

ISE, GEMX, MRX, PHLX, NOM

Market Maker Risk Management

MANDATORY RISK MANAGEMENT FEATURES

INTERFACE

Feature	Description	OTTO, FIX, Precise	Trigger
Market Maker Curtailments (Rapid Fire)	<ul style="list-style-type: none"> • When triggered, Rapid Fire purges all quotes in a symbol/instrument type for the associated market maker badge. • A reentry flag is required in order for new quotes to be accepted. • For ISE, GEMX and MRX all parameters must be set. For PHLX and NOM, Delta and Vega are optional while Cumulative Count and Percentage Count must be set. All thresholds must be exceeded in order to trigger the underlying purges. <ul style="list-style-type: none"> – Cumulative Count: total contracts traded – Percentage Count: traded size as a percentage of total quote size available plus the quote size previously executed during the time interval. Percentage values in a symbol are calculated per series/side and then the sum of the percentages for sold contracts is subtracted from the sum of the percentages for bought contracts, and evaluated as an absolute value. Therefore, buys and sells are offset only within an instrument but not across different instruments." – Delta: long vs. short, evaluated as an absolute value – Vega: bought vs. sold, evaluated as an absolute value • Adjustable time intervals – configurable in milliseconds, from 500ms to 30 seconds. • ActiveQP: Firms will have the option to opt out of traditional Rapid Fire and use ActiveQP which will calculate the total contracts traded within an underlying. ActiveQP does not use a timer and firms must 'actively' replenish the counter as required. Once the threshold is exceeded all quotes will be purged similar to Rapid Fire. • All settings adjustable intraday. 	SQF	Automatic Configured by Member)

*configured by the Exchange

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Market-Wide Speed Bump (MWSB)	<ul style="list-style-type: none"> When triggered, MWSB purges all quotes and prevents new quotes from being accepted by the system. After a MWSB is triggered, quote re-entry requires action by Market Operations. Curtailment parameter is the aggregate of Rapid Fire curtailment events within a specified time period across the entire market for a given market maker. Thresholds are established and calculated independently for the Nasdaq ISE, Nasdaq GEMX, Nasdaq MRX and Nasdaq PHLX markets. Can be configured at the MM badge level or at a Group level with multiple badges associated with the Group. If not configured the protection will not apply. Cross Market Speed Bump (CMSB): allows a common threshold to be set across Nasdaq ISE and Nasdaq GEMX. 		Automatic Configured by Member)
Quote Purge Request	<ul style="list-style-type: none"> Purge all quotes for all series in an underlying with one transaction. Wildcard option purges all quotes for all series in all symbols for the associated market maker. A reentry flag is required in order for new quotes to be accepted. 	SQF	Member Initiated
Notification Ports	<ul style="list-style-type: none"> SQF ports can be configured to receive notification messages (such as purge notifications) as well as send quotes. 	SQF	Member Initiated
Cancel on Disconnect	<ul style="list-style-type: none"> SQF ports can be configured to only allow entry of underlying-level purges to minimize latency. 	SQF	Member Initiated

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Anti-Internalization (AIQ)	<ul style="list-style-type: none"> Prevents single leg Market Maker interest from matching against resting MM interest from the same market maker. Market Makers can configure this protection to apply at the badge, exchange account or member firm level. If AIQ is triggered, incoming single leg MM interest will trade with other interest with priority on the book, and resting MM interest that would have otherwise matched with the incoming interest will be cancelled. Covers MM orders entered via FIX, OTTO, and Precise in addition to SQF quotes/sweeps. 	All	Automatic
Quote Reprice/Cancel	<ul style="list-style-type: none"> A quote which locks or crosses the NBBO will be re-priced from the NBBO on the contra side. The quote will remain at the re-priced price until cancelled or updated by the submitting Market Maker. Market Makers may elect for their quotes to be cancelled rather than repriced 	All	Automatic
Acceptable Trade Range	<ul style="list-style-type: none"> An order or quote is limited to a predefined maximum range set by the Exchange where it will be permitted to execute. 	All	Automatic

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Cancel on Disconnect (COD)	<ul style="list-style-type: none"> All quotes and orders will be removed if a loss of communication is detected with an order entry port. Market maker quotes will be cancelled across the same Market Maker ID and underlying issues. 	All	Automatic

*configured by the Exchange

