



## Rule Self-Certification

March 18, 2015

### VIA ELECTRONIC PORTAL

Christopher J. Kirkpatrick  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Center  
1155 21<sup>st</sup> Street, N.W.  
Washington, DC 20581

Re: **Regulation §40.6 Submission Certification**  
**Market Maker Protection and Self-Match Prevention**  
**Reference Guide**  
**Reference File: SR-NFX-2015-12**

Dear Mr. Kirkpatrick:

Pursuant to Section 5c(c)(1) of the Commodity Exchange Act, as amended (“Act”), and Section 40.6(a) of the regulations promulgated by the Commodity Futures Trading Commission under the Act, NASDAQ Futures, Inc. (“NFX” or “Exchange”) adopts a new Market Maker Protection and Self-Match Prevention Reference Guide. The new Reference Guide will be implemented on May 1, 2015. The text of this Reference Guide is set forth in Exhibit A.<sup>1</sup>

The Exchange recently filed amendments to its Trading Rules which will be implemented on May 1, 2015.<sup>2</sup> Among other things, the rule change adopted revised and new trading rules in Chapter IV entitled “Trading System.” The Exchange is adopting this Market Maker Protection and Self-Match Prevention Reference Guide to provide further guidance to market participants with respect to the optional protections offered to Market Makers by the Exchange. This Reference Guide will be posted on the Exchange’s website to provide market participants additional information with respect to these available protections.

With respect to the designated contract market core principles (“Core Principles”) as set forth in the Act:

---

<sup>1</sup> Exhibit A reflects amendments to the Exchange’s Rulebook as filed in SR-NFX-2014-02, SR-NFX-2014-05, SR-NFX-2015-01 SR-NFX-2015-04 and SR-NFX-2015-08.

<sup>2</sup> Id.

- *Compliance with Rules:* Today the Exchange has in place Rules which describe the manner in which Futures Participants may access and trade on NFX. Chapter II, Section I provides for the qualifications and rules of participation applicable to Futures Participants as well as Authorized Traders. Chapter V, Section 18 describes prohibited activities with respect to the Trading System. Trading is subject to the Rules at Chapter III of the Exchange's Rulebook, which include prohibitions against fraudulent, noncompetitive, unfair and abusive practices. Additionally, trading is subject to the trading procedures and standards in Chapter V of the Rulebook. The Exchange's disciplinary Rules are contained in Chapter VI of the Rulebook.
  
- *Prevention of Market Disruption:* The Exchange's Regulatory Department, which handles real-time surveillance, monitors trading activity on the Exchange with a SMARTS Surveillance Application through which the Exchange can track activity of specific Authorized Traders, monitor price and volume information and receive alerts regarding market messages. The Exchange's Regulatory Department, which handles real-time surveillance in conjunction with staff that handles T+1 surveillance, utilizes data collected by the SMARTS Surveillance Application to monitor price movements, as well as market conditions and volumes to detect suspicious activity such as manipulation, disruptive trading and other abnormal market activity.
  
- *Availability of Contract Information.* The Exchange has indicated within its trading Rules where specific information relates to a particular Contract. The Exchange will post the terms and conditions of Exchange Contracts in its Rulebook along with trading Rules.
  
- *Publication of Information.* The Exchange will publish daily information on settlement prices, volume, open interest and opening and closing ranges for actively traded Contracts on its website. The Exchange's volume information will include information on the volume of Block Trades.
  
- *Execution of Transactions.* The Exchange operates an electronic trading facility that provides Futures Participants with the ability to execute Orders within the Exchange's Order Book and offers within a predetermined automated trade matching and execution algorithm. Orders submitted into the Trading System will continue to be matched in either Price-Time priority or Size Pro-Rata priority order, as specified by the Exchange. The Exchange

specifies the types of Orders that will be accepted by the Trading System in recently filed Chapter IV, Section 4.

- *Protection of market participants.* Chapter III of the Exchange's Rulebook contains prohibitions precluding intermediaries from disadvantaging their customers. These rules apply to trading in all Contracts.

