

## MIAX PEARL Appendix A

### Obvious and Catastrophic Errors During Limit and Straddle States

For the month of December 2018, the MIAX PEARL Exchange collected the following dataset containing the data for each Straddle and Limit State in optionable stocks.

Stock Symbol	Option Symbol	Trade Date	LULD Start Time	Straddle Limit Indicator	Executed Volume	TW Avg MBBO Spread	TW Avg Quote Bid Size	TW Avg Quote Ask Size	High Execution Price	Low Execution Price	Trades Reviewed for Error	Price Change GT 30 PCT in LULD	Price Change GT 30 PCT After LULD
CRON	CRON-2018-12-07-C-9.00	12/03/2018	11:52:05 AM	STRADDLE	2	0.35	0.99	0	0.5	0.5	N/A	0	1
CRON	CRON-2018-12-07-C-9.50	12/03/2018	11:52:05 AM	STRADDLE	13	0.15	0.06	0	0.3	0.1	N/A	1	1
CRON	CRON-2018-12-14-C-10.00	12/03/2018	11:52:05 AM	STRADDLE	25	0.25	0	0	0.25	0.25	N/A	0	0
AKRX	AKRX-2019-03-15-P-4.00	12/07/2018	10:50:55 AM	STRADDLE	1	4.88	0	0.05	0.9	0.9	N/A	0	0
CORT	CORT-2018-12-21-C-15.00	12/11/2018	02:08:57 PM	STRADDLE	10	0.77	0	0	0.8	0.8	N/A	0	1
RICK	RICK-2019-01-18-P-20.00	12/27/2018	09:45:00 AM	STRADDLE	4	3.5	0	4.55	0.5	0.5	N/A	0	0
SHOS	SHOS-2019-02-15-P-2.50	12/28/2018	09:45:00 AM	STRADDLE	1	4.45	0	11.42	2.3	2.3	N/A	0	0
SHOS	SHOS-2019-04-18-C-7.50	12/28/2018	09:45:00 AM	STRADDLE	4	0.15	0	5.82	0.1	0.1	N/A	0	0