provision that includes a dependency on an action by the market where the underlying security traded.

As an example of a situation in which a trade results from an erroneous quote in the underlying security, assume again that a given underlying is quoting and trading in the \$49.00 - \$50.00 price range then a liquidity gap occurs, with bidders not representing quotes in the market place and an offer quoted at \$5.00. Quoting may quickly return to normal, again in the \$49.00 - \$50.00 price range, but due to the potential perception that the underlying has gone through a dramatic price revaluation, numerous options trades could trigger based off of this new quoted price in the interim. Because the price that triggered such trades was not a valid price, it would be appropriate to review said option trades.

***Stop (and Stop-Limit) Order Trades Triggered by Erroneous Trades***

The Exchange notes that certain market participants and their customers enter stop or stop limit orders that are triggered based on executions in the marketplace. As proposed, transactions resulting from the triggering of a stop or stop-limit order by an erroneous trade in an option contract shall be nullified by the Exchange, provided a party notifies an Official in a timely manner as set forth below. The Exchange believes it is appropriate to nullify executions of stop or stop-limit orders that were wrongly triggered because such transactions should not have occurred. If a party believes that it

participated in an erroneous transaction pursuant to the Proposed Rule it must notify an Official within the timeframes set forth in the Obvious Error Rule above, with the allowed notification timeframe commencing at the time of notification of the nullification of transaction(s) that triggered the stop or stop-limit order.

### ***Linkage Trades***

The Exchange also proposes to adopt language that clearly provides the Exchange with authority to take necessary actions when another options exchange nullifies or adjusts a transaction pursuant to its respective rules and the transaction resulted from an order that has passed through the Exchange and been routed on to another options exchange on behalf of the Exchange. Specifically, if the Exchange routes an order pursuant to the Options Order Protection and Locked/Crossed Market Plan<sup>12</sup> that results in a transaction on another options exchange (a “Linkage Trade”) and such options exchange subsequently nullifies or adjusts the Linkage Trade pursuant to its rules, the Exchange will perform all actions necessary to complete the nullification or adjustment of the Linkage Trade. Although the Exchange is not utilizing its own authority to nullify or adjust a transaction related to an action taken on a Linkage Trade by another options exchange, the Exchange does have to assist in the processing of the adjustment or nullification of the order, such as notification to the member or member organization and The Options Clearing Corporation (“OCC”) of the adjustment or nullification. Thus, the Exchange believes that the proposed provision adds additional transparency to the Proposed Rule.

### ***Verifiable Disruption or Malfunction of Exchange Systems***

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<sup>12</sup> See Rule 1083(n).

The Exchange proposes to retain its provision regarding a verifiable disruption or malfunction in Exchange systems, which appears in subparagraphs (c)(ii)(A) and (B) of the Current Rule. Specifically, parties to a trade may have a trade nullified or its price adjusted if the trade resulted from a verifiable disruption or malfunction of an Exchange execution, dissemination, or communication system that caused a quote/order to trade in excess of its disseminated size (e.g. a quote/order that is frozen, because of an Exchange system error, and repeatedly traded). Similarly, parties to a trade may have a trade nullified or its price adjusted if it resulted from a verifiable disruption or malfunction of an Exchange dissemination or communication system that prevented a member from updating or canceling a quote/order for which the member is responsible where there is Exchange documentation providing that the member sought to update or cancel the quote/order.

### *Appeals*

The Exchange proposes to maintain its current appeals process (currently in Rule 1092(g)) in connection with the Proposed Rule. Specifically, if a party affected by a determination made under the Proposed Rule so requests within the time permitted, the Market Operations Review Committee will review decisions made under the Proposed Rule in accordance with Exchange Rule 124(d). A request for review under this paragraph must be made within 30 minutes after a party receives verbal notification of a final determination by an Official under this Rule, except that if such notification is made after 3:30 p.m. Eastern Time, either party has until 9:30 a.m. Eastern Time on the next trading day to request a review. Such a request for review must be in writing or otherwise documented. The Market Operations Review Committee shall review the facts and render

a decision on the day of the transaction, or the next trade day in the case where a request is properly made after 3:30 p.m. on the day of the transaction or where the request is properly made the next trade day. In addition, the Exchange is proposing to harmonize with other exchanges that any determination by an Official or the Market Operations Review Committee shall be rendered without prejudice as to the rights of the parties to the transaction to submit their dispute to arbitration.<sup>13</sup>

In order to maintain a diverse group of participants, the Market Operations Review Committee will continue to consist of a number of Member Representative members<sup>14</sup> that is equal to at least 20 percent of the total number of members of the Market Operations Review Committee; no more than 50 percent of the members of the Market Operations Review Committee shall be engaged in market making activity or employed by a Member firm whose revenues from market making activity exceed 10 percent of its total revenues.<sup>15</sup> The Market Operations Review Committee may continue to act as a panel with a minimum of three Committee members, of which no more than 50% can be engaged in market making activity or employed by an Exchange member organization whose revenues from market making activity exceed ten percent of its total

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<sup>13</sup> See e.g., The NASDAQ Options Market Rules, Chapter V, Section 6(g)(iv).

<sup>14</sup> A Member Representative Member is a member appointed by the Board of Directors who has been elected or appointed after having been nominated by the Member Nominating Committee pursuant to the Exchange's By-Laws. See By-Law Article I, Section 1(x).

<sup>15</sup> See By-Law Article V, Section 5-3(d).

revenues.<sup>16</sup> To assure fairness, members of the Market Operations Review Committee, like all members of Board Committees, are subject to a conflict of interest prohibition.<sup>17</sup>

### ***Complex Orders***

The Exchange is proposing to adopt Commentary .01 to the Proposed Rule to provide for how the Exchange will treat Obvious and Catastrophic Errors respecting complex order executions.<sup>18</sup> The Proposed Rule will be identical to the Current Rule.<sup>19</sup> If both parties to a trade that is one component of a complex order execution are parties to all of the trades that together comprise the execution of a complex order at a single net debit or credit, then if one of those component trades can be nullified under this Rule 1092, all component trades that were part of the same complex order shall be nullified as well. This is intended to mitigate the risk to parties using complex orders, where part or all of a complex order traded at an erroneous price.<sup>20</sup>

### ***No Adjustments to a Worse Price***

Finally, the Exchange proposes to include Commentary .02 to the Proposed Rule, which would make clear that to the extent the provisions of the proposed Rule would result in the Exchange applying an adjustment of an erroneous sell transaction to a price lower than the execution price or an erroneous buy transaction to a price higher than the

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<sup>16</sup> See Rule 124(d)(i)

<sup>17</sup> See By-Law Article III, Section 3-4(a).

<sup>18</sup> The process for complex order executions is governed by Rule 1080.07.

<sup>19</sup> See Rule 1092(c)(v).

<sup>20</sup> See Securities Exchange Act Release No. 63692 (January 11, 2011), 76 FR 2940 (January 18, 2011).

execution price, the Exchange will not adjust or nullify the transaction, but rather, the execution price will stand.

### ***Limit Up-Limit Down Plan***

The Exchange proposes to amend Rule 1047(f)(v) to reflect the numbering and content of the Proposed Rule. It will then continue to cover how the Exchange will treat Obvious and Catastrophic Errors in response to the Regulation NMS Plan to Address Extraordinary Market Volatility Pursuant to Rule 608 of Regulation NMS under the Act (the “Limit Up-Limit Down Plan” or the “Plan”),<sup>21</sup> which is applicable to all NMS stocks, as defined in Regulation NMS Rule 600(b)(47).<sup>22</sup>

### ***Implementation Date***

In order to ensure that other options exchanges are able to adopt rules consistent with this proposal and to coordinate the effectiveness of such harmonized rules, the Exchange proposes to delay the operative date of this proposal to May 8, 2015.