There were no opposing views among the Exchange's Board of Directors, members or market participants. The Exchange hereby certifies that this Reference Guide complies with the Commodity Exchange Act and regulations thereunder. The Exchange also certifies that a notice of pending certification with the Commission and a copy of this submission have been concurrently posted on the Exchange's website at <http://www.nasdaqomx.com/transactions/markets/nasdaq-futures..>

If you require any additional information regarding the submission, please contact Angela S. Dunn at +1 215 496 5692 or via e-mail at [angela.dunn@nasdaq.com](mailto:angela.dunn@nasdaq.com). Please reference SR-NFX-2015-12 in any related correspondence.

Regards,



Daniel R. Carrigan  
President

cc: National Futures Association

**Exhibit A**

**[Market Maker Protection and Self-Match Prevention Reference Guide]**

# **NASDAQ Futures, Inc. (NFX) Market Maker Protection & Self-Match Prevention Reference Guide**

---

Version 1.00 | 2015-5-1



## **CONFIDENTIALITY/DISCLAIMER**

This Reference Guide is being forwarded to you strictly for informational purposes and solely for the purpose of developing or operating systems for your use that interact with systems of NASDAQ Futures, Inc. (NFX<sup>SM</sup>) and its affiliates (collectively, NFX). This specification is proprietary to NFX.

NFX reserves the right to withdraw, modify, or replace this Reference Guide at any time, without prior notice. No obligation is made by NFX regarding the level, scope or timing of NFX's implementation of the functions or features discussed in this specification. The Reference Guide is provided "AS IS," "WITH ALL FAULTS". NFX makes no warranties to this Reference Guide or its accuracy, and disclaims all warranties, whether express, implied, or statutory related to the Reference Guide or its accuracy. This document is not intended to represent an offer of any terms by NFX. While reasonable care has been taken to ensure that the details contained herein are true and not misleading at the time of publication, no liability whatsoever is assumed by NFX for any incompleteness or inaccuracies. By using this Reference Guide you agree that you will not, without prior written permission from NFX, copy or reproduce the information in this Reference Guide except for the purposes noted above. You further agree that you will not, without prior written permission from NFX, store the information contained in this Reference Guide in a retrieval system, or transmit it in any form or by any means, whether electronic, mechanical, or otherwise except for the purposes noted above. In addition you agree that you will not, without prior written permission from NFX, permit access to the information contained herein except to those with a need-to-know for the purposes noted above.

NFX<sup>SM</sup> is a servicemark of Nasdaq Futures, Inc.

© Copyright 2015, Nasdaq Futures, Inc. All rights reserved.

## TABLE OF CONTENTS

<b>1 INTRODUCTION</b>	<b>4</b>
<b>2 MMP PARAMETERS</b>	<b>4</b>
2.1 DEFINITION OF UNDERLYING ASSET CLASS	5
2.2 EXPOSURE LIMIT TIME INTERVAL	5
2.3 QUANTITY PROTECTION	6
2.4 DELTA PROTECTION	6
2.4.1 Delta Protection Including Futures	6
2.4.2 Delta Protection Not Including Futures	6
2.5 QUOTATION FROZEN TIME INTERVAL	6
<b>3 TRIGGERING CALCULATIONS AND CONSEQUENCES</b>	<b>7</b>
3.1 TRADES INCLUDED IN THE CALCULATION	7
3.2 THRESHOLD BREACH ACTION	7
3.3 RESET OF THE MARKET MAKER PROTECTION PARAMETERS	7
3.4 QUOTING AFTER A MARKET MAKER PROTECTION EVENT	7
3.5 MMP WITH MASS QUOTATIONS	8
3.6 PASSIVE AND AGGRESSIVE QUOTES	8
3.6.1 Aggressive Quotes	8
3.6.2 Passive Quotes	8
3.7 IN-HOUSE TRADING	8
3.7.1 Aggressive Quote matched with a Combination Order	8
3.7.2 Passive Quote matched with a Combination Order	8
3.8 STOP ORDERS	8
3.9 SESSION STATES	9
<b>4 SELF-MATCH PREVENTION</b>	<b>9</b>
<b>5 MMP EXAMPLES</b>	<b>10</b>
5.1 EXAMPLE 1: AGGRESSIVE QUOTES (SECTION 3.6.1)	10
5.2 EXAMPLE 2: PASSIVE QUOTES (SECTION 3.6.2)	11
5.3 EXAMPLES 3: COMBINATION ORDERS (SECTION 3.8)	12
5.3 EXAMPLES 4: COMBINATION ORDERS (SECTION 3.8)	13

