New text is underlined.

Rules of NASDAQ BX

Equity Rules

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6800. Consolidated Audit Trail Compliance

6810. Consolidated Audit Trail – Definitions

For purposes of the Rule 6800 Series:

- (a) "Account Effective Date" means:
- (1) with regard to those circumstances in which an Industry Member has established a trading relationship with an institution but has not established an account with that institution:
 - (A) when the trading relationship was established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, either
 - (i) the date the relationship identifier was established within the Industry Member;
 - (ii) the date when trading began (i.e., the date the first order was received) using the relevant relationship identifier; or
 - (iii) if both dates are available, the earlier date will be used to the extent that the dates differ; or
 - (B) when the trading relationship was established on or after

 November 15, 2018 for Industry Members other than Small Industry Members, or
 on or after November 15, 2019 for Small Industry Members, the date the Industry

 Member established the relationship identifier, which would be no later than the
 date the first order was received;
- (2) where an Industry Member changes back office providers or clearing firms prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the date an account was established at the relevant Industry Member, either directly or via transfer;
- (3) where an Industry Member acquires another Industry Member prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior

- to November 15, 2019 for Small Industry Members, the date an account was established at the relevant Industry Member, either directly or via transfer;
- (4) where there are multiple dates associated with an account established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the earliest available date;
- (5) with regard to Industry Member proprietary accounts established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members:
 - (A) the date established for the account in the Industry Member or in a system of the Industry Member or
 - (B) the date when proprietary trading began in the account (i.e., the date on which the first orders were submitted from the account).

With regard to paragraphs (2) - (5), the Account Effective Date will be no later than the date trading occurs at the Industry Member or in the Industry Member's system.

- (b) "Active Accounts" means an account that has had activity in Eligible Securities within the last six months.
- (c) "Allocation Report" means a report made to the Central Repository by an Industry Member that identifies the Firm Designated ID for any account(s), including subaccount(s), to which executed shares are allocated and provides the security that has been allocated, the identifier of the firm reporting the allocation, the price per share of shares allocated, the side of shares allocated, the number of shares allocated to each account, and the time of the allocation; provided, for the avoidance of doubt, any such Allocation Report shall not be required to be linked to particular orders or executions.
- (d) "Business Clock" means a clock used to record the date and time of any Reportable Event required to be reported under this Rule Series.
- (e) "CAT" means the consolidated audit trail contemplated by SEC Rule 613.
- (f) "CAT NMS Plan" means the National Market System Plan Governing the Consolidated Audit Trail, as amended from time to time.
- (g) "CAT-Order-ID" means a unique order identifier or series of unique order identifiers that allows the Central Repository to efficiently and accurately link all Reportable Events for an order, and all orders that result from the aggregation or disaggregation of such order.
- (h) "CAT Reporting Agent" means a Data Submitter that is a third party that enters into an agreement with an Industry Member pursuant to which the CAT Reporting Agent agrees to fulfill such Industry Member's reporting obligations under this Rule Series.

- (i) "Central Repository" means the repository responsible for the receipt, consolidation, and retention of all information reported to the CAT pursuant to SEC Rule 613 and the CAT NMS Plan.
- (j) "Compliance Threshold" has the meaning set forth in Rule 6893(d).
- (k) "Customer" means:
- (1) the account holder(s) of the account at an Industry Member originating the order; and
- (2) any person from whom the Industry Member is authorized to accept trading instructions for such account, if different from the account holder(s).
- (1) "Customer Account Information" shall include, but not be limited to, account number, account type, customer type, date account opened, and large trader identifier (if applicable); except, however, that:
- (1) in those circumstances in which an Industry Member has established a trading relationship with an institution but has not established an account with that institution, the Industry Member will:
 - (A) provide the Account Effective Date in lieu of the "date account opened";
 - (B) provide the relationship identifier in lieu of the "account number"; and
 - (C) identify the "account type" as a "relationship";
- (2) in those circumstances in which the relevant account was established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, and no "date account opened" is available for the account, the Industry Member will provide the Account Effective Date in the following circumstances:
 - (A) where an Industry Member changes back office providers or clearing firms and the date account opened is changed to the date the account was opened on the new back office/clearing firm system;
 - (B) where an Industry Member acquires another Industry Member and the date account opened is changed to the date the account was opened on the post-merger back office/clearing firm system;
 - (C) where there are multiple dates associated with an account in an Industry Member's system, and the parameters of each date are determined by the individual Industry Member; and