## **2. Statutory Basis**

The Exchange believes that its proposal is consistent with the requirements of the Act and the rules and regulations thereunder that are applicable to a national securities exchange, and, in particular, with the requirements of Section 6(b) of the Act.<sup>23</sup> Specifically, the proposal is consistent with Section 6(b)(5) of the Act<sup>24</sup> because it would promote just and equitable principles of trade, remove impediments to, and perfect the

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<sup>21</sup> Securities Exchange Act Release No. 67091 (May 31, 2012), 77 FR 33498 (June 6, 2012).

<sup>22</sup> 17 CFR 242.600(b)(47).

<sup>23</sup> 15 U.S.C. 78f(b).

<sup>24</sup> 15 U.S.C. 78f(b)(5).

mechanism of, a free and open market and a national market system, and, in general, protect investors and the public interest.

As described above, the Exchange and other options exchanges are seeking to adopt harmonized rules related to the adjustment and nullification of erroneous options transactions. The Exchange believes that the Proposed Rule will provide greater transparency and clarity with respect to the adjustment and nullification of erroneous options transactions. Particularly, the proposed changes seek to achieve consistent results for participants across U.S. options exchanges while maintaining a fair and orderly market, protecting investors and protecting the public interest. Based on the foregoing, the Exchange believes that the proposal is consistent with Section 6(b)(5) of the Act<sup>25</sup> in that the Proposed Rule will foster cooperation and coordination with persons engaged in regulating and facilitating transactions.

The Exchange believes the various provisions allowing or dictating adjustment rather than nullification of a trade are necessary given the benefits of adjusting a trade price rather than nullifying the trade completely. Because options trades are used to hedge, or are hedged by, transactions in other markets, including securities and futures, many members and member organizations, and their customers, would rather adjust prices of executions rather than nullify the transactions and, thus, lose a hedge altogether. As such, the Exchange believes it is in the best interest of investors to allow for price adjustments as well as nullifications. The Exchange further discusses specific aspects of the Proposed Rule below.

The Exchange does not believe that the proposal is unfairly discriminatory, even

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<sup>25</sup> 15 U.S.C. 78f(b)(5).

though it differentiates in many places between Customers and non-Customers. The rules of the options exchanges, including the Exchange's existing Obvious Error provision, often treat Customers differently, often affording them preferential treatment. This treatment is appropriate in light of the fact that Customers are not necessarily immersed in the day-to-day trading of the markets, are less likely to be watching trading activity in a particular option throughout the day, and may have limited funds in their trading accounts. At the same time, the Exchange reiterates that in the U.S. options markets generally there is significant retail customer participation that occurs directly on (and only on) options exchanges such as the Exchange. Accordingly, differentiating among market participants with respect to the adjustment and nullification of erroneous options transactions is not unfairly discriminatory because it is reasonable and fair to provide Customers with additional protections as compared to non-Customers.

The Exchange believes that its proposal with respect to the allowance of mutual agreed upon adjustments or nullifications is appropriate and consistent with the Act, as such proposal removes impediments to and perfects the mechanism of a free and open market and a national market system, allowing participants to mutually agree to correct an erroneous transactions without the Exchange mandating the outcome. The Exchange also believes that its proposal with respect to mutual adjustments is consistent with the Act because it is designed to prevent fraudulent and manipulative acts and practices by explicitly stating that it is considered conduct inconsistent with just and equitable principles of trade for any member or member organization to use the mutual adjustment process to circumvent any applicable Exchange rule, the Act or any of the rules and regulations thereunder.

The Exchange believes its proposal to provide within the Proposed Rule definitions of Customer, erroneous sell transaction and erroneous buy transaction, and Official is consistent with Section 6(b)(5) of the Act because such terms will provide more certainty to market participants as to the meaning of the Proposed Rule and reduce the possibility that a party can intentionally submit an order hoping for the market to move in their favor in reliance on the Rule as a safety mechanism, thereby promoting just and fair principles of trade. Similarly, the Exchange believes that proposed Commentary .02 is consistent with the Act as it would make clear that the Exchange will not adjust or nullify a transaction, but rather, the execution price will stand when the applicable adjustment criteria would actually adjust the price of the transaction to a worse price (i.e., higher for an erroneous buy or lower for an erroneous sell order).

As set forth below, the Exchange believes it is consistent with Section 6(b)(5) of the Act for the Exchange to determine Theoretical Price when the NBBO cannot reasonably be relied upon because the alternative could result in transactions that cannot be adjusted or nullified even when they are otherwise clearly at a price that is significantly away from the appropriate market for the option. Similarly, reliance on an NBBO that is not reliable could result in adjustment to prices that are still significantly away from the appropriate market for the option.

The Exchange believes that its proposal with respect to determining Theoretical Price is consistent with the Act in that it has retained the standard of the current rule, which is to rely on the NBBO to determine Theoretical Price if such NBBO can reasonably be relied upon. Because, however, there is not always an NBBO that can or should be used in order to administer the rule, the Exchange has proposed various

provisions that provide the Exchange with the authority to determine a Theoretical Price. The Exchange believes that the Proposed Rule is transparent with respect to the circumstances under which the Exchange will determine Theoretical Price, and has sought to limit such circumstances as much as possible. The Exchange notes that Exchange personnel currently are required to determine Theoretical Price in certain circumstances. While the Exchange continues to pursue alternative solutions that might further enhance the objectivity and consistency of determining Theoretical Price, the Exchange believes that the discretion currently afforded to Officials is appropriate in the absence of a reliable NBBO that can be used to set the Theoretical Price.

With respect to the specific proposed provisions for determining Theoretical Price for transactions that occur as part of the Exchange's Opening Process and in situations where there is a wide quote, the Exchange believes both provisions are consistent with the Act because they provide objective criteria that will determine Theoretical Price with limited exceptions for situations where the Exchange does not believe the NBBO is a reasonable benchmark or there is no NBBO. The Exchange notes in particular with respect to the wide quote provision that the Proposed Rule will result in the Exchange determining Theoretical Price less frequently than it would pursuant to wide quote provisions that have previously been approved. The Exchange believes that it is appropriate and consistent with the Act to afford protections to market participants by not relying on the NBBO to determine Theoretical Price when the quote is extremely wide but had been, in the prior 10 seconds, at much more reasonable width. The Exchange also believes it is appropriate and consistent with the Act to use the NBBO to determine Theoretical Price when the quote has been wider than the applicable amount for more

than 10 seconds, as the Exchange does not believe it is necessary to apply any other criteria in such a circumstance. The Exchange believes that market participants can easily use or adopt safeguards to prevent errors when such market conditions exist. When entering an order into a market with a persistently wide quote, the Exchange does not believe that the entering party should reasonably expect anything other than the quoted price of an option.

The Exchange believes that its proposal to adopt clear but disparate standards with respect to the deadline for submitting a request for review of Customer and non-Customer transactions is consistent with the Act, particularly in that it creates a greater level of protection for Customers. As noted above, the Exchange believes that this is appropriate and not unfairly discriminatory in light of the fact that Customers are not necessarily immersed in the day-to-day trading of the markets and are less likely to be watching trading activity in a particular option throughout the day. Thus, members or member organizations representing Customer orders reasonably may need additional time to submit a request for review. The Exchange also believes that its proposal to provide additional time for submission of requests for review of linkage trades is reasonable and consistent with the protection of investors and the public interest due to the time that it might take an options exchange or third-party routing broker to file a request for review with the Exchange if the initial notification of an error is received by the originating options exchange near the end of such options exchange's filing deadline. Without this additional time, there could be disparate results based purely on the existence of intermediaries and an interconnected market structure.

In relation to the aspect of the proposal giving Officials the ability to review

transactions for obvious errors on their own motion, the Exchange notes that an Official can adjust or nullify a transaction under the authority granted by this provision only if the transaction meets the specific and objective criteria for an Obvious Error under the Proposed Rule. As noted above, this is designed to give an Official the ability to provide parties relief in those situations where they have failed to report an apparent error within the established notification period. However, the Exchange will only grant relief if the transaction meets the requirements for an Obvious Error as described in the Proposed Rule.

