My name is Stacey Cunningham and I am the Chief Operating Officer of the New York Stock Exchange.

I’d like to thank the Commission and the Committee for the opportunity to participate in today’s Equity Market Structure Advisory Committee meeting. I particularly appreciate the ability to share NYSE’s views on the Market Quality Subcommittee’s recent recommendations. Market quality is constantly at the forefront of our minds at NYSE, not simply as a reaction to August 24, 2015, but because high quality markets benefit our listed companies, exchange members and investors.

I’ll begin by sharing our thoughts on market quality generally, then, in the context of the Subcommittee’s Recommendation, provide an update on the progress that the Limit Up Limit Down Operating Committee has made toward revising the LULD Plan. I will also provide a brief update on changes to NYSE’s opening processes.

**Liquidity provision and volatility**

A primary tenet of market quality is providing stable, displayed quotes with meaningful size and a narrow bid-ask spread. High quality markets are achieved by bringing together committed liquidity providers with a wide variety of liquidity-seeking investors that have diverse investment goals and time horizons.

This becomes increasingly important, but unfortunately increasingly challenging, in today’s fragmented marketplace. On recent days, more than 40% of trading occurred in the dark. As a result, liquidity providers on exchange do not have the benefit of interacting with diverse order flow, yet the market is still dependent on them to establish benchmark prices. These prices are used broadly from retail investors evaluating investment options to, ironically, ATSs and internalizers matching trades off-exchange.

As the Equity Market Structure Advisory Committee and ALL of its Subcommittees consider market quality, promoting displayed liquidity must be a primary focus and finding ways to encourage market makers to provide displayed liquidity at ALL times, particularly during periods of increased volatility, is a means to that end.

At NYSE, our market models are constructed to create the right balance between market maker benefits and obligations. The Designated Market Makers on NYSE have more significant obligations than any other class of market maker in US equities. Among these obligations, they guarantee all marketable interest will be satisfied in opening and closing auctions, they must contribute to the NBBO a certain percentage of the trading day and must also provide depth liquidity to dampen price moves throughout
the day. Unlike most market maker incentive programs, these are not voluntary obligations they can ignore when market conditions are less appealing. They are rule-based mandatory obligations that carry regulatory risk. In exchange for those accepting that risk, they are rewarded with a set of incentives, including parity participation and enhanced economics. We invest quite literally, in better market quality for our issuers.

On August 24, it became clear that the balance of market making benefits and obligations had underestimated another factor: market structure risks and uncertainty. When I last presented to this committee in February, I highlighted a number of contributing factors to a reduction in market maker participation. Uncertainty around a potential Market Wide Circuit Breaker trigger, around hedging opportunities, around potential Clearly Erroneous Executions, or around opening prices were just a few. It is with the goal of reducing uncertainty for liquidity providers and increasing transparency for all market participants that we approach the industry dialogue of improving market quality.

Enhancements to the LULD Plan

The Market Quality Subcommittee notes that the primary function of the LULD Plan works, but that the re-opening process does not function well. The Subcommittee cites a lack of market participation during the re-opening process following a trading halt compared to a similar opening or closing auction on a primary listing venue as an issue and believes making changes to address that issue would be too cumbersome for the industry. For these reasons, the Subcommittee has recommended focusing on a futures-like extension of limit states rather than pausing trading in a security.

While the LULD Operating Committee had been working on amendments to the LULD plan prior to the volatility of last August 24, we have incorporated analysis of the day’s events into our work. We agree that moving to a structure where limit states would be extended rather than halting trading is worth exploring but any such overhaul of the LULD plan warrants an extensive review before it could be finalized and implemented for the equities markets. We believe the markets should not lose sight of changes that can be made to improve the operation of the current LULD plan in the near term while we assess a larger overhaul of the LULD mechanism.

As an example, Amendment 10 of the Plan was recently implemented on July 18. It revised the reference price used to establish bands in the absence of an opening auction, and based on initial results, has led to a roughly 75% decline in spurious trading pauses.

Exchanges have also implemented, or are in the process of implementing, changes to assure that trading during the regular session will always be subject to a Price Band, even if not yet received from the SIP.

Earlier this year, the LULD Operating Committee, in tandem with the LULD Advisory Committee, identified two obvious areas that required in depth review and established working groups dedicated to addressing those areas. Their recommendations have been based on empirical observations as well as extensive dialogue with market makers, institutional investors, retail investors and issuers. It’s been a collaborative and productive process.
Trade Resumption Working Group

First, a working group is comprehensively assessing the trade resumption process following a trading pause and has agreed to concrete changes that would improve this process. We believe these changes would address the concerns raised both by this Subcommittee and other industry participants without imposing a substantial burden on market participants. Based on the feedback we received, the primary markets have committed to adopt a standardized approach regarding automated reopens that would be implemented through both amendments to the LULD plan and exchange rules. Specifically, the Plan participants intend to propose an amendment to the LULD plan that would prohibit market centers from resuming trading in a security until the primary reopens and Price Bands have been disseminated by the SIP.

In connection with the changes to the LULD plan, the primary markets would propose changes to their rules to adopt consistent standards for automated re-openings following a trading pause. All primaries would have the same manner of calculating the reference price for auction collars, the same auction collar methodology, and the same percentage parameters applicable to those collars. The exchanges would also adopt new, uniform standards for how the trading pause period would be extended and collars widened if an automated auction cannot be conducted within the collars or if there is an imbalance of Market Orders.