- (D) where the relevant account is an Industry Member proprietary account.
- (m) "Customer Identifying Information" means information of sufficient detail to identify a Customer, including, but not limited to:
- (1) with respect to individuals: name, address, date of birth, individual tax payer identification number ("ITIN")/social security number ("SSN"), individual's role in the account (e.g., primary holder, joint holder, guardian, trustee, person with the power of attorney); and
- (2) with respect to legal entities: name, address, Employer Identification Number ("EIN")/Legal Entity Identifier ("LEI") or other comparable common entity identifier, if applicable; provided, however, that an Industry Member that has an LEI for a Customer must submit the Customer's LEI in addition to other information of sufficient detail to identify a Customer.
- (n) "Data Submitter" means any person that reports data to the Central Repository, including national securities exchanges, national securities associations, broker-dealers, the SIPs for the CQS, CTA, UTP and Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information ("OPRA") Plans, and certain other vendors or third parties that may submit data to the Central Repository on behalf of Industry Members.
- (o) "Eligible Security" includes (1) all NMS Securities and (2) all OTC Equity Securities.
- (p) "Error Rate" means the percentage of Reportable Events collected by the Central Repository in which the data reported does not fully and accurately reflect the order event that occurred in the market.
- (q) "Firm Designated ID" means a unique identifier for each trading account designated by Industry Members for purposes of providing data to the Central Repository, where each such identifier is unique among all identifiers from any given Industry Member for each business date.
- (r) "Industry Member" means a member of a national securities exchange or a member of a national securities association.
- (s) "Industry Member Data" has the meaning set forth in Rule 6830(a)(2).
- (t) "Initial Plan Processor" means the first Plan Processor selected by the Operating Committee in accordance with SEC Rule 613, Section 6.1 of the CAT NMS Plan and the National Market System Plan Governing the Process for Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail.
- (u) "Listed Option" or "Option" have the meaning set forth in Rule 600(b)(35) of Regulation NMS.

- (v) "Manual Order Event" means a non-electronic communication of order-related information for which Industry Members must record and report the time of the event.
- (w) "Material Terms of the Order" includes: the NMS Security or OTC Equity Security symbol; security type; price (if applicable); size (displayed and non-displayed); side (buy/sell); order type; if a sell order, whether the order is long, short, short exempt; open/close indicator (except on transactions in equities); time in force (if applicable); if the order is for a Listed Option, option type (put/call), option symbol or root symbol, underlying symbol, strike price, expiration date, and open/close (except on market maker quotations); and any special handling instructions.
- (x) "NMS Security" means any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in Listed Options.
- (y) "NMS Stock" means any NMS Security other than an option.
- (z) "Operating Committee" means the governing body of the CAT NMS, LLC designated as such and described in Article IV of the CAT NMS Plan.
- (aa) "Options Market Maker" means a broker-dealer registered with an exchange for the purpose of making markets in options contracts traded on the exchange.
- (bb) "Order" or "order", with respect to Eligible Securities, shall include:
 - (1) Any order received by an Industry Member from any person;
 - (2) Any order originated by an Industry Member; or
 - (3) Any bid or offer.
- (cc) "OTC Equity Security" means any equity security, other than an NMS Security, subject to prompt last sale reporting rules of a registered national securities association and reported to one of such association's equity trade reporting facilities.
- (dd) "Participant" means each Person identified as such in Exhibit A of the CAT NMS Plan, as amended, in such Person's capacity as a Participant in CAT NMS, LLC.
- (ee) "Person" means any individual, partnership, limited liability company, corporation, joint venture, trust, business trust, cooperative or association and any heirs, executors, administrators, legal representatives, successors and assigns of such Person where the context so permits.
- (ff) "Plan Processor" means the Initial Plan Processor or any other Person selected by the Operating Committee pursuant to SEC Rule 613 and Sections 4.3(b)(i) and 6.1 of the CAT NMS Plan, and with regard to the Initial Plan Processor, the National Market System Plan Governing the Process for Selecting a Plan Processor and Developing a Plan