The Exchange believes that its proposal to adjust non-Customer transactions and to nullify Customer transactions that qualify as Obvious Errors is appropriate for reasons consistent with those described above. In particular, Customers are not necessarily immersed in the day-to-day trading of the markets, are less likely to be watching trading activity in a particular option throughout the day, and may have limited funds in their trading accounts.

The Exchange acknowledges that the proposal contains some uncertainty regarding whether a trade will be adjusted or nullified, depending on whether one of the parties is a Customer, because a party may not know whether the other party to a transaction was a Customer at the time of entering into the transaction. However, the Exchange believes that the proposal nevertheless promotes just and equitable principles of trade and protects investors as well as the public interest because it eliminates the possibility that a Customer's order will be adjusted to a significantly different price. As noted above, the Exchange believes it is consistent with the Act to afford Customers greater protections under the Proposed Rule than are afforded to non-Customers. Thus,

the Exchange believes that its proposal is consistent with the Act in that it protects investors and the public interest by providing additional protections to those that are less informed and potentially less able to afford an adjustment of a transaction that was executed in error. Customers are also less likely to have engaged in significant hedging or other trading activity based on earlier transactions, and thus, are less in need of maintaining a position at an adjusted price than non-Customers.

If any member or member organization submits requests to the Exchange for review of transactions pursuant to the Proposed Rule, and in aggregate that member or member organization has 200 or more Customer transactions under review concurrently and the orders resulting in such transactions were submitted during the course of 2 minutes or less, the Exchange believes it is appropriate for the Exchange apply the non-Customer adjustment criteria described above to such transactions. The Exchange believes that the proposed aggregation is reasonable as it is representative of an extremely large number of orders submitted to the Exchange over a relatively short period of time that are, in turn, possibly erroneous (and within a time frame significantly less than an entire day), and thus is most likely to occur because of a systems issue experienced by a member or member organization representing Customer orders or a systems issue coupled with the erroneous marking of orders. The Exchange does not believe it is possible at a level of 200 Customer orders over a 2 minute period that are under review at one time that multiple, separate Customers were responsible for the errors in the ordinary course of trading. In the event of a large-scale issue caused by an member or member organization that has submitted orders over a 2 minute period marked as Customer that resulted in more than 200 transactions under review, the Exchange does

not believe it is appropriate to nullify all such transactions because of the negative impact that nullification could have on the market participants on the contra-side of such transactions, who might have engaged in hedging and trading activity following such transactions. In order for a participant to have more than 200 transactions under review concurrently when the orders triggering such transactions were received in 2 minutes or less, the Exchange believes that a market participant will have far exceeded the normal behavior of customers deserving protected status. While the Exchange continues to believe that it is appropriate to nullify transactions in such a circumstance if both participants to a transaction are Customers, the Exchange does not believe it is appropriate to place the overall risk of a significant number of trade breaks on non-Customers that in the normal course of business may have engaged in additional hedging activity or trading activity based on such transactions. Thus, the Exchange believes it is necessary and appropriate to protect non-Customers in such a circumstance by applying the non-Customer adjustment criteria, and thus adjusting transactions as set forth above, in the event a member or member organization has more than 200 transactions under review concurrently. In summary, due to the extreme level at which the proposal is set, the Exchange believes that the proposal is consistent with Section 6(b)(5) of the Act in that it promotes just and equitable principles of trade by encouraging market participants to retain appropriate controls over their systems to avoid submitting a large number of erroneous orders in a short period of time.

Similarly, the Exchange believes that the proposed Size Adjustment Modifier, which would increase the adjustment amount for non-Customer transactions, is appropriate because it attempts to account for the additional risk that the parties to the

trade undertake for transactions that are larger in scope. The Exchange believes that the Size Adjustment Modifier creates additional incentives to prevent more impactful Obvious Errors and it lessens the impact on the contra-party to an adjusted trade. The Exchange notes that these contra-parties may have preferred to only trade the size involved in the transaction at the price at which such trade occurred, and in trading larger size has committed a greater level of capital and bears a larger hedge risk.

The Exchange similarly believes that its Proposed Rule with respect to Catastrophic Errors is consistent with the Act as it affords additional time for market participants to file for review of erroneous transactions that were further away from the Theoretical Price. At the same time, the Exchange believes that the Proposed Rule is consistent with the Act in that it generally would adjust transactions, including Customer transactions, because this will protect against hedge risk, particularly for transactions that may have occurred several hours earlier and thus, which all parties to the transaction might presume are protected from further modification. Similarly, by providing larger adjustment amounts away from Theoretical Price than are set forth under the Obvious Error provision, the Catastrophic Error provision also takes into account the possibility that the party that was advantaged by the erroneous transaction has already taken actions based on the assumption that the transaction would stand. The Exchange believes it is reasonable to specifically protect Customers from adjustments through their limit prices for the reasons stated above, including that Customers are less likely to be watching trading throughout the day and that they may have less capital to afford an adjustment price. The Exchange believes that the proposal provides a fair process that will ensure that Customers are not forced to accept a trade that was executed in violation of their

limit order price. In contrast, market professionals are more likely to have engaged in hedging or other trading activity based on earlier trading activity, and thus, are more likely to be willing to accept an adjustment rather than a nullification to preserve their positions even if such adjustment is to a price through their limit price.

The Exchange believes that proposed rule change to adopt the Significant Market Event provision is consistent with Section 6(b)(5) of the Act in that it will foster cooperation and coordination with persons engaged in regulating the options markets. In particular, the Exchange believes it is important for options exchanges to coordinate when there is a widespread and significant event, as commonly, multiple options exchanges are impacted in such an event. Further, while the Exchange recognizes that the Proposed Rule will not guarantee a consistent result for all market participants on every market, the Exchange does believe that it will assist in that outcome. For instance, if options exchanges are able to agree as to the time from which Theoretical Price should be determined and the period of time that should be reviewed, the likely disparity between the Theoretical Prices used by such exchanges should be very slight and, in turn, with otherwise consistent rules, the results should be similar. The Exchange also believes that the Proposed Rule is consistent with the Act in that it generally would adjust transactions, including Customer transactions, because this will protect against hedge risk, particularly for liquidity providers that might have been quoting in thousands or tens of thousands of different series and might have affected executions throughout such quoted series. The Exchange believes that when weighing the competing interests between preferring a nullification for a Customer transaction and an adjustment for a transaction of a market professional, while nullification is appropriate in a typical one-off

situation that it is necessary to protect liquidity providers in a widespread market event because, presumably, they will be the most affected by such an event (in contrast to a Customer who, by virtue of their status as such, likely would not have more than a small number of affected transactions). The Exchange believes that the protection of liquidity providers by favoring adjustments in the context of Significant Market Events can also benefit Customers indirectly by better enabling liquidity providers, which provides a cumulative benefit to the market. Also, as stated above with respect to Catastrophic Errors, the Exchange believes it is reasonable to specifically protect Customers from adjustments through their limit prices for the reasons stated above, including that Customers are less likely to be watching trading throughout the day and that they may have less capital to afford an adjustment price. The Exchange believes that the proposal provides a fair process that will ensure that Customers are not forced to accept a trade that was executed in violation of their limit order price. In contrast, market professionals are more likely to have engaged in hedging or other trading activity based on earlier trading activity, and thus, are more likely to be willing to accept an adjustment rather than a nullification to preserve their positions even if such adjustment is to a price through their limit price. In addition, the Exchange believes it is important to have the ability to nullify some or all transactions arising out of a Significant Market Event in the event timely adjustment is not feasible due to the extraordinary nature of the situation. In particular, although the Exchange has worked to limit the circumstances in which it has to determine Theoretical Price, in a widespread event it is possible that hundreds if not thousands of series would require an Exchange determination of Theoretical Price. In turn, if there are hundreds or thousands of trades in such series, it may not be practicable

for the Exchange to determine the adjustment levels for all non-Customer transactions in a timely fashion, and in turn, it would be in the public interest to instead more promptly deliver a simple, consistent result of nullification.