# 1 INTRODUCTION

This objective of this document is to provide an overview of NFX's Trading System Market Maker Protection (MMP) and Self-Match Prevention functionality, as well as act as an explanatory reference guide for these key concepts and services provided by NFX.

The Market Maker Protection functionality is designed to prevent rapid fire trade executions resulting from Market Maker (MM) Quotes. The Market Maker may elect MMP functionality whereby the Trading System will automatically purge all Quotes in a certain underlying Futures or Options Contract if a configurable number of contracts have been executed during a configurable amount of time. Market Makers will have the ability to use the MMP functionality for all underlying Contracts. . Market Maker Protection is optional for Futures Participants and Authorized Customers. See NFX Rulebook.

Self-Match Prevention functionality prevents matching between counterparties affiliated with the same Participant or User. A Participant is defined as a Clearing Futures Participant, Futures Participant, or Authorized Customer. A User is defined as an Authorized Trader. (See NFX Reference Guide, Section 2.3, Relational Model). Futures Participants may elect that Orders not execute against Orders on the opposite side of the market by its Authorized Traders. A Futures Participant's Authorized Customer may elect that Orders not be executed against Orders entered on the opposite side of the market by its Authorized Traders. Self-Match Prevention is optional for Futures Participants and Authorized Customers. See NFX Rulebook, Chapter V, Section 9 for the rule related to Self-Match Prevention.

The term "Market Maker" shall refer to any entity approved and registered with the Exchange in such capacity. A Market Maker may be either a Futures Participant or Authorized Customer.

## 2 MMP PARAMETERS

The MMP parameters are configurable by the Market Maker and are set at the Participant level. The Market Maker can update (change or disable) the MMP parameters intra-day.

Parameters available for a Market Maker to set by underlying are:

- Exposure Limit Time Interval;
- Quotation Frozen Time;
- Delta Protection;
- Quantity Protection; and
- Include Futures.

To prevent the "Quantity Protection" and "Delta Protection" parameters from being set too low by the Market Maker, thus triggering the MMP thresholds too often, there will be a pre-defined minimum quantity parameter set by the Exchange. The minimum quantity will be specified per underlying Contract and the value will apply for both the "Quantity Protection" and "Delta Protection" parameters.