- for the Consolidated Audit Trail, to perform the CAT processing functions required by SEC Rule 613 and set forth in the CAT NMS Plan.
- (gg) "Received Industry Member Data" has the meaning set forth in Rule 6830(a)(2).
- (hh) "Recorded Industry Member Data" has the meaning set forth in Rule 6830(a)(1).
- (ii) "Reportable Event" includes, but is not limited to, the original receipt or origination, modification, cancellation, routing, execution (in whole or in part) and allocation of an order, and receipt of a routed order.
- (jj) "SRO" means any self-regulatory organization within the meaning of Section 3(a)(26) of the Exchange Act.
- (kk) "SRO-Assigned Market Participant Identifier" means an identifier assigned to an Industry Member by an SRO, or an identifier used by a Participant.
- (ll) "Small Industry Member" means an Industry Member that qualifies as a small broker-dealer as defined in Rule 0-10(c) under the Securities Exchange Act of 1934, as amended.
- (mm) "Trading Day" shall have the meaning as is determined by the Operating Committee. For the avoidance of doubt, the Operating Committee may establish different Trading Days for NMS Stocks (as defined in SEC Rule 600(b)(47)), Listed Options, OTC Equity Securities, and any other securities that are included as Eligible Securities from time to time.

6820. Consolidated Audit Trail - Clock Synchronization

(a) Clock Synchronization

- (1) Each Industry Member shall synchronize its Business Clocks, other than such Business Clocks used solely for Manual Order Events or used solely for the time of allocation on Allocation Reports, at a minimum to within a fifty (50) millisecond tolerance of the time maintained by the atomic clock of the National Institute of Standards and Technology ("NIST"), and maintain such synchronization.
- (2) Each Industry Member shall synchronize (A) its Business Clocks used solely for Manual Order Events and (B) its Business Clocks used solely for the time of allocation on Allocation Reports at a minimum to within a one second tolerance of the time maintained by the NIST atomic clock, and maintain such synchronization.
- (3) The tolerance for paragraphs (a)(1) and (2) of this Rule includes all of the following:
 - (A) The difference between the NIST atomic clock and the Industry Member's Business Clock;

- (B) The transmission delay from the source; and
- (C) The amount of drift of the Industry Member's Business Clock.
- (4) Business Clocks must be synchronized every business day before market open to ensure that timestamps for Reportable Events are accurate. To maintain clock synchronization, Business Clocks must be checked against the NIST atomic clock and resynchronized, as necessary, throughout the day.

(b) Documentation

Industry Members must document and maintain their synchronization procedures for Business Clocks. Industry Members must keep a log of the times when they synchronize their Business Clocks and the results of the synchronization process. This log should include notice of any time a Business Clock drifts more than the applicable tolerance specified in paragraph (a) of this Rule. Such log must include results for a period of not less than five years ending on the then current date, or for the entire period for which the Industry Member has been required to comply with this Rule if less than five years.

(c) Certification

Each Industry Member shall certify to the Exchange that its Business Clocks satisfy the synchronization requirements set forth in paragraph (a) of this Rule periodically in accordance with the certification schedule established by the Operating Committee pursuant to the CAT NMS Plan.

(d) Violation Reporting

Each Industry Member with Business Clocks must report to the Plan Processor and the Exchange violations of paragraph (a) of this Rule pursuant to the thresholds set by the Operating Committee pursuant to the CAT NMS Plan.

6830. Consolidated Audit Trail - Industry Member Data Reporting

- (a) Recording and Reporting Industry Member Data
- (1) Subject to paragraph (3) below, each Industry Member shall record and electronically report to the Central Repository the following details for each order and each Reportable Event, as applicable ("Recorded Industry Member Data") in the manner prescribed by the Operating Committee pursuant to the CAT NMS Plan:
 - (A) for original receipt or origination of an order:
 - (i) Firm Designated ID(s) for each Customer;
 - (ii) CAT-Order-ID;

- (iii) SRO-Assigned Market Participant Identifier of the Industry Member receiving or originating the order;
 - (iv) date of order receipt or origination;
- (v) time of order receipt or origination (using timestamps pursuant to Rule 6860); and
 - (vi) Material Terms of the Order;
- (B) for the routing of an order:
 - (i) CAT-Order-ID;
 - (ii) date on which the order is routed;
- (iii) time at which the order is routed (using timestamps pursuant to Rule 6860);
- (iv) SRO-Assigned Market Participant Identifier of the Industry Member routing the order;
- (v) SRO-Assigned Market Participant Identifier of the Industry Member or Participant to which the order is being routed;
- (vi) if routed internally at the Industry Member, the identity and nature of the department or desk to which the order is routed; and
 - (vii) Material Terms of the Order;
- (C) for the receipt of an order that has been routed, the following information:
 - (i) CAT-Order-ID;
 - (ii) date on which the order is received;
 - (iii) time at which the order is received (using timestamps pursuant to Rule 6860);
 - (iv) SRO-Assigned Market Participant Identifier of the Industry Member receiving the order;
 - (v) SRO-Assigned Market Participant Identifier of the Industry Member or Participant routing the order; and
 - (vi) Material Terms of the Order;
 - (D) if the order is modified or cancelled:

- (i) CAT-Order-ID;
- (ii) date the modification or cancellation is received or originated;
- (iii) time at which the modification or cancellation is received or originated (using timestamps pursuant to Rule 6860);
 - (iv) price and remaining size of the order, if modified;
- (v) other changes in the Material Terms of the Order, if modified; and
- (vi) whether the modification or cancellation instruction was given by the Customer or was initiated by the Industry Member;
- (E) if the order is executed, in whole or in part:
 - (i) CAT-Order-ID;
 - (ii) date of execution;
- (iii) time of execution (using timestamps pursuant to Rule 6860);
 - (iv) execution capacity (principal, agency or riskless principal);
 - (v) execution price and size;
- (vi) SRO-Assigned Market Participant Identifier of the Industry Member executing the order;
- (vii) whether the execution was reported pursuant to an effective transaction reporting plan or the Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information; and
- (F) other information or additional events as may be prescribed pursuant to the CAT NMS Plan.
- (2) Subject to paragraph (3) below, each Industry Member shall record and report to the Central Repository the following, as applicable ("Received Industry Member Data" and collectively with the information referred to in Rule 6830(a)(1) "Industry Member Data")) in the manner prescribed by the Operating Committee pursuant to the CAT NMS Plan:
 - (A) if the order is executed, in whole or in part:
 - (i) An Allocation Report;

- (ii) SRO-Assigned Market Participant Identifier of the clearing broker or prime broker, if applicable; and
 - (iii) CAT-Order-ID of any contra-side order(s);
- (B) if the trade is cancelled, a cancelled trade indicator; and
- (C) for original receipt or origination of an order, the Firm Designated ID for the relevant Customer, and in accordance with Rule 6840, Customer Account Information and Customer Identifying Information for the relevant Customer.
- (3) Each Industry Member that is an Options Market Maker is not required to report to the Central Repository the Industry Member Data regarding the routing, modification or cancellation of its quotes in Listed Options. Each Industry Member that is an Options Market Maker shall report to the Exchange the time at which its quote in a Listed Option is sent to the Exchange (and, if applicable, any subsequent quote modification time and/or cancellation time when such modification or cancellation is originated by the Options Market Maker).

(b) Timing of Recording and Reporting

(1) Each Industry Member shall record Recorded Industry Member Data contemporaneously with the applicable Reportable Event.

(2) Each Industry Member shall report:

- (A) Recorded Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on the Trading Day following the day the Industry Member records such Recorded Industry Member Data; and
- (B) Received Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on the Trading Day following the day the Industry Member receives such Received Industry Member Data.
- (3) Industry Members may, but are not required to, voluntarily report Industry Member Data prior to the applicable 8:00 a.m. Eastern Time deadline.

(c) Applicable Securities

- (1) Each Industry Member shall record and report to the Central Repository the Industry Member Data as set forth in paragraph (a) of this Rule for each NMS Security registered or listed for trading on such exchange or admitted to unlisted trading privileges on such exchange.
- (2) Each Industry Member shall record and report to the Central Repository the Industry Member Data as set forth in this paragraph (a) of this Rule for each Eligible Security for which transaction reports are required to be submitted to FINRA.

(d) Security Symbology

- (1) For each exchange-listed Eligible Security, each Industry Member shall report Industry Member Data to the Central Repository using the symbology format of the exchange listing the security.
- (2) For each Eligible Security that is not exchange-listed, each Industry

 Member shall report Industry Member Data to the Central Repository using such
 symbology format as approved by the Operating Committee pursuant to the CAT NMS

 Plan.

(e) Error Correction

For each Industry Member for which errors in Industry Member Data submitted to the Central Repository have been identified by the Plan Processor or otherwise, such Industry Member shall submit corrected Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on T+3.

6840. Consolidated Audit Trail - Customer Information Reporting

(a) Initial Set of Customer Information

Each Industry Member shall submit to the Central Repository the Firm

Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account prior to such Industry Member's commencement of reporting to the Central Repository and in accordance with the deadlines set forth in Rule 6880.

(b) Daily Updates to Customer Information

Each Industry Member shall submit to the Central Repository any updates, additions or other changes to the Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account on a daily basis.