The Exchange believes that proposed rule change related to an erroneous print in the underlying security, an erroneous quote in the underlying security, or an erroneous transaction in the option with respect to stop and stop limit orders is likewise consistent with Section 6(b)(5) of the Act because the proposal provides for the adjustment or nullification of trades executed at erroneous prices through no fault on the part of the trading participants. Allowing for Exchange review in such situations will promote just and fair principles of trade by protecting investors from harm that is not of their own making. Specifically with respect to the proposed provisions governing erroneous prints and quotes in the underlying security, the Exchange notes that market participants on the Exchange base the value of their quotes and orders on the price of the underlying security. The provisions regarding errors in prints and quotes in the underlying security cover instances where the information market participants use to price options is erroneous through no fault of their own. In these instances, market participants have little, if any, chance of pricing options accurately. Thus, these provisions are designed to provide relief to market participants harmed by such errors in the prints or quotes of the underlying security.

The Exchange believes that the proposed provision related to Linkage Trades is consistent with the Act because it adds additional transparency to the Proposed Rule and makes clear that when a Linkage Trade is adjusted or nullified by another options exchange, the Exchange will take necessary actions to complete the nullification or

adjustment of the Linkage Trade.

The Exchange believes that retaining the same appeals process as the Exchange maintains under the Current Rule is consistent with the Act because such process provides members and member organizations with due process in connection with decisions made by Officials under the Proposed Rule. The Exchange believes that this process provides fair representation of members and member organizations by ensuring diversity amongst the members of any review panel, which is consistent with Sections 6(b)(3) and 6(b)(7) of the Act.

**B. Self-Regulatory Organization's Statement on Burden on Competition**

Phlx believes the entire proposal is consistent with Section 6(b)(8) of the Act<sup>26</sup> in that it does not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act as explained below.

Importantly, the Exchange believes the proposal will not impose a burden on intermarket competition but will rather alleviate any burden on competition because it is the result of a collaborative effort by all options exchanges to harmonize and improve the process related to the adjustment and nullification of erroneous options transactions. The Exchange does not believe that the rules applicable to such process is an area where options exchanges should compete, but rather, that all options exchanges should have consistent rules to the extent possible. Particularly where a market participant trades on several different exchanges and an erroneous trade may occur on multiple markets nearly simultaneously, the Exchange believes that a participant should have a consistent experience with respect to the nullification or adjustment of transactions. The Exchange

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<sup>26</sup> 15 U.S.C. 78f(b)(8).

understands that all other options exchanges intend to file proposals that are substantially similar to this proposal.

The Exchange does not believe that the proposed rule change imposes a burden on intramarket competition because the provisions apply to all market participants equally within each participant category (i.e., Customers and non-Customers). With respect to competition between Customer and non-Customer market participants, the Exchange believes that the Proposed Rule acknowledges competing concerns and tries to strike the appropriate balance between such concerns. For instance, as noted above, the Exchange believes that protection of Customers is important due to their direct participation in the options markets as well as the fact that they are not, by definition, market professionals. At the same time, the Exchange believes due to the quote-driven nature of the options markets, the importance of liquidity provision in such markets and the risk that liquidity providers bear when quoting a large breadth of products that are derivative of underlying securities, that the protection of liquidity providers and the practice of adjusting transactions rather than nullifying them is of critical importance. As described above, the Exchange will apply specific and objective criteria to determine whether an erroneous transaction has occurred and, if so, how to adjust or nullify a transaction.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on

competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A)(iii) of the Act<sup>27</sup> and subparagraph (f)(6) of Rule 19b-4 thereunder.<sup>28</sup>

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-Phlx-2015-43 on the subject line.

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<sup>27</sup> 15 U.S.C. 78s(b)(3)(a)(iii).

<sup>28</sup> 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

Paper comments:

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-Phlx-2015-43. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site

(<http://www.sec.gov/rules/sro.shtml>).

Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-Phlx-2015-43 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>29</sup>

Kevin M O'Neill  
Deputy Secretary

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<sup>29</sup> 17 CFR 200.30-3(a)(12).

**EXHIBIT 5**

Note: Proposed new language is underlined. Proposed deletions are enclosed in [brackets].

**Rules of the Exchange**

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**Options Rules**

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**Rule 1047. Trading Rotations, Halts and Suspensions**

(a) – (e) No change.

(f) This paragraph shall be in effect during a pilot period to coincide with the pilot period for the Plan to Address Extraordinary Market Volatility Pursuant to Rule 608 of Regulation NMS, as it may be amended from time to time ("LULD Plan"), except as specified in subparagraph (v) below. Capitalized terms used in this paragraph shall have the same meaning as provided for in the LULD Plan. During a Limit State and Straddle State in the Underlying NMS stock:

(i) – (iv) No change.

(v) For a pilot period set to end on October 23, 2015, electronic trades are not subject to an obvious error or catastrophic error review pursuant to Rule 1092(c) or (d) [(a)(i) or (ii) nor are they subject to nullification or adjustment pursuant to Rule 1092(c)(ii)(E) or (F)]. Nothing in this provision shall prevent electronic trades from review on Exchange motion pursuant to Rule 1092[(e)(i)(B)](c)(3), or subject to nullification or adjustment pursuant to Rule 1092(e) – (k).

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**Rule 1092. Nullification and Adjustment of Options Transactions including Obvious Errors**

The Exchange may nullify a transaction or adjust the execution price of a transaction in accordance with this Rule. However, the determination as to whether a trade was executed at an erroneous price may be made by mutual agreement of the affected parties to a particular transaction. A trade may be nullified or adjusted on the terms that all parties to a particular transaction agree, provided, however, that such agreement to nullify or adjust must be conveyed to the Exchange in a manner prescribed by the Exchange prior to 8:30 a.m. Eastern Time on the first trading day following the execution. It is considered conduct inconsistent with just and equitable principles of trade for any member or member organization to use the mutual adjustment process to

circumvent any applicable Exchange rule, the Act or any of the rules and regulations thereunder.

(a) Definitions.

(1) Customer. For purposes of this Rule, a Customer shall not include any broker-dealer or professional.

(2) Erroneous Sell/Buy Transaction. For purposes of this Rule, an “erroneous sell transaction” is one in which the price received by the person selling the option is erroneously low, and an “erroneous buy transaction” is one in which the price paid by the person purchasing the option is erroneously high.

(3) Official. For purposes of this Rule, an Official is an Options Exchange Official as defined in Rule 1(w).

(4) Size Adjustment Modifier. For purposes of this Rule, the Size Adjustment Modifier will be applied to individual transactions as follows:

<b><u>Number of Contracts per Execution</u></b>	<b><u>Adjustment – Theoretical Price (TP) Plus/Minus</u></b>
<u>1-50</u>	<u>N/A</u>
<u>51-250</u>	<u>2 times adjustment amount</u>
<u>251-1000</u>	<u>2.5 times adjustment amount</u>
<u>1001 or more</u>	<u>3 times adjustment amount</u>

(b) Theoretical Price. Upon receipt of a request for review and prior to any review of a transaction execution price, the “Theoretical Price” for the option must be determined. For purposes of this Rule, if the applicable option series is traded on at least one other options exchange, then the Theoretical Price of an option series is the last NBB just prior to the trade in question with respect to an erroneous sell transaction or the last NBO just prior to the trade in question with respect to an erroneous buy transaction unless one of the exceptions in sub-paragraphs (b)(1) through (3) below exists. For purposes of this provision, when a single order received by the Exchange is executed at multiple price levels, the last NBB and last NBO just prior to the trade in question would be the last NBB and last NBO just prior to Exchange’s receipt of the order.

(1) Transactions at the Open. For a transaction occurring as part of the Opening Process (as defined in Rule 1017) the Exchange will determine the Theoretical Price if there is no NBB or NBO for the affected series just prior to the erroneous transaction or if the bid/ask differential of the NBB and NBO just prior to the erroneous transaction is equal to or greater than the Minimum Amount set forth in the chart contained in sub-paragraph (b)(3) below. If the bid/ask differential is less than the Minimum Amount, the Theoretical Price is the NBB or NBO just prior to the erroneous transaction.

