

Following the extraordinary equity market volatility of August 24th, 2015, the date on which Limit Up-Limit Down (LULD) received the first large-scale market test since its original implementation in April 2013, many studies were conducted to determine ways to improve market structure. LULD received a lot of attention, particularly regarding auction processes following a Trading Pause. Improving and standardizing the management of halts and re-openings following a Trading Pause became a key goal for both the exchanges and the Securities and Exchange Commission (SEC).

The exchanges jointly formed a Trade Resumption Working Group that held numerous discussions focused on many aspects of Halt Auctions that follow LULD Trading Pauses. The subcommittee's efforts included consultations with a broad range of industry advisors and participants, whose feedback was incorporated into a new LULD amendment, formally known as the Twelfth Amendment of the Plan to Address Extraordinary Market Volatility (Amendment 12). This amendment was filed with the SEC on September 19, 2016.

Preceding Amendment 12, several steps were taken by market participants to make trading and structural improvements based on the experiences of August 24th. Listed below are two important industry-wide changes that occurred prior to Amendment 12:

### **Closing “leaky bands” following a Halt Auction**

The small time window between a primary listing market's re-opening price and the SIP's dissemination of LULD Price Bands created an opportunity for trades to occur without adhering to Price Band boundaries. Changes were made to eliminate the so-called “leaky bands” by ensuring that trade resumption is always based on LULD Price Band boundaries.

### **Amendment 10**

The sole purpose of this LULD amendment was to revise the Reference Price on which the first LULD Price Band of a trading day is based in the event that the Opening Auction has no trading activity. The change, implemented on July 18th, 2016, uses the previous trading day's closing price as the Reference Price instead of the midpoint of the primary market's quote. Following the implementation of Amendment 10, the occurrence of Trading Pauses has declined by more than 85%<sup>1</sup>.

## Key Elements and Enhancements of Amendment 12

It is important to recognize that Amendment 12 was created mainly to improve re-openings following a Trading Pause, with an eye towards carefully balancing Halt Auction price quality and the speed with which continuous trading can be resumed. The overarching objective was to ensure consistent and standardized behavior across markets. Listed below are the key elements and enhancements that are part of Amendment 12:

### **Auction Halt Periods will be Extended if Auction Re-Opening Criteria are Not Met**

- A halt period will be extended if at least one of the following two conditions exists:
  - The auction price at which the most shares would be traded is outside the range of the pre-defined price threshold collars.
  - There is a market order share imbalance.

### **Price Collars will be Widened at the Start of Each 5-minute Halt Segment**

- The Price Collar Threshold will be widened by 5% of the price of the Price Band that triggered the Trading Pause, but only in the direction of the upper or lower band that invoked the Trading Pause. To the extent that a security does not re-open within any given 5-minute halt segment, the Price Collar Threshold will continue to be widened by that same initial amount in the direction of the imbalance.
- Opposite-side Price Collar Thresholds will remain at the Price Band value that was in effect when the Trading Pause was invoked.

<sup>1</sup> Analysis based on Trading Pauses occurring in NMS securities from January 2, 2016 through September 16, 2016

### Standard Halt Auction Time Extensions and Associated Conditions

- Initial Halt segment will remain in effect for a full 5-minute period.
- Second Halt segment will remain in effect for another full 5-minute period.
- Subsequent Halt segments will have an established 5-minute duration, but re-openings can occur if re-opening criteria are met, without waiting for a full 5-minute time lapse.

### Special Circumstance Halt Extensions Modifications

- If the primary market does not re-open after 10 minutes and has not declared a Regulatory Halt, other exchanges cannot resume trading until the primary market itself re-opens trading.
- If the primary market cannot re-open due to systems problems, trading can resume upon receipt of an LULD Price Band from the SIP, but no earlier than 10 minutes after the initial halt declaration.

### Halt Re-Openings Precluded After 3:50 PM

- If a Halt Auction has not occurred by 3:50 PM, trading will be deferred until 4:00 PM and combined with the Closing Auction.
- This auction deferral differs from current procedures that limit Halt Auction activity between 3:50 PM and 4:00 PM when a halt declaration occurs after 3:50 PM.

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