## **MIAX OPTIONS EXCHANGE**

## LIMIT UP/LIMIT DOWN STATES AND THE OBVIOUS ERROR RULE ASSESSMENT

### **Background:**

The Plan to Address Extraordinary Market Volatility Pursuant to Rule 608 of Regulation NMS was implemented on April 8, 2013. MIAX proposed to exclude transactions executed during a Limit State or Straddle State from MIAX Rule 521 (Obvious and Catastrophic Errors), to the extent set forth in paragraph (j) of MIAX Rule 530 (Limit-Up-Limit-Down) for a one-year pilot basis (see SR-MIAX-2013-12) ("the pilot"). More recently, the Exchange revised its rules to extend the pilot to include any extension of the pilot period applicable to the Limit Up-Limit Down Plan. See Securities Exchange Act Release No. 76237 (October 22, 2015), 80 FR 66100 (October 28, 2015)(SR-MIAX-2015-60). MIAX believes that the application of the Obvious and Catastrophic Error Rule to all transactions occurring during a Limit or Straddle State would be impracticable during Limit and Straddle States, and could produce undesirable effects. MIAX believes that market participants should not be able to benefit from the time frames allotted to them from the time of the affected transaction within which they may request a review of their transactions in these situations and that it is appropriate to suspend application of Rule 521 for all transactions occurring during a Limit or Straddle State (except for erroneous transactions that resulted from a verifiable disruption or malfunction of an Exchange execution, dissemination, or communication system, or due to an erroneous quote or print in the underlying NMS Stock).

The purpose of this report is to, in connection with assessing the impact of the Obvious Error Rules during Limit and Straddle States, (1) evaluate the statistical and economic impact of Limit and Straddle States on liquidity and market quality in the options markets, and (2) assess whether the lack of obvious error rules in effect during the Straddle and Limit States are problematic.

#### Data:

The MIAX analyzed the trades that occurred during the Limit and Straddle States ("States") between the months of June 2015 and November 2015. MIAX tracked trades and market quality for situations where there was at least one trade in an option series during a State.

During the review period mentioned above, there were a total of 24 underlying stocks that entered the State phase and there was at least one trade in an option series during the State. There were 58 trades during the States for a total quantity of 400 contracts. August 2015 contained the highest number of LULD trades accounting for 39 of the 58 total trades. There were 11 transactions during a Limit State and 47 transactions during a Straddle State. There was a single LULD transaction in 15 of the 24 securities listed.

With regard to price volatility, 5 of the instances had a price change in an option series of 30% or more during the State phase compared to the last trade before the State phase; and 4 of the instances had a price change in an option series' price move 30% during the five minute period after it exited the State phase.

Finally, there were no obvious error reviews during the review period.

The tables below summarize the information contained in the periodic LULD reports submitted to the Commission on a monthly basis.

Month	LULD Trades	
June 2015	2	
July 2015	2	
August 2015	39	
September 2015	1	
October 2015	5	
November 2015	9	
<b>Grand Total</b>	58	

Symbol	Total LULD Volume	Total LULD Trades	Avg. Trade Size
ADXS	10	1	10
BCE	4	4	1
CBIO	10	1	10
CELG	9	4	2
CF	1	1	1
CL	3	1	3
GNC	103	2	51
ITB	60	2	30
MNK	19	4	5
POM	13	1	13
PVA	10	1	10
RAD	2	1	2
RGC	25	1	25
SBUX	1	1	1
STRP	1	1	1
SUNE	20	2	10
SVXY	12	2	6
TERP	10	1	10
TTPH	1	1	1
TWTR	3	1	3
ULTA	10	1	10
VRX	11	1	11
XLF	1	1	1
XLK	31	20	2
ZTS	30	2	15
<b>Grand Total</b>	400	58	7

# Conclusion:

In connection with assessing the impact of the Obvious Error Rules during Limit and Straddle States, MIAX has evaluated the statistical and economic impact of Limit and Straddle States on liquidity and market quality in the options markets. MIAX believes that there is insufficient data to make a reliable statistical and economic evaluation of market quality in the options market during States.

In connection with assessing the impact of the Obvious Error Rules during Limit and Straddle States, MIAX has assessed whether the lack of obvious error rules in effect during the Straddle and Limit States are problematic. MIAX believes that there is insufficient data to make a reliable assessment of whether the lack of obvious error rules in effect during straddle and limit states are problematic. As noted above, to date, the Exchange has not received any requests for review of a transaction pursuant to Rule 521 when the underlying security was in a State. As such, MIAX has not identified any problematic outcomes as a result of the pilot rule.