(2) No Valid Quotes. The Exchange will determine the Theoretical Price if there are no quotes or no valid quotes for comparison purposes. Quotes that are not valid are all quotes in the applicable option series published at a time where the last NBB is higher than the last NBO in such series (a “crossed market”), quotes published by the Exchange that were submitted by either party to the transaction in question, and quotes published by another options exchange against which the Exchange has declared self-help.

(3) Wide Quotes. The Exchange will determine the Theoretical Price if the bid/ask differential of the NBB and NBO for the affected series just prior to the erroneous transaction was equal to or greater than the Minimum Amount set forth below and there was a bid/ask differential less than the Minimum Amount during the 10 seconds prior to the transaction. If there was no bid/ask differential less than the Minimum Amount during the 10 seconds prior to the transaction then the Theoretical Price of an option series is the last NBB or NBO just prior to the transaction in question, as set forth in paragraph (b) above.

<b><u>Bid Price at Time of Trade</u></b>	<b><u>Minimum Amount</u></b>
<u>Below \$2.00</u>	<u>\$0.75</u>
<u>\$2.00 to \$5.00</u>	<u>\$1.25</u>
<u>Above \$5.00 to \$10.00</u>	<u>\$1.50</u>
<u>Above \$10.00 to \$20.00</u>	<u>\$2.50</u>
<u>Above \$20.00 to \$50.00</u>	<u>\$3.00</u>
<u>Above \$50.00 to \$100.00</u>	<u>\$4.50</u>
<u>Above \$100.00</u>	<u>\$6.00</u>

(c) Obvious Errors.

(1) Definition. For purposes of this Rule, an Obvious Error will be deemed to have occurred when the Exchange receives a properly submitted filing where the execution price of a transaction is higher or lower than the Theoretical Price for the series by an amount equal to at least the amount shown below:

<b><u>Theoretical Price</u></b>	<b><u>Minimum Amount</u></b>
<u>Below \$2.00</u>	<u>\$0.25</u>
<u>\$2.00 to \$5.00</u>	<u>\$0.40</u>
<u>Above \$5.00 to \$10.00</u>	<u>\$0.50</u>
<u>Above \$10.00 to \$20.00</u>	<u>\$0.80</u>
<u>Above \$20.00 to \$50.00</u>	<u>\$1.00</u>
<u>Above \$50.00 to \$100.00</u>	<u>\$1.50</u>
<u>Above \$100.00</u>	<u>\$2.00</u>

(2) Time Deadline. A party that believes that it participated in a transaction that was the result of an Obvious Error must notify an Official in the

manner specified from time to time by the Exchange in a notice distributed to members and member organizations. Such notification must be received by an Official within the timeframes specified below:

(A) *Customer Orders.* For an execution of a Customer order, a filing must be received by the Exchange within thirty (30) minutes of the execution, subject to sub-paragraph (C) below; and

(B) *“Non-Customer” Orders.* For an execution of any order other than a Customer order, a filing must be received by the Exchange within fifteen (15) minutes of the execution, subject to sub-paragraph (C) below.

(C) *Linkage Trades.* Any other options exchange will have a total of forty-five (45) minutes for Customer orders and thirty (30) minutes for non-Customer orders, measured from the time of execution on the Exchange, to file with the Exchange for review of transactions routed to the Exchange from that options exchange and executed on the Exchange (“linkage trades”). This includes filings on behalf of another options exchange filed by a third-party routing broker if such third-party broker identifies the affected transactions as linkage trades. In order to facilitate timely reviews of linkage trades the Exchange will accept filings from either the other options exchange or, if applicable, the third-party routing broker that routed the applicable order(s). The additional fifteen (15) minutes provided with respect to linkage trades shall only apply to the extent the options exchange that originally received and routed the order to the Exchange itself received a timely filing from the entering participant (i.e., within 30 minutes if a Customer order or 15 minutes if a non-Customer order).

(3) *Acting on Own Motion.* The President or designee thereof, who is an officer of the Exchange (collectively “Exchange officer”) may review a transaction believed to be erroneous on his/her own motion in the interest of maintaining a fair and orderly market and for the protection of investors. A transaction reviewed pursuant to this paragraph may be nullified or adjusted only if it is determined by the Exchange officer that the transaction is erroneous in accordance with the provisions of this Rule, provided that the time deadlines of sub-paragraph (c)(2) above shall not apply. The Exchange officer shall act as soon as possible after becoming aware of the transaction, and ordinarily would be expected to act on the same day that the transaction occurred. In no event shall the Exchange officer act later than 8:30 a.m. Eastern Time on the next trading day following the date of the transaction in question. A party affected by a determination to nullify or adjust a transaction pursuant to this provision may appeal such determination in accordance with paragraph (l) below; however, a determination by an Exchange officer not to review a transaction or determination not to nullify or adjust a transaction for which a review was conducted on an

Exchange officer’s own motion is not appealable. If a transaction is reviewed and a determination is rendered pursuant to another provision of this Rule, no additional relief may be granted under this provision.

(4) *Adjust or Bust.* If it is determined that an Obvious Error has occurred, the Exchange shall take one of the actions listed below. Upon taking final action, the Exchange shall promptly notify both parties to the trade electronically or via telephone.

(A) *Non-Customer Transactions.* Where neither party to the transaction is a Customer, the execution price of the transaction will be adjusted by the Official pursuant to the table below. Any non-Customer Obvious Error exceeding 50 contracts will be subject to the Size Adjustment Modifier defined in sub-paragraph (a)(4) above.

<u>Theoretical Price (TP)</u>	<u>Buy Transaction Adjustment – TP Plus</u>	<u>Sell Transaction Adjustment – TP Minus</u>
<u>Below \$3.00</u>	<u>\$0.15</u>	<u>\$0.15</u>
<u>At or above \$3.00</u>	<u>\$0.30</u>	<u>\$0.30</u>

(B) *Customer Transactions.* Where at least one party to the Obvious Error is a Customer, the trade will be nullified, subject to sub-paragraph (C) below.

(C) If any member or member organization submits requests to the Exchange for review of transactions pursuant to this rule, and in aggregate that member or member organization has 200 or more Customer transactions under review concurrently and the orders resulting in such transactions were submitted during the course of 2 minutes or less, where at least one party to the Obvious Error is a non-Customer, the Exchange will apply the non-Customer adjustment criteria set forth in sub-paragraph (A) above to such transactions.

(d) *Catastrophic Errors.*

(1) *Definition.* For purposes of this Rule, a Catastrophic Error will be deemed to have occurred when the execution price of a transaction is higher or lower than the Theoretical Price for the series by an amount equal to at least the amount shown below:

<u>Theoretical Price</u>	<u>Minimum Amount</u>
<u>Below \$2.00</u>	<u>\$0.50</u>
<u>\$2.00 to \$5.00</u>	<u>\$1.00</u>
<u>Above \$5.00 to \$10.00</u>	<u>\$1.50</u>
<u>Above \$10.00 to \$20.00</u>	<u>\$2.00</u>
<u>Above \$20.00 to \$50.00</u>	<u>\$2.50</u>
<u>Above \$50.00 to \$100.00</u>	<u>\$3.00</u>
<u>Above \$100.00</u>	<u>\$4.00</u>

(2) Time Deadline. A party that believes that it participated in a transaction that was the result of a Catastrophic Error must notify an Official in the manner specified from time to time by the Exchange in a notice distributed to members and member organizations. Such notification must be received by an Official by 8:30 a.m. Eastern Time on the first trading day following the execution. For transactions in an expiring options series that take place on an expiration day, a party must notify an Official within 45 minutes after the close of trading that same day.

(3) Adjust or Bust. If it is determined that a Catastrophic Error has occurred, the Exchange shall take action as set forth below. Upon taking final action, the Exchange shall promptly notify both parties to the trade electronically or via telephone. In the event of a Catastrophic Error, the execution price of the transaction will be adjusted by the Official pursuant to the table below. Any Customer order subject to this sub-paragraph will be nullified if the adjustment would result in an execution price higher (for buy transactions) or lower (for sell transactions) than the Customer’s limit price.