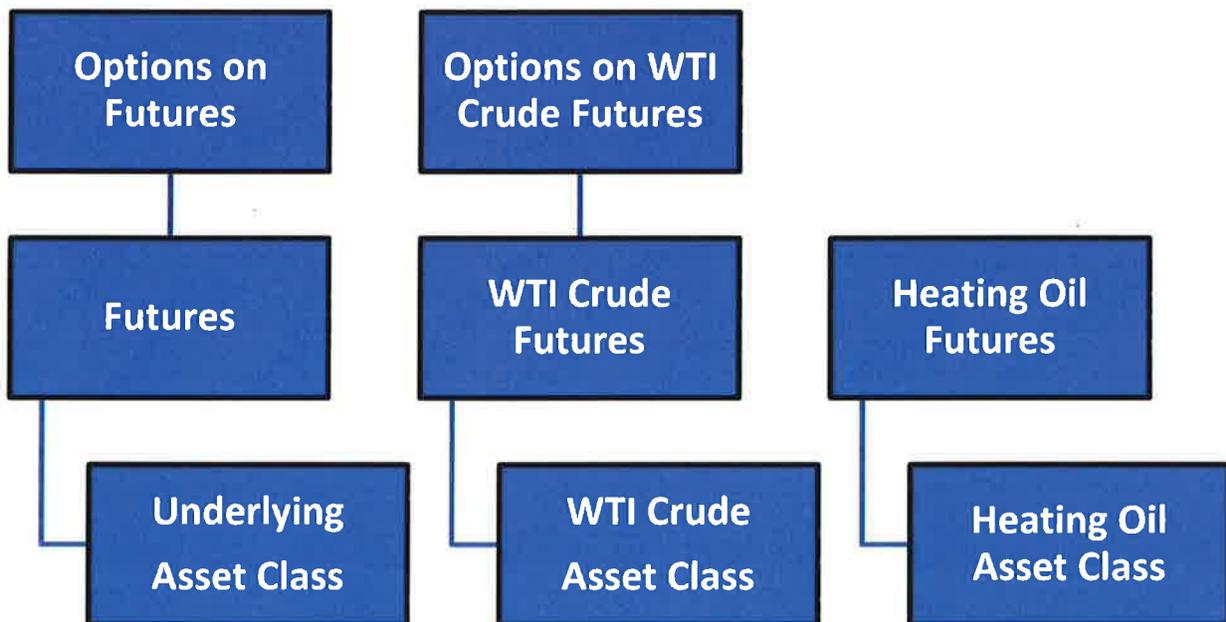
Note that all MMP parameter calculations will be measured on Market Maker Quote executions, and once triggered, only Market Maker Quotes will be purged from the Trading System Order Book(s). Orders entered into the Trading System are not included in any MMP parameter calculations.

## 2.1 DEFINITION OF UNDERLYING ASSET CLASS

The term “Underlying Asset Class” is an important concept in the configuration and implementation of NFX MMP. All parameters are monitored and calculated based on an Underlying Asset Class.

Underlying Asset Class is defined as the asset class upon which all of the related Futures and Options Contracts and Options on Futures Contracts are based. Per the diagram below, the NFX WTI Crude Underlying Asset Class includes WTI Crude Futures Contracts and Options on WTI Crude Futures Contracts.

If a MMP parameter threshold is triggered for an Underlying Asset Class, the Trading System would purge all Quotes for the WTI Crude Underlying Asset Class, which includes Quotes in WTI Crude Futures and Options.



The NFX Heating Oil Underlying Asset Class includes only Heating Oil Futures Contracts since no Options are listed.

## 2.2 EXPOSURE LIMIT TIME INTERVAL

The Exposure Limit Timer Interval is a timer that defines length of a “rolling time interval” for MMP re-calculation, which is set in number of seconds.

The rolling time interval is used to determine if the Quantity or Delta Limit has been breached. Note that the Exposure Limit Time Interval can occasionally extend to 110% of the parameter due to Trading System constraints following excessive message activity.

It is especially important to note that if the rolling time interval is set to 0 (zero), the MMP functionality is turned off, disabling the MMP.

## 2.3 QUANTITY PROTECTION

The Quantity Protection threshold value is a value that if equaled or exceeded for a specific Underlying Asset Class will trigger the Trading System to purge all Quotes in the respective Futures and Options Contracts. The Quantity Protection threshold value is as defined as the maximum number of traded contracts that the Market Maker wants to trade via Quotes within the given time interval (Exposure Limit Time Interval).

If the Quantity Protection threshold is set to 0 (zero), the Quantity Protection functionality would be effectively disabled.

## 2.4 DELTA PROTECTION

The Delta Protection threshold value, is a value that if equaled or exceeded for an Options Contract related to the same Underlying Asset Class, will trigger the Trading System to purge all Quotes in the Underlying Asset Class (including Futures).. The Delta Protection threshold value is defined as the maximum number of executed contracts in the same direction (either long or short) that the Market Maker executes or Quotes, in an Options Contract, within the given time interval (Exposure Limit Time Interval).

The Delta Protection threshold value will be monitored for each Underlying Asset Class individually. There are two different methods to calculate the Delta Protection threshold value depending if Futures Contracts are included in the calculation. The methods are defined in Sections 2.4.1 and 2.4.2 herein.