(c) Periodic Updates to Complete Set of Customer Information

On a periodic basis as designated by the Plan Processor and approved by the Operating Committee, each Industry Member shall submit to the Central Repository a complete set of Firm Designated IDs, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account.

(d) Error Correction

For each Industry Member for which errors in Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account submitted to the Central Repository have been identified by the

<u>Plan Processor or otherwise, such Industry Member shall submit corrected data to the Central Repository by 5:00 p.m. on T+3.</u>

6850. Consolidated Audit Trail – Industry Member Information Reporting

Each Industry Member shall submit to the Central Repository information sufficient to identify such Industry Member, including CRD number and LEI, if such LEI has been obtained, prior to such Industry Member's commencement of reporting to the Central Repository and in accordance with the deadlines set forth in Rule 6880, and keep such information up to date as necessary.

6860. Consolidated Audit Trail - Time Stamps

(a) Millisecond Time Stamps

- (1) Subject to paragraphs (a)(2) and (b), each Industry Member shall record and report Industry Member Data to the Central Repository with time stamps in milliseconds.
- (2) Subject to paragraph (b), to the extent that any Industry Member's order handling or execution systems utilize time stamps in increments finer than milliseconds, such Industry Member shall record and report Industry Member Data to the Central Repository with time stamps in such finer increment.

(b) One Second Time Stamps/Electronic Order Capture

- (i) Each Industry Member may record and report Manual Order
 Events to the Central Repository in increments up to and including one second,
 provided that each Industry Member shall record and report the time when a
 Manual Order Event has been captured electronically in an order handling and
 execution system of such Industry Member ("Electronic Capture Time") in
 milliseconds; and
- (ii) Each Industry Member may record and report the time of Allocation Reports in increments up to and including one second.

6865. Consolidated Audit Trail - Clock Synchronization Rule Violation

An Industry Member that engages in a pattern or practice of reporting Reportable Events outside of the required clock synchronization time period as set forth in this Rule Series without reasonable justification or exceptional circumstances may be considered in violation of this Rule.

6870. Consolidated Audit Trail – Connectivity and Data Transmission

(a) Data Transmission

Each Industry Member shall transmit data as required under the CAT NMS Plan to the Central Repository utilizing such format(s) as may be provided by the Plan Processor and approved by the Operating Committee.

(b) Connectivity

Each Industry Member shall connect to the Central Repository using a secure method(s), including but not limited to private line(s) and virtual private network connection(s).

(c) CAT Reporting Agents

- (1) Any Industry Member may enter into an agreement with a CAT Reporting Agent pursuant to which the CAT Reporting Agent agrees to fulfill the reporting obligations of such Industry Member under this Rule 6800 Series. Any such agreement shall be evidenced in writing, which shall specify the respective functions and responsibilities of each party to the agreement that are required to effect full compliance with the requirements of this Rule Series.
- (2) All written documents evidencing an agreement described in subparagraph (1) shall be maintained by each party to the agreement.
- (3) Each Industry Member remains primarily responsible for compliance with the requirements of this Rule 6800 Series, notwithstanding the existence of an agreement described in this paragraph.

6880. Consolidated Audit Trail - Development and Testing

(a) Development

- (1) Connectivity and Acceptance Testing
- (i) Industry Members (other than Small Industry Members) shall begin connectivity and acceptance testing with the Central Repository no later than August 15, 2018.
- (ii) Small Industry Members shall begin connectivity and acceptance testing with the Central Repository no later than August 15, 2019.
 - (2) Reporting Customer and Industry Member Information
- (i) Industry Members (other than Small Industry Members) shall begin reporting Customer and Industry Member information, as required by Rules 6840(a) and 6850, respectively, to the Central Repository for processing no later than October 15, 2018.

(ii) Small Industry Members shall begin reporting Customer and Industry Member information, as required by Rules 6840(a) and 6850, respectively, to the Central Repository for processing no later than October 15, 2019.

(3) Submission of Order Data

- (i) Industry Members (other than Small Industry Members)
- (A) Industry Members (other than Small Industry Members) are permitted, but not required, to submit order data for testing purposes beginning no later than May 15, 2018.
- (B) Industry Members (other than Small Industry Members) shall participate in the coordinated and structured testing of order submission, which will begin no later than August 15, 2018.

(ii) Small Industry Members

- (A) Small Industry Members are permitted, but not required, to submit order data for testing purposes beginning no later than May 15, 2019.
- (B) Small Industry Members shall participate in the coordinated and structured testing of order submission, which will begin no later than August 15, 2019.
- (4) Submission of Options Market Maker Quote. Industry Members are permitted, but not required to, submit Quote Sent Time on Options Market Maker quotes, beginning no later than October 15, 2018.