<u>Theoretical Price (TP)</u>	<u>Buy Transaction Adjustment – TP Plus</u>	<u>Sell Transaction Adjustment – TP Minus</u>
<u>Below \$2.00</u>	<u>\$0.50</u>	<u>\$0.50</u>
<u>\$2.00 to \$5.00</u>	<u>\$1.00</u>	<u>\$1.00</u>
<u>Above \$5.00 to \$10.00</u>	<u>\$1.50</u>	<u>\$1.50</u>
<u>Above \$10.00 to \$20.00</u>	<u>\$2.00</u>	<u>\$2.00</u>
<u>Above \$20.00 to \$50.00</u>	<u>\$2.50</u>	<u>\$2.50</u>
<u>Above \$50.00 to \$100.00</u>	<u>\$3.00</u>	<u>\$3.00</u>
<u>Above \$100.00</u>	<u>\$4.00</u>	<u>\$4.00</u>

(e) Significant Market Events.

(1) Definition. For purposes of this Rule, a Significant Market Event will be deemed to have occurred when: criterion (A) below is met or exceeded or the sum of all applicable event statistics, where each is expressed as a percentage of the relevant threshold in criteria (A) through (D) below, is greater than or equal

to 150% and 75% or more of at least one category is reached, provided that no single category can contribute more than 100% to the sum and any category contributing more than 100% will be rounded down to 100%. All criteria set forth below will be measured in aggregate across all exchanges.

(A) Transactions that are potentially erroneous would result in a total Worst-Case Adjustment Penalty of \$30,000,000, where the Worst-Case Adjustment Penalty is computed as the sum, across all potentially erroneous trades, of:

(i) \$0.30 (i.e., the largest Transaction Adjustment value listed in sub-paragraph (e)(3)(A) below); times

(ii) the contract multiplier for each traded contract; times

(iii) the number of contracts for each trade; times

(iv) the appropriate Size Adjustment Modifier for each trade, if any, as defined in sub-paragraph (e)(3)(A) below.

(B) Transactions involving 500,000 options contracts are potentially erroneous;

(C) Transactions with a notional value (i.e., number of contracts traded multiplied by the option premium multiplied by the contract multiplier) of \$100,000,000 are potentially erroneous;

(D) 10,000 transactions are potentially erroneous.

(2) *Coordination with Other Options Exchanges.* To ensure consistent application across options exchanges, in the event of a suspected Significant Market Event, the Exchange shall initiate a coordinated review of potentially erroneous transactions with all other affected options exchanges to determine the full scope of the event. When this paragraph is invoked, the Exchange will promptly coordinate with the other options exchanges to determine the appropriate review period as well as select one or more specific points in time prior to the transactions in question and use one or more specific points in time to determine Theoretical Price. Other than the selected points in time, if applicable, the Exchange will determine Theoretical Price in accordance with paragraph (b) above.

(3) *Adjust or Bust.* If it is determined that a Significant Market Event has occurred then, using the parameters agreed as set forth in sub-paragraph (e)(2) above, if applicable, an Official will determine whether any or all transactions under review qualify as Obvious Errors. The Exchange shall take one of the

actions listed below with respect to all transactions that qualify as Obvious Errors pursuant to sub-paragraph (c)(1) above. Upon taking final action, the Exchange shall promptly notify both parties to the trade electronically or via telephone.

(A) The execution price of each affected transaction will be adjusted by an Official to the price provided below unless both parties agree to adjust the transaction to a different price or agree to bust the trade. In the context of a Significant Market Event, any error exceeding 50 contracts will be subject to the Size Adjustment Modifier defined in sub-paragraph (a)(4) above.

<u>Theoretical Price (TP)</u>	<u>Buy Transaction Adjustment – TP Plus</u>	<u>Sell Transaction Adjustment – TP Minus</u>
<u>Below \$3.00</u>	<u>\$0.15</u>	<u>\$0.15</u>
<u>At or above \$3.00</u>	<u>\$0.30</u>	<u>\$0.30</u>

(B) Where at least one party to the transaction is a Customer, the trade will be nullified if the adjustment would result in an execution price higher (for buy transactions) or lower (for sell transactions) than the Customer’s limit price.

(4) Nullification of Transactions. If the Exchange, in consultation with other options exchanges, determines that timely adjustment is not feasible due to the extraordinary nature of the situation, then the Exchange will nullify some or all transactions arising out of the Significant Market Event during the review period selected by the Exchange and other options exchanges consistent with this paragraph. To the extent the Exchange, in consultation with other options exchanges, determines to nullify less than all transactions arising out of the Significant Market Event, those transactions subject to nullification will be selected based upon objective criteria with a view toward maintaining a fair and orderly market and the protection of investors and the public interest.

(5) Final Rulings. With respect to rulings made pursuant to this paragraph, the number of affected transactions is such that immediate finality is necessary to maintain a fair and orderly market and to protect investors and the public interest. Accordingly, rulings by the Exchange pursuant to this paragraph are non-appealable.

(f) Trading Halts. The Exchange shall nullify any transaction that occurs during a trading halt in the affected option on the Exchange pursuant to Commentary .03 of this Rule.

(g) *Erroneous Print in Underlying.* A trade resulting from an erroneous print(s) disseminated by the underlying market that is later nullified by that underlying market shall be adjusted or busted as set forth in sub-paragraph (c)(4) of this Rule, provided a party notifies an Official in a timely manner as set forth below. For purposes of this paragraph, a trade resulting from an erroneous print(s) shall mean any options trade executed during a period of time for which one or more executions in the underlying security are nullified and for one second thereafter. If a party believes that it participated in an erroneous transaction resulting from an erroneous print(s) pursuant to this paragraph it must notify an Official within the timeframes set forth in sub-paragraph (c)(2) above, with the allowed notification timeframe commencing at the time of notification by the underlying market(s) of nullification of transactions in the underlying security. If multiple underlying markets nullify trades in the underlying security, the allowed notification timeframe will commence at the time of the first market's notification.

(h) *Erroneous Quote in Underlying.* A trade resulting from an erroneous quote(s) in the underlying security shall be adjusted or busted as set forth in sub-paragraph (c)(4) this Rule, provided a party notifies an Official in a timely manner as set forth below. An erroneous quote occurs when the underlying security has a width of at least \$1.00 and has a width at least five times greater than the average quote width for such underlying security during the time period encompassing two minutes before and after the dissemination of such quote. For purposes of this paragraph, the average quote width shall be determined by adding the quote widths of sample quotations at regular 15-second intervals during the four-minute time period referenced above (excluding the quote(s) in question) and dividing by the number of quotes during such time period (excluding the quote(s) in question). If a party believes that it participated in an erroneous transaction resulting from an erroneous quote(s) pursuant to this paragraph it must notify an Official in accordance with sub-paragraph (c)(2) above.

(i) *Stop (and Stop-Limit) Order Trades Triggered by Erroneous Trades.* Transactions resulting from the triggering of a stop or stop-limit order by an erroneous trade in an option contract shall be nullified by the Exchange, provided a party notifies an Official in a timely manner as set forth below. If a party believes that it participated in an erroneous transaction pursuant to this paragraph it must notify an Official within the timeframes set forth in sub-paragraph (c)(2) above, with the allowed notification timeframe commencing at the time of notification of the nullification of transaction(s) that triggered the stop or stop-limit order.

(j) *Linkage Trades.* If the Exchange routes an order pursuant to the Plan (as defined in Rule 1083(n)) that results in a transaction on another options exchange (a "Linkage Trade") and such options exchange subsequently nullifies or adjusts the Linkage Trade pursuant to its rules, the Exchange will perform all actions necessary to complete the nullification or adjustment of the Linkage Trade.

(k) Verifiable Disruption or Malfunction of Exchange Systems. Parties to a trade may have a trade nullified or its price adjusted if it resulted from a verifiable disruption or malfunction of Exchange execution, dissemination, or communication systems that caused a quote/order to trade in excess of its disseminated size (e.g. a quote/order that is frozen, because of an Exchange system error, and repeatedly traded). Parties to a trade may have a trade nullified or its price adjusted if it resulted from a verifiable disruption or malfunction of an Exchange dissemination or communication system that prevented a member from updating or canceling a quote/order for which the member is responsible where there is Exchange documentation providing that the member sought to update or cancel the quote/order.