If the Delta Protection is set to 0 (zero), the Delta Protection functionality would effectively disable MMP.

### 2.4.1 Delta Protection Including Futures

The Delta Protection threshold value calculation method including Futures Contracts is:

the Absolute value of the sum of [(bought Future Contracts + bought Call Options on Futures Contracts + sold Put Options on Futures Contracts) – (sold Future Contracts + sold Call Options on Futures contracts + bought Put Options on Futures Contracts)].

### 2.4.2 Delta Protection Not Including Futures

The Delta Protection threshold value calculation method, not including Futures Contracts, is:

the Absolute value of the sum of [(bought Call Options on Futures Contracts + sold Put Options on Futures Contracts) – (sold Call Options on Futures Contracts + bought Put Options on Futures Contracts)].

## 2.5 QUOTATION FROZEN TIME INTERVAL

When MMP is triggered due to a Delta and/or Quantity Protection threshold breach, the Market Maker will be prevented from entering new Quotes for a period of time defined by this parameter. The Quotation Frozen Time interval parameter shall be specified in number of seconds. The “frozen” time period exists to prevent Market Makers from entering additional Quotes before the threshold counters can be reset, which would lead to additional rejections.

Once the Quotation Frozen Time interval has expired, the thresholds counter(s) for the specified Contract underlying(s) will be reset and the Market Maker can enter additional Quotes into the Trading System.

If the Quotation Frozen Time interval is set to 0 (zero), the quotes are considered frozen and the quotation ability can only be activated by updating the parameter.

## **3 TRIGGERING CALCULATIONS AND CONSEQUENCES**

### **3.1 TRADES INCLUDED IN THE CALCULATION**

Only single-leg trades that are matched in the Order Book via Quotes entered by the Market Maker are counted for purposes of MMP.

Additionally, Off-Order Book trade reports (Block Trades and Exchange of Futures for Related (“EFRPs”) Products) entered by the Market Maker are not counted for purposes of MMP.

### **3.2 THRESHOLD BREACH ACTION**

When a Quantity or Delta Protection threshold is reached and/or breached, all Quotes for the Underlying Asset Class in which the threshold violation took place will automatically be purged by the Trading System. Note that Quotes in Futures Contracts will be purged regardless of whether the Delta Protection threshold calculation is set to include or exclude Futures Contracts. As an example, if a Market Maker’s Delta Protection threshold calculation method excludes Futures Contracts and the Market Maker executes an amount of WTI Crude Options on Futures Contract trades via Quotes in one direction to reach or breach the Market Maker’s threshold, MMP will purge all of the Market Maker’s existing Quotes in WTI Crude Futures Contracts and WTI Crude Options on Futures Contracts (the WTI Crude Underlying Asset Class) regardless of direction (either long or short) of the Quotes.

Single Orders and Combination Orders/Quotes submitted by the Market Maker will not be purged. The Market Maker will be informed via a Trading System broadcast message of the purge. There will be one Trading System broadcast message sent for each purged Quote. The Market Maker will also be informed when limits have been reached or breached via a broadcast message.

In the case where the Market Maker has many Quotes in the Order Book in the same Instrument series, all Quotes will be purged.

### **3.3 RESET OF THE MARKET MAKER PROTECTION PARAMETERS**

After MMP has taken place, due to a threshold violation, and the respective Quotes are purged, the counted quantities will automatically reset to zero. This prevents the threshold breach from being triggered immediately after the initial trigger. The Market Maker will be able to submit additional Quotes in the underlying after the frozen time interval has expired.

### **3.4 QUOTING AFTER A MARKET MAKER PROTECTION EVENT**

If additional Quotes have been submitted by a Market Maker immediately after a MMP threshold breach has occurred, causing a purge of all Quotes in the underlying, but before the notification broadcast message is received by the Market Maker, additional Quotes will be rejected, and the Market Maker will receive an additional notification message with the reason code “Market Maker Protection.” After the

specified quotation frozen time, the Market Maker can start submitting Quotes into the Trading System. If the Market Maker wants to submit new Quotes earlier than this timeframe, the Market Maker has the ability to override the quotation frozen time by updating the parameters. When the parameters are updated, the calculated Quantity Protection and Delta Protection values will reset for that particular Underlying Asset Class; regardless of whether parameters have been changed.

