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January 19, 2001

Lori Richards
Director
United States Securities and Exchange Commission
Office of Compliance Inspections and Examinations
450 Fifth Street, N.W.
Washington, D.C. 20549-0903

Dear Ms. Richards:

This information is being provided pursuant to your letter dated December 20, 2000. Bernard L. Madoff Investment Securities LLC takes very seriously its obligation to comply with all SEC and NASD regulations, and spends a great deal of time and financial resources designing systems that help facilitate this goal. In addition to designing systems to help keep us in compliance, we continuously monitor the operation of these systems and the actions of all trading personnel to verify that the systems are performing as designed, and that our traders are operating in accordance with all regulations and internal policies. When a problem within our systems or procedures is detected, we make whatever changes are necessary to maintain the highest possible level of regulatory compliance.

The complexities of the regulatory requirements and the extremely high volumes of trades and quotes that our systems must process test even the most stringent system design tolerances. We mention this because while we recognize the seriousness of the SEC Staff's findings in this review, we feel that our firm's compliance with SEC Rule 11Ac1-4, the Display Rule is far better than the numbers in the review suggest.

The intent of the SEC's Limit Order Display Rule is at least in part to improve transparency in the equity markets so that all investors have the information necessary to make decisions about the prices at which they may reasonably expect to be able to buy and sell stocks. Requiring that all market participants display their best priced limit orders in their quote helps to narrow spreads and ensure that market orders are executed at prices that truly reflect the buying and selling interest that exists in the limit order books of the primary markets, Nasdaq market makers, ECN's and UTP exchanges. It also gives those investors who use limit orders every opportunity for their orders to interact with the market at large.

We have reviewed each of the 119 orders identified by SEC Staff as having failed to be displayed for a duration of 30 seconds or longer either in terms of the full size or the price and size of the orders. In reviewing these trades, we found that 113 of the orders were away from the NBBO at the time our system failed to display them correctly. The remaining 6 were priced equal to the NBBO. While this does not excuse our systems handling of these orders, it does speak to any impact the proper display of these orders would have had on these orders' opportunity to interact with the market at large or possible benefit they might have provided in narrowing the spread of the NBBO.

When designing complex trading systems, one is often faced with dilemmas about how to handle either competing regulatory requirements or the shortcomings of the particular computer hardware or software products you are using. It is also common for conflicts to arise between the goal of compliance and the desire to operate a profitable business. Bernard L. Madoff Investment Securities has never designed a system that intentionally compromises our compliance with a regulatory requirement so that we may enhance our trading profits. That being said, we understand and appreciate the Staff's concerns regarding their findings in this review. We are doing everything necessary to ensure that any and all system modifications necessary to prevent any future recurrence of these problems are made.

During the review period, Madoff generated 8,219 quotes and executed 19,656 trades in the 20 securities that made up the SEC Staff's sample. The reason that this is important is that our system's Limit Order Display compliance "rules engine" reviews every quote change generated either by a trader or by the system in general to ensure that we aren't disseminating a quotation that is inferior to our best "displayable" limit order. In other words, the rules engine worked successfully 98.6% of the time.

The Staff's review of Madoff Display Rule compliance identified instances of temporary non-display in 5 areas:

1. Situations where an order we had placed in a Qualified Display Alternative such as the New York Stock Exchange DOT system, or in a qualified ECN was at the same price at which we held a displayable limit order, but for a size smaller than that required by the Display Rule.

Prior to October 19, 1999, our system was programmed to treat orders placed by Madoff traders into "qualified" display systems such as the NYSE's DOT system (in the case of listed stocks) and "qualified" ECN's (in the case of Nasdaq stocks) as satisfying at least part of our display requirement to the extent that the size of the orders placed into the DOT system or into an ECN were equal to or larger than the largest displayable order on our book at a given price. The system would then calculate the difference in quantity (if any) between the size of our DOT or ECN order and the cumulative size of our displayable book. It would then automatically set our quote in Nasdaq to be equal to that difference, but to be no less than 100 shares at the price where we held a displayable order. Any attempts by a trader to reduce that quote size or move the quoted price to an inferior level were prevented by the system. While this mechanism worked the vast majority of the time, it was deficient in detecting when a partially executed DOT or ECN order was no longer large enough to satisfy the Display Rule.

This system feature was changed on October 19, 1999. Our system now treats orders placed into "qualified" display alternatives such as DOT and ECN's as strictly "proprietary" and does not take them into account when determining the proper price and size of our Nasdaq quote for purposes of compliance with the Display Rule.

2. Situations where our best priced limit order was priced in an increment smaller than the minimum quotable increment in Nasdaq.

Prior to this review, our system was programmed to display orders priced in "non-displayable" increments (as defined by Nasdaq's minimum quotation increment rule) at a price that was rounded to the nearest displayable fraction. This was done after consultation with Nasdaq staff, and was part of our original Limit Order Display compliance software that was installed prior to the implementation of the Display Rule in 1997. Discussions with SEC staff during the course of this review pointed out to us that the rule required us to cumulate the display quantity at the non-displayable increment with any size that needed to be displayed at the rounded price. This is contrary to the guidance provided by Nasdaq staff when this portion of our system's code was written in January 1997. An example of this problem is item #72 where we held an order to buy 500 CIEN @ 33 1/32. Nasdaq's system will not accept quotations in increments finer than 1/16 for stocks above $10/share, so when we received an order such as this our system was designed to display it at the next displayable increment, which in this case was 33. Our system failed to add the cumulative size of our displayable orders at 33 (items #73-75) with the size of our book at 33 1/32, and then display the combined total at 33.