(l) Appeals. If a party affected by a determination made under this Rule so requests within the time permitted, the Market Operations Review Committee will review decisions made under this Rule in accordance with Exchange Rule 124(d). A request for review under this paragraph must be made within 30 minutes after a party receives verbal notification of a final determination by an Official under this Rule, except that if such notification is made after 3:30 p.m. Eastern Time, either party has until 9:30 a.m. Eastern Time on the next trading day to request a review. Such a request for review must be in writing or otherwise documented. The Market Operations Review Committee shall review the facts and render a decision on the day of the transaction, or the next trade day in the case where a request is properly made after 3:30 p.m. on the day of the transaction or where the request is properly made the next trade day. Any determination by an Official or the Market Operations Review Committee shall be rendered without prejudice as to the rights of the parties to the transaction to submit their dispute to arbitration.

**Commentary:**

**.01 Complex Order Executions.** If both parties to a trade that is one component of a complex order execution are parties to all of the trades that together comprise the execution of a complex order at a single net debit or credit, then if one of those component trades can be nullified under this Rule 1092, all component trades that were part of the same complex order shall be nullified as well.

**.02** For the purposes of this Rule, to the extent the provisions of this Rule would result in the Exchange applying an adjustment of an erroneous sell transaction to a price lower than the execution price or an erroneous buy transaction to a price higher than the execution price, the Exchange will not adjust or nullify the transaction, but rather, the execution price will stand.

**.03 Trading Halts.** Trades on the Exchange will be nullified when:

- (A) The trade occurred during a trading halt in the affected option on the Exchange;
- (B) Respecting equity options (including options overlying ETFs), the trade occurred during a trading halt on the primary market for the underlying security;
- (C) Respecting index options, the trade occurred during a trading halt on the primary market in (y) underlying securities representing more than 10 percent of the current index

value for stock index options, or (z) either component security of an Alpha Index for Alpha Index options; or

(D) Respecting Treasury security options, the trade occurred during a trading halt of the underlying Treasury security instituted by the United States Government.

\* \* \* \* \*

**[Obvious Errors and Catastrophic Errors**

The Exchange shall either nullify a transaction or adjust the execution price of a transaction that results in an Obvious Error as provided in this Rule.

- (a) (i) *Definition of Obvious Error.* For purposes of this Rule only, an Obvious Error will be deemed to have occurred when the execution price of a transaction is higher or lower than the Theoretical Price for a series by an amount equal to at least the amount shown below:

**For equity and index options**

Theoretical price	Minimum amount
Below \$2	\$.25
\$2 to \$5	\$.40
Above \$5 to \$10	\$.50
Above \$10 to \$20	\$.80
Above \$20	\$1.00

**For foreign currency options**

Theoretical price	Minimum amount
Below \$2	\$.25
\$2 to \$5	\$.40
Above \$5 to \$10	\$.50
Above \$10 to \$20	\$.80
Above \$20	\$1.00

**For Treasury securities options**

Theoretical price	Minimum amount
Below \$2	\$.25
\$2 to \$5	\$.40
Above \$5 to \$10	\$.50
Above \$10 to \$20	\$.80
Above \$20	\$1.00

- (ii) *Catastrophic Error*. For purposes of this Rule only, a Catastrophic Error will be deemed to have occurred when the execution price of a transaction is higher or lower than the Theoretical Price for the series by an amount equal to at least the minimum amount shown below:

<b>Theoretical Price</b>	<b>Minimum Amount</b>
Below \$2	\$1
\$2 to \$5	\$2
Above \$5 to \$10	\$5
Above \$10 to \$50	\$10
Above \$50 to \$100	\$20
Above \$100	\$30

- (b) *Definition of Theoretical Price*. For purposes of this Rule only, the Theoretical Price of an option is:

- (i) If the series is traded on at least one other options exchange the last National Best Bid price with respect to an erroneous sell transaction and the last National Best Offer price with respect to an erroneous buy transaction, just prior to the trade;
- (ii) if there are no quotes for comparison purposes, or if the bid/ask differential of the National Best Bid and Offer ("NBBO") for the affected series, just prior to the erroneous transaction, was at least two times the permitted bid/ask differential under Rule 1014(c)(i)(A)(1)(a), as determined by an Options Exchange Official; or
- (iii) for transactions occurring as part of the Exchanges automated opening system, the Theoretical Price shall be the first quote after the transaction(s) in question that does not reflect the erroneous transaction(s).

- (c) Absent Mutual Agreement as provided in Rule 1092(c)(iii) below, parties to a trade may have a trade nullified or its price adjusted if:

- (i) any such party makes a documented request within the time specified in Rule 1092(e)(i)(A); and

- (ii) one of the conditions below is met:

- (A) The trade resulted from a verifiable disruption or malfunction of an Exchange execution, dissemination, or communication system that caused a quote/order to trade in excess of its disseminated size (e.g. a quote/order that is frozen, because of an Exchange system error, and repeatedly traded) in which case trades in excess of the disseminated size may be nullified; or

- (B) The trade resulted from a verifiable disruption or malfunction of an Exchange dissemination or communication system that prevented a member from updating or canceling a quote/order for which the member is responsible where there is Exchange documentation providing that the member sought to update or cancel the quote/order; or
- (C) The trade resulted from an erroneous print disseminated by the underlying market which is later cancelled or corrected by the underlying market where such erroneous print resulted in a trade higher or lower than the average trade in the underlying security during the time period encompassing two minutes before and after the erroneous print, by an amount at least five times greater than the average quote width for such underlying security during the time period encompassing two minutes before and after the erroneous print. For purposes of this Rule, the average trade in the underlying security shall be determined by adding the prices of each trade during the four minute time period referenced above (excluding the trade in question) and dividing by the number of trades during such time period (excluding the trade in question); or
- (D) The trade resulted from an erroneous quote in the Primary Market for the underlying security that has a width of at least \$1.00 and that width is at least five times greater than the average quote width for such underlying security during the time period encompassing two minutes before and after the dissemination of such quote. For the purposes of this Rule, the average quote width shall be determined by adding the quote widths of sample quotations at regular 15-second intervals during the four minute time period referenced above (excluding the quote in question) and dividing by the number of quotes during such time period (excluding the quote in question); or
- (E) The trade resulted in an execution price in a series quoted no bid and for 5 seconds prior to the execution remained no bid (excluding the quote in question; bids and offers of the parties to the subject trade that are in any of the series in the same options class shall not be considered) and at least one strike price below (for calls) or above (for puts) in the same class were quoted no bid at the time of the erroneous execution (in which case the trade shall be nullified);
- (F) The trade occurred at a price that is deemed to be an Obvious Error as defined in Paragraph (a) of this Rule 1092.
- (iii) *Mutual Agreement*. The determination as to whether a trade was automatically executed at an erroneous price may be made by mutual agreement of the affected parties to a particular transaction within the time periods specified in sub-paragraphs (d)(i)(A) or (B) below. A trade may be nullified or adjusted on the terms that all parties to a particular transaction

agree. In the absence of mutual agreement by the parties, a particular trade may only be nullified or adjusted when the transaction results from an Obvious Error as provided in this Rule.

(iv) **Trading Halts.** Trades on the Exchange will be nullified when:

(A) The trade occurred during a trading halt in the affected option on the Exchange;

(B) Respecting equity options (including options overlying ETFs), the trade occurred during a trading halt on the primary market for the underlying security;

(C) Respecting index options, the trade occurred during a trading halt on the primary market in (y) underlying securities representing more than 10 percent of the current index value for stock index options, or (z) either component security of an Alpha Index for Alpha Index options; or

(D) Respecting Treasury security options, the trade occurred during a trading halt of the underlying Treasury security instituted by the United States Government.