### **3.5 MMP WITH MASS QUOTATIONS**

If a mass Quote is sent to the Trading System which results in trade executions, the mass Quote transaction shall be processed as multiple, individual transactions, instead of one composite transaction. If these multiple individual transactions were to cause a threshold breach, thus triggering MMP, the remaining unexecuted Quotes in the transaction in the same Underlying Asset Class will be purged with reason code "Market Maker Protection."

### **3.6 PASSIVE AND AGGRESSIVE QUOTES**

#### **3.6.1 Aggressive Quotes**

If an aggressive Quote is entered by the Market Maker that matches with Orders in the Order Book, the MMP is checked for each individual Quote. See example 1 in Section 5.1 herein.

#### **3.6.2 Passive Quotes**

If an aggressive single Order is entered into the Trading System that matches with passive Quotes from the Market Maker in the Order Book, MMP shall be checked when the aggressive Order has been fully matched. See example 2 in Section 5.2 herein.

### **3.7 IN-HOUSE TRADING**

A Participant or User will not be able to match its Orders against its own Orders or Orders submitted by another Participant or User affiliated with a common Futures Participant or Authorized Trader.

#### **3.7.1 Aggressive Quote matched with a Combination Order**

If an aggressive Quote by a protected Market Maker is matched with an Implied Order generated from a Combination Order, the MMP will first check each individual Quote item, and then consider other legs of the Combination Order Strategy, which shall be traded before the MMP is triggered, even if a threshold is reached after the first leg is traded. See example 3 in Section 5.3 herein.

#### **3.7.2 Passive Quote matched with a Combination Order**

If a passive Quote by the protected Market Maker is matched with an Implied Order generated from a Combination Order the MMP will first check each individual quote item, and then consider the other legs of the Combination Order Strategy, which shall be traded before the MMP is triggered, even if a threshold is reached after the first leg is traded.

### **3.8 STOP ORDERS**

MMP has priority against resting Stop Orders. If a trade triggers MMP and the new last price also triggers a Stop Order, which is eligible to trade against another Market Maker Quote, the Stop Order will not be triggered before the Quotes have been purged.

### 3.9 SESSION STATES

The MMP will only be enabled during Trading Sessions with continuous matching (the Open Session).

## 4 SELF-MATCH PREVENTION

As mentioned in the introduction, this optional functionality prevents matching between counterparties affiliated with the same Participant or User. The Self-Match Prevention parameter is configurable at both the Participant and User level. The functionality will prohibit matching between counterparties affiliated with the same Participant or User. A Participant or User will not be able to match its Orders against its own Orders or Orders submitted by another Participant or User affiliated with a common Futures Participant or Authorized Trader. If a residual quantity of an Order exists after matching, crossed or locks with Orders from the same or commonly affiliated Participant or User, the residual quantity of the Order will be canceled.

Self-Match Prevention at the Participant level can be configured to override any setting at the User level.

This configuration will apply also for Combination Orders, both when matching against other Combination Orders and against single-leg Orders.

For Mass Quotes, the configuration applies when matching against Orders. Regardless of the internal crossing configuration, only one optimized Quote per Options series and Participant is allowed and may never cross with each other.

The configuration applies in continuous matching Trading Sessions only (the Open Session). Therefore, two Orders submitted by the same Participant might match in an uncross (Pre-Open Session). Additionally, off-Exchange trade reports (Block Trades and EFRPs for Futures) and Crossing Transactions are not be subject to Self-Match Prevention functionality.

## 5 MMP EXAMPLES

### 5.1 EXAMPLE 1: AGGRESSIVE QUOTES (SECTION 3.6.1)

If an aggressive Quote is entered by the Market Maker that matches with Orders in the Order Book, MMP shall be checked for each individual Quote.

Example 1:

Assume that the Market Maker has defined the Quantity Protection to 9.