The current design of our system prevents us from combining the size of our limit order books at multiple price levels when calculating our limit order display requirement at a single price. A project to resolve this issue is currently under way. It should be noted that this problem only accounted for 3 of the 119 orders that are the subject of this review.

3. Situations where our best priced limit order was an odd-lot or a stop order.

This problem is related to the issue described above regarding our system's inability to combine the size of order books at multiple price levels for display at a single price. Even though odd-lots and stop orders are not "covered orders" under the Display Rule, these orders prevented our system from knowing what our display requirement was at prices inferior to the level at which we held an individual stop or odd-lot order that did not qualify for display. Since our system is programmed to automatically execute odd-lot limit orders in both listed and Nasdaq stocks as soon the NBBO reaches their limit price, this problem only came up when we held odd-lot limit orders away from the NBBO, <u>and</u> where the cumulative size of those orders was less than 100 shares, <u>and</u> where those orders represented our best priced limit orders.

We solved this problem by redesigning our system to display odd-lot limit orders and stop orders with a 100 share quote in Nasdaq at their limit price. This project was completed prior to October 25, 1999 when the Nasdaq limit order sample was taken. Its effectiveness is demonstrated by the fact that no instances of this problem showed up in the Nasdaq limit order sample.

4. Situations where Nasdaq AQR system or our internal "quote refresh" mechanism would cause us to quote through a level at which we were holding a displayable limit order and then fail to reset our quote to the proper level in a timely fashion.

This problem involves Madoff's systems attempting to simultaneously comply with various SEC and NASD Rules. The majority of orders that we researched appeared on your spreadsheet due to our systems' attempt to concurrently comply with the rules regarding Firm Quote (SEC Rule 11Ac1-1), Two-Sided Quotations (NASD Rule 4613(a)), and Limit Order Display (SEC Rule 11Ac1-4). To ensure compliance with the Firm Quote Rule, Madoff's systems are programmed to automatically execute preferenced SelectNet orders directed to us against our current quote. After executing a preferenced SelectNet order that exhausts or quoted size at a price, our own internal AQR (automatic quotation refresh) moves our quote to an inferior price in order to avoid receiving multiple executions against our Nasdaq quote. To ensure compliance with the Two-Sided Quotation Rule, Madoff uses Nasdaq's SOES Automatic Quotation Refresh (AQR) feature to automatically refresh our quotation when our size in a SOES security has been decremented to zero. The functionality of Nasdaq's and Madoff's AQR mechanisms are the same. Both systems automatically tick our bid down or our offer up by a predefined amount that we set individually for each security, and will also restore our displayed size to stock specific default size. When that predefined AQR "tick" amount exceeds the difference between the level we were quoting prior to being SOESed or preferenced and the next level at which we're holding a displayable limit order, the result can be a momentary "quote through" where we will bid at a lower price than our best displayable buy order or offer at a higher price than our best displayable sell order. Our internal AQR mechanism automatically decrements our quoted size or price when a trade takes place internally within our own system against our Nasdaq quote.

Madoff's system uses an event driven trigger to notify the Display Rule compliance engine to put itself back into compliance with the Limit Order Display Rule after the AQR mechanism is invoked. At the time of the review, the three event triggers were as follows: 1) A new order was received, 2) the trader changed their quote, or 3) an additional execution took place in that security. In most instances, one of these three events would activate our display compliance engine very quickly and we would snap back into compliance within a few seconds of the quote through. We are in the process of reprogramming our system to include an additional trigger to invoke the display compliance mechanism immediately after <u>every</u> instance of Nasdaq's or Madoff's AQR mechanisms being activated.

5. Limit orders received prior to the market opening.

There were also several instances where customer limit orders entered prior to the market opening were not displayed promptly enough after the market opened and the orders became eligible for display. Madoff has programmed its systems to immediately display or execute limit orders received <u>at or after</u> 9:30:00. Limit orders entered prior to the market opening that are priced better than the NBBO when the market opens, are executed immediately upon our systems' receipt of Nasdaq's Level 1 "open" notification. Limit orders entered prior to the market opening that are not marketable based on the NBBO at 9:30:00 are displayed when any one of several security specific events occur, such as systemic adjustment of our quote due to the receipt of a new limit order after the opening, any attempt by the trader to adjust his/her quotation, or an NBBO quote change that causes the system to execute a limit order we are holding. In addition, to ensure that non-marketable pre-opening limit orders received in securities that have little or no activity are represented or executed in compliance with the Limit Order Display Rule, Madoff's system had been programmed to perform an additional sweep of its limit order file shortly after the opening to ensure that all limit orders entered pre-opening were being properly displayed. At the time of this review, this "sweep" was programmed to run at 9:45:00 for every security in which Madoff was a market maker. As a result of this review, we have reprogrammed our system to perform this sweep at 9:37:00.

One of the most helpful procedures that we have instituted as a result of the issues identified in this review involves a post-trade Limit Display Rule Compliance program that compares every "display eligible" limit order that Madoff receives to our Nasdaq quote output file. A report is generated once a week that lists instances of non-display. This report is reviewed by a trading desk supervisor, who then submits a summary of their findings to our compliance department. Any problems that this program detects either in our Display Rule compliance software or in our trading room procedures are addressed immediately upon their discovery. This procedure has resulted in significant improvements in our ability to detect and correct software bugs, and has reduced the number of instances of non-display of eligible orders to a de minimis level.

Thank you for your consideration of our response to the findings in this review, and please don't hesitate to call me at (212) 230-2424 if you require any additional information.

Sincerely,

Andrew Madoff
Bernard L. Madoff Investment Securities LLC