(v) **Complex Order Executions.** If both parties to a trade that is one component of a complex order execution are parties to all of the trades that together comprise the execution of a complex order at a single net debit or credit, then if one of those component trades can be nullified under this Rule 1092, all component trades that were part of the same complex order shall be nullified as well.

(d) **Adjustments.** Where the execution price of a transaction executed as the result of an Obvious Error is adjusted, the adjusted price will be:

(i) the Theoretical Price of the option in the case where the erroneous price is displayed in the market and subsequently executed against quotes or orders that did not exist on the Exchange at the time the erroneous price was entered; or

(ii) the last bid or offer, just prior to the transaction, on the exchange that was disseminating the National Best Bid or Offer for the series at the time of the transaction that was the result of an Obvious Error in the case where an erroneous price executes against quotes or orders already existing on the Exchange at the time the erroneous price was entered.

(e) **Obvious Error Procedure.** Regulatory staff shall administer the application of this Rule as follows:

(i) (A) Notification. If a specialist or Registered Options Trader ("ROT") on the Exchange believes that he/she participated in a transaction that was the result of an Obvious Error, he/she must notify Regulatory staff within fifteen minutes of the transaction. If a member or member organization that initiated the order from off the floor of the Exchange believes a transaction on the Exchange was the result of an Obvious Error, such member or member organization must notify Regulatory staff within twenty minutes of the execution. Absent unusual circumstances, Regulatory staff will not grant relief under this Rule unless notification is made within the prescribed time period. Notwithstanding the foregoing, respecting transactions that occur as part of the Exchanges automated opening process, after the twenty minute notification period as described above and until 4:30 p.m. Eastern Time ("ET") on the subject trade date, where parties to the transaction are a non-broker-dealer customer and an Exchange specialist, SQT, RSQT or non-SQT ROT, the non-broker-dealer customer may request review of the subject transaction, and the execution price of the transaction will be adjusted to the first quote after the transaction(s) in question that does not reflect the erroneous transaction(s) (provided the adjustment does not violate the customer's limit price) by an Options Exchange Official.

(B) Procedures for Reviewing Trades on Exchange Motion. In the interest of maintaining a fair and orderly market for the protection of investors, the President or designee thereof, who is an officer of the Exchange (collectively "Exchange officer") may, on his or her own motion or upon request, determine to review any transaction occurring on the Exchange that is believed to be erroneous. A transaction reviewed pursuant to this provision may be nullified or adjusted only if it is determined by the Exchange officer that the transaction is an Obvious Error as provided in this Rule 1092. A transaction would be adjusted or nullified in accordance with the provision under which it is deemed an Obvious Error. The Exchange officer may be assisted by an Options Exchange Official in reviewing a transaction.

The Exchange officer shall act as soon as possible after receiving notification of the transaction, and ordinarily would be expected to act on the same day as the transaction occurred. In no event shall the Exchange officer act later than 9:30 a.m. (ET) on the next trading day following the date of the transaction in question. A party affected by a determination to nullify or adjust a transaction pursuant to this provision may appeal such determination in accordance with Rule 1092; however, a determination by an Exchange officer not to review a transaction, or a determination not to nullify or adjust a transaction for which a review was requested or conducted, is not appealable. If a transaction is reviewed and a determination is rendered pursuant to another provision of Rule 1092, no additional relief may be granted under this provision.

(ii) **Adjust or Bust.** An Options Exchange Official will determine whether there is an Obvious Error as defined in this Rule. If it is determined that an Obvious Error has occurred: (A) where each party to the transaction is either a specialist or ROT on the Exchange, the execution price of the transaction will be adjusted by an Options Exchange Official, unless both parties agree to nullify the transaction within ten minutes of being notified by Regulatory staff of the Obvious Error; or (B) where at least one party to the transaction in which an Obvious Error occurred is not a specialist or ROT on the Exchange, an Options Exchange Official will nullify the transaction, unless both parties agree to adjust the price of the transaction within 30 minutes of being notified by Regulatory staff of the Obvious Error. Upon final Options Exchange Official action, Regulatory staff, in conjunction with the Help Desk, where appropriate, shall promptly notify both parties to the trade.

(f) *Catastrophic Error Procedure.*

(i) *Notification.* If an Exchange member believes that it participated in a transaction that qualifies as a Catastrophic Error pursuant to paragraph (a)(ii) above, it must notify the Exchange's Regulatory staff by 8:30 am ET, on the first trading day following the date on which the Catastrophic Error occurred. For transactions in an expiring options series that take place on an expiration day that is a business day, an Exchange member must notify the Exchange by 5:00 pm ET that same day. For such transactions in an expiring options series that take place on the business day immediately prior to an expiration day that is not a business day, an Exchange member must notify the Exchange's Regulatory staff by 5:00 pm ET on such business day. Relief will not be granted under this paragraph: (i) unless notification is made within the prescribed time period; and (ii) if an Options Exchange Official has previously rendered a decision with respect to the transaction in question pursuant to Rule 1092(e).

(ii) *Catastrophic Error determination.* An Options Exchange Official will determine whether the transaction(s) qualifies as a Catastrophic Error. If it is determined that a Catastrophic Error has occurred, the Options Exchange Official will adjust the execution price(s) of the transaction(s) according to subparagraph (f)(iii) below, as long as the adjusted price would not exceed the limit price of a non-broker-dealer customer's limit order, in which case the non-broker-dealer customer would have 20 minutes from notification of the proposed adjusted price to accept it or else the trade will be nullified. If it is determined that a Catastrophic Error has not occurred, the member requesting the determination will be subject to a charge of \$5,000.

(iii) *Adjustment.* If it is determined that a Catastrophic Error has occurred, unless both (all) parties agree to adjust the transaction to a different price, the execution price(s) of the transaction(s) will be adjusted to the theoretical price,

(i) plus the adjustment value provided below for erroneous buy transactions, and (ii) minus the adjustment value provided for erroneous sell transactions.

<b>Theoretical Price</b>	<b>Minimum Amount</b>
Below \$2	\$1
\$2 to \$5	\$2
Above \$5 to \$10	\$3
Above \$10 to \$50	\$5
Above \$50 to \$100	\$7
Above \$100	\$10

(iv) *Appeal*. An Exchange member may appeal the Options Exchange Officials determination to the Market Operations Review Committee pursuant to paragraph (g) below.

(g) *Request for Review*. If a party affected by a determination made under this Rule so requests within the time permitted, the Market Operations Review Committee will review decisions made under this Rule in accordance with Exchange Rule 124(d). A request for review under this paragraph must be made within 30 minutes after a party receives verbal notification of a final determination by the Options Exchange Official under this Rule, except that if such notification is made after 3:30 p.m. Eastern Time, either party has until 9:30 a.m. Eastern Time on the next trading day to request a review. Such a request for review must be in writing or otherwise documented. The Market Operations Review Committee shall review the facts and render a decision on the day of the transaction, or the next trade day in the case where a request is properly made after 3:30 p.m. on the day of the transaction or where the request is properly made the next trade day.

**Commentary:** -----

**.01** For purposes of paragraph (a) of this Rule, the maximum bid/ask spread shall be the maximum bid/ask spread allowed pursuant to Exchange Rule 1014(c)(i)(A), unless a wider spread has been allowed by the Exchange for the option because of unusual market conditions.

**.02** The price to which a transaction is adjusted under paragraph (c)(ii) of this Rule will be determined as follows: (i) the bid price from the exchange disseminating the National Best Bid for the series at the time of the transaction that was the result of an obvious error will be used with respect to an erroneous offer price entered on the Exchange, and (ii) the offer price from the exchange disseminating the National Best Offer for the series at the time of the transaction that was the result of an obvious error

will be used with respect to an erroneous bid price entered on the Exchange. If there are no quotes for comparison purposes, the adjustment price will be determined by an Options Exchange Official.

For purposes of Rule 1092, an "erroneous sell transaction" is one in which the price received by the person selling the option is erroneously low, and an "erroneous buy transaction" is one in which the price paid by the person purchasing the option is erroneously high.]

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