

BATS Exchange, Inc. and EDGX Exchange, Inc.
Options Limit Up-Limit Down Assessment
December 18, 2015

Background

BATS Exchange, Inc. (“BZX”) and EDGX Exchange, Inc. (“EDGX”, and together with BZX, the “Exchanges”) are Participants in the Plan to Address Extraordinary Market Volatility Pursuant to Rule 608 of Regulation NMS (the “Limit Up-Limit Down Plan” or the “Plan”)¹. On May 8, 2015, BZX implemented Rule 20.6 “Nullification and Adjustment of Options Transactions including Obvious Errors”, in coordination with other U.S. options exchanges. An identical Rule 20.6 was adopted in connection with the creation of an options trading platform for EDGX. On November 2, 2015, the EDGX options trading platform was launched.

As part of Rule 20.6, the Exchanges adopted Interpretation and Policy .01 to provide for how the Exchanges will treat Obvious and Catastrophic Errors in response to the Limit Up-Limit Down Plan, which is applicable to all NMS stocks, as defined in Regulation NMS Rule 600(b)(47).² Under Interpretation and Policy .01, during a pilot period to coincide with the pilot period for the Plan, including any extensions to the pilot period for the Plan, an execution will not be subject to review as an Obvious Error or Catastrophic Error pursuant to paragraph (c) or (d) of Rule 20.6 if it occurred while the underlying security was in a “Limit State” or “Straddle State,” as defined in the Plan.

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

This assessment includes BZX data from June 1, 2015 through November 30, 2015 and EDGX data from November 2, 2015 through November 30, 2015³ (collectively, the “Review Period”).

Data

Data regarding the operation of the Pilot is available at:
http://www.batsoptions.com/market_data/luld_reports/

During the Review Period, the Exchanges received 31 obvious error review requests, two of which (6.5%) were to review a transaction pursuant to Rule 20.6 when the underlying security

¹ Securities Exchange Act Release No. 67091 (May 31, 2012), 77 FR 33498 (June 6, 2012) (order approving the Plan on a pilot basis).

² 17 CFR 242.600(b)(47).

³ The EDGX Options platform launched on November 2, 2015 with trading in five symbols. A phased roll-out across all eligible options series was completed on November 16, 2015.

was in a Limit State or Straddle State. Hereafter, a trade occurring when the underlying security was in a Limit State or Straddle State will be referred to as a “LULD Trade”. Request A was submitted for two executions and asserted that the executions occurred moments before a trading halt. This request was not received within the time deadlines set forth in Rule 20.6. Request B was received for 19 executions and asserted that the underlying stock had been halted when the options executions occurred. Exchange personnel confirmed that the security was not halted when the options executions occurred. Further, the Exchanges note that both requests were filed claiming an erroneous print in the underlying, which is set forth in Exchange Rule 20.6(g) and is not covered by the pilot program (*i.e.*, if an erroneous print in the underlying did occur, the options execution could be adjusted or nullified pursuant to Rule 20.6).

BZX observed a total of 209 LULD Trades accounting for 7,954 contracts in options overlying 58 securities during the Review Period. LULD Trade volume accounted for 0.0038% of the total volume on BZX (210,748,983 contracts) during the Review Period. No LULD Trades occurred on EDGX during the Review Period. Please refer to Appendix A for a summary of LULD Trades and volume per options class during the Review Period.

With regard to price volatility, BZX observed that 75 of the 209 LULD Trades had a price change in an options series of 30% or more during the Limit State or Straddle State compared to the last trade before the Limit State or Straddle State. 38 LULD Trades had a price change in an options series’ price move 30% during the five minute period after it exited the Limit State or Straddle State.

Conclusion

While BATS believes that there is insufficient data, particularly given the recent adoption of the pilot rule by BATS (*i.e.*, May 8, 2015 for BZX Options and November 2, 2015 for EDGX Options), to make a reliable statistical and economic evaluation of market quality in the options market during Limit and Straddle States, the Exchanges preliminarily concluded, based on the information available during the Review Period, that the pilot does not negatively impact market quality during normal market conditions.

Approximately 9% of the LULD Trades during the Review Period occurred on August 24, 2015 (19 of 209 LULD Trades). Excluding the August 24, 2015 data point from the Review Period, reveals that 190 LULD Trades occurred during normal market conditions, an average of approximately 1.5 LULD Trades per day.

15 of the 75 LULD Trades during the Review Period (20%) that had a price change in an options series of 30% or more during the Limit State or Straddle State compared to the last trade before the Limit State or Straddle State occurred on August 24, 2015. 16 of the 38 LULD Trades during the Review Period (42%) that had a price change in an options series’ price move 30% during the five minute period after it exited the Limit State or Straddle State occurred on August 24, 2015.

Table 1 LULD Trade Statistics June 1, 2015 – November 30, 2015			
	Review Period	August 24, 2015	% Occurring on August 24, 2015
Count of LULD Trades	209	19	9%
Executed Volume of LULD Trades	7,954	752	9%
Price Change Exceeded 30% During Limit or Straddle State⁴	75	15	20%
Option Price within Five Minutes after Leaving Limit State or Straddle State is 30% or More Away⁵	38	16	42%

The Exchanges believe that analysis of any future market volatility events, similar to that occurring on August 24, 2015, would provide the Exchanges with a more fulsome assessment of any impact of Limit States and Straddle States on the options markets during such anomalous market events.

BATS believes that there is insufficient data to make a statistical assessment of whether the lack of obvious error rules in effect during Limit and Straddle States are problematic based on the two obvious error review requests received during the Review Period. As noted above, the requests were filed claiming an erroneous print in the underlying, which is set forth in Exchange Rule 20.6(g) and is not covered by the pilot program.

⁴ As compared to the last available option price as reported by OPRA before the start of the Limit or Straddle State.

⁵ As compared to the price before the start of the Limit or Straddle State.

Appendix A – Summary of LULD Trades

Stock Symbol	Total LULD Volume	Total LULD Trades	Avg. Trade Size
AAC	158	11	14
ABBV	434	10	43
ABC	20	1	20
ACI	140	3	47
ADXS	952	5	190
AKRX	20	1	20
ALK	4	2	2
ARG	26	1	26
ASFI	20	1	20
ATML	60	2	30
AVP	56	3	19
BHI	72	1	72
BLUE	62	8	8
BMY	4	2	2
CDZI	4	1	4
CF	2	1	2
CL	10	1	10
CVC	72	4	18
CZR	152	5	30
DDD	128	3	43
EMES	4	1	4
EVHC	6	2	3
GNC	800	18	44
HMSY	258	4	65
HUM	86	6	14
INCY	28	3	9
IRG	10	1	10
ITB	400	1	400
JUNO	14	2	7
LOCK	68	6	11
MCK	2	1	2
MNK	44	5	9
NSC	6	2	3
ODP	80	2	40
P	28	2	14
PAG	20	1	20
PAH	12	2	6
PEP	6	1	6
PHH	68	3	23

Stock Symbol	Total LULD Volume	Total LULD Trades	Avg. Trade Size
PMCS	200	1	200
POM	40	1	40
RAD	1,702	19	90
RGC	440	8	55
RJET	50	3	17
SBUX	2	1	2
STRP	116	8	15
SUNE	338	7	48
SVXY	2	1	2
TE	56	6	9
TERP	316	6	53
THC	2	1	2
UNH	10	1	10
VRX	194	7	28
VTL	68	2	34
WMB	22	2	11
XLF	4	2	2
YELP	4	1	4
ZTS	52	3	17