Assume that four individual Orders and one Quote are stored in the Order Book:

Bid			Offer		
Order No	Quantity	Price	Price	Quantity	Order No
1. Order	10	100.0			
2. Order	10	100.0			
3. Order	10	100.0			
4. Order	7	100.0			
5. Quote MM	5	99.0			

Assume that the Market Maker enters one Quote: sell 30@99.0.

This Quote is fully matched against all Orders and Quotes in the Order Book before the Quantity Protection is checked. The calculated Quantity Protection value is then 30, which exceeds the Quantity Protection of 9.

The Market Maker Protection is triggered.

Any Quotes belonging to the Market Maker in the affected Order Books are removed (thus removing the remaining of Quote number 5 in the Order Book).

The Order Book, after the Order has been matched, looks like:

Bid			Offer		
Order No	Quantity	Price	Price	Quantity	Order No
1	7	100.0			

## 5.2 EXAMPLE 2: PASSIVE QUOTES (SECTION 3.6.2)

Assume that the Market Maker has defined the Quantity Protection to 9.

Assume that two individual Quotes and two Orders are stored in the Order Book:

Bid			Offer		
Order No	Quantity	Price	Price	Quantity	Order No
1. Quote MM	10	100.0			
2. Order	10	100.0			
3. Order	5	99.0			
4.Quote MM	10	99.0			
5. Order	10	99.0			

Assume that a market participant enters one Order sell 30@99.0.

This Order is matched against all Orders and Quotes in the Order Book, leaving 5 in the Quote number 4. Next, the Trading System checks the Quantity Protection. The calculated Quantity Protection value is then 15 (10 from Quote number 1. + 5 from Quote number 4.), which exceeds the Quantity Protection of 9. Note that the calculated Quantity Protection value does not contain any quantity contribution from Order number 2 or Order number 3.

The Market Maker Protection is triggered.

Any Quotes belonging to the Market Maker in the affected Order Book are removed (thus removing the remaining of Quote number 4 in the Order Book).

The Order Book, after the Order has been matched, looks like:

Bid			Offer		
Order No	Quantity	Price	Price	Quantity	Order No
5. order	10	99.0			

## 5.3 EXAMPLES 3 AND 4: COMBINATION ORDERS (SECTION 3.8)

If an aggressive Quote by the protected Market Maker is matched with an Implied Order generated from a Combination Order Strategy, Market Maker Protection shall first check each individual Quote and then consider the other legs of the Combination Order Strategy which shall be traded before the Market Maker Protection is triggered, even if a threshold is reached after the first leg is executed.

**Example 3: Aggressive Quote matched with Combination Order Strategy**

Combination Order AB: buy A and sell B (A and B is part of the same underlying)

Step 1:

Market Maker A (MMA) has a one-sided Quote in series A. (10@10)

The Quantity Protection parameter is set to 9 for MMA.

Participant B (PB) enters an Order in series A. (5@10)

Participant A (PA) wants to buy the Combination Order Strategy AB 10 times at 2.

When PA enters the Combination Order, an Implied Order is generated in the series B Order Book.

Order Combo AB	
(PA) 10 @2	

Series A	
	10@10 (MMA)
	5@10 (PB)

Series B	
	10@8 (implied)

Step 2:

MMA enters a Quote in series B: buy 10@8.

Result:

The whole Order will execute before the Market Maker Protection is triggered, and the remaining Quotes (in the underlying Contract) would be removed because of the trigger. Orders are not removed as a result of the trigger.

The calculated Quantity Protection will be 20.

Combo AB	

Series A	
	5@10 (PB)

Series B	

#### Example 4: Passive Quote matched with Combination Order Strategy

Step 1 is the same as in example 3.

Step 2:

Participant B (PB) enters an Order in series B: 10@8.

The whole Order will execute before the Market Maker Protection is triggered, and the remaining Quotes (in the underlying Contract) would be removed because of the trigger. Orders are not removed as a result of the trigger.

Combo AB	

Series A	
	5@10 (PB)

Series B	

© Copyright 2015, Nasdaq, Inc. All rights reserved

