## MIAX Emerald Appendix A

## Obvious and Catastrophic Errors during Limit and Straddle States

For the month of September 2019, the MIAX Emerald 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