The goal of these changes is to make sure that all Market Orders will be satisfied in a reopening auction. As we saw on August 24, allowing unexecuted Market Orders to flow into continuous trading if they don’t participate in a trading halt auction can have negative impacts on post-auction pricing, including triggering more trading pauses. The proposal is designed to satisfy orders while balancing price discovery and price protection. Satisfying all marketable interest in the auction was unanimously viewed as a critical requirement among retail broker dealers.

Our proposed solution also addresses concerns around mean reversion, which were included in the Subcommittee recommendation. Specifically, the proposed extensions, which would be in five-minute increments, would include a widening of the auction collar by 5%, but only on the side of the direction of the auction pressure. If, for example, there is selling pressure, the lower trading collar would be widened, but the upper collar would not change. If during an extension, the direction moves to buying pressure that cannot be satisfied in the upper trading collar, for the next extension, it would be the upper trading collar that would be widened by five percent, and the lower trading collar would not change. The likelihood of subsequent halts or rebounds is reduced by the fact that all marketable interest will be satisfied before a trade resumption.

The trade resumption working group has made significant progress and we believe the SRO’s would be ready to file both the proposed amendments to the LULD Plan and primary market rules this month for SEC review.
Re-Tiering Working Group

A second LULD working group has been working on identifying methods to re-tier securities in the NMS Plan. Right now, the Price Bands applicable to an NMS Stock are based on one of two tiers that are separated by index participation. NMS Stocks in the S&P 500 and Russell 1000, as well as ETPs that follow those indices and have specified notional value, are “Tier 1” stocks generally subject to a 5% Price Band. All other NMS Stocks are in “Tier 2” and generally subject to 10% Price Band. The goal of this working group is to conduct the necessary analysis regarding potential adjustments to this tiering methodology. A key aspect of this analysis is to identify tiers that would obviate the need for clearly erroneous execution rules, which would also eliminate another area of uncertainty for market makers and lead to better market quality.

At this stage, the re-tiering working group has been analyzing the current tiering structure and has identified what data-driven analysis needs to be conducted. At a high level, we are looking to move away from using index participation or potentially product type as the basis for tier allocation, and instead focus on the volatility of a security to determine the appropriate tier.

Both the trade resumption working and re-tiering working groups received heavy support from the LULD Advisory Committee as well as extensive industry feedback and we would like to thank all of those who contributed.

To be clear, NYSE and the broader LULD Operating Committee believe moving forward with the LULD enhancements I already described would not be mutually exclusive to analyzing a futures-like approach to LULD in the equities market. However, we believe the enhancements that we are already actively working on together with the other participants to the LULD plan and the Advisory Committee would address the near-term concerns with the LULD Plan. In addition, while the proposed changes would require technology changes by the exchanges and SIP, these would not be onerous changes for market participants. Rather, the enhancements would leverage existing processes and focus price discovery following a trading pause to the primary listing market.

Opening Process

The Subcommittee also recommended that the exchanges and Commission adopt policies and procedures to ensure all stocks open as close to 9:30 as possible. We challenge the value in emphasizing this as a market quality objective. We believe issuers should be able to choose what matters most to them and NYSE’s listed companies continue to choose price discovery. Indeed, a recent survey that we conducted of over 60 NYSE issuers revealed that over 95% of them prefer that their DMM delay the opening of their stock a few seconds or minutes to dampen volatility if needed. Combining human judgment with automation leads to a better result for both the issuer and its long-term investors. Prioritizing price discovery over speed is especially important because many retail investors participate during the first minutes of the day and can be most benefited by an opening that is well-priced.
A measure of the success of the NYSE opening process is the price volatility that follows the open. For example, on “Brexit Day”, NYSE-listed names experienced 50% less volatility in aggregate after the open compared to the fully electronic openings.¹

Given the fragmented nature of today’s markets, we recognize the importance of opening as quickly as possible and work with our DMMs to encourage finding the right price. We have already seen progress on this front. In July 2016, 99.8% of NYSE stocks were opened by 9:35, on average, compared with 96.4% in January of this year.

Additionally, we have recent SEC approval on rule changes that will allow for opening automation parameters and increased transparency that adjust for volatility. These changes were designed to facilitate faster openings during times of volatility while still protecting price discovery and are scheduled to be implemented this month.

**Recommendations Relating to Customer Issues**

I would be remiss if I did not briefly touch on the Subcommittee recommendations relating to customer issues. Although we will not be participating in this afternoon’s panel, we wish to state our support of these recommendations. With respect to Recommendation #2 in particular, if the SEC is going to continue to use Rule 605 and 606 reports as a basis for execution quality and to disclose conflicts of interest, we believe the Commission’s recent proposal is a step in the right direction. We also believe the Commission should expand those proposals or develop comparable proposals to provide more transparency of the fixed income markets.

**Conclusion**

Thank you again for the opportunity to present the views of NYSE to you today and I look forward to the discussion.

¹ See [https://www.nyse.com/article/market-volatility#chart](https://www.nyse.com/article/market-volatility#chart)