(b) Testing

Each Industry Member shall participate in testing related to the Central Repository, including any industry-wide disaster recovery testing, pursuant to the schedule established pursuant to the CAT NMS Plan.

6890. Consolidated Audit Trail - Recordkeeping

Each Industry Member shall maintain and preserve records of the information required to be recorded under this Rule Series for the period of time and accessibility specified in SEC Rule 17a-4(b). The records required to be maintained and preserved under this Rule may be immediately produced or reproduced on "micrographic media" as defined in SEC Rule 17a-4(f)(1)(i) or by means of "electronic storage media" as defined in SEA Rule 17a-4(f)(1)(ii) that meet the conditions set forth in SEC Rule 17a-4(f) and be maintained and preserved for the required time in that form.

6893. Consolidated Audit Trail – Timely, Accurate and Complete Data

(a) General

Industry Members are required to record and report data to the Central Repository as required by this Rule Series in a manner that ensures the timeliness, accuracy, integrity and completeness of such data.

(b) LEIs

Without limiting the requirement set forth in paragraph (a), Industry Members are required to accurately provide the LEIs in their records as required by this Rule Series and may not knowingly submit inaccurate LEIs to the Central Repository; provided, however, that this requirement does not impose any additional due diligence obligations on Industry Members with regard to LEIs for CAT purposes.

(c) Compliance with Error Rate

If an Industry Member reports data to the Central Repository with errors such that the error percentage exceeds the maximum Error Rate established by the Operating Committee pursuant to the CAT NMS Plan, then such Industry Member would not be in compliance with the Rule 6800 Series.

(d) Compliance Thresholds

Each Industry Member shall be required to meet a separate compliance threshold which will be an Industry Member-specific rate that may be used as the basis for further review or investigation into the Industry Member's performance with regard to the CAT (the "Compliance Thresholds"). Compliance Thresholds will compare an Industry Member's error rate to the aggregate Error Rate over a period of time to be defined by the Operating Committee. An Industry Member's performance with respect to its Compliance Threshold will not signify, as a matter of law, that such Industry Member has violated this Rule Series.

6895. Consolidated Audit Trail – Compliance Dates

(a) General

Except as set forth in paragraphs (b) and (c) of this Rule or otherwise set forth in this Rule Series, these rules are fully effective and members must comply with their terms.

(b) Clock Synchronization

- (1) Each Industry Member shall comply with Rule 6820 with regard to Business Clocks that capture time in milliseconds commencing on or before March 15, 2017.
- (2) Each Industry Member shall comply with Rule 6820 with regard to Business Clocks that do not capture time in milliseconds commencing on or before

February 19, 2018 (pending approval of exemptive relief regarding the compliance date for Business Clocks that do not capture time in milliseconds).

(c) CAT Data Reporting

- (1) Each Industry Member (other than a Small Industry Member) shall record and report the Industry Member Data to the Central Repository by November 15, 2018.
- (2) Each Industry Member that is a Small Industry Member shall record and report the Industry Member Data to the Central Repository by November 15, 2019.

Options Rules

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Chapter IX Records, Reports and Audits

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Sec. 8 Consolidated Audit Trail Compliance

(a) Consolidated Audit Trail – Definitions

For purposes of the Rule 6800 Series:

- (i) "Account Effective Date" means:
- (1) with regard to those circumstances in which an Industry Member has established a trading relationship with an institution but has not established an account with that institution:
 - (A) when the trading relationship was established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, either
 - (i) the date the relationship identifier was established within the Industry Member;
 - (ii) the date when trading began (i.e., the date the first order was received) using the relevant relationship identifier; or
 - (iii) if both dates are available, the earlier date will be used to the extent that the dates differ; or
 - (B) when the trading relationship was established on or after

 November 15, 2018 for Industry Members other than Small Industry Members, or
 on or after November 15, 2019 for Small Industry Members, the date the Industry

Member established the relationship identifier, which would be no later than the date the first order was received;

- (2) where an Industry Member changes back office providers or clearing firms prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the date an account was established at the relevant Industry Member, either directly or via transfer;
- (3) where an Industry Member acquires another Industry Member prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the date an account was established at the relevant Industry Member, either directly or via transfer;
- (4) where there are multiple dates associated with an account established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the earliest available date;
- (5) with regard to Industry Member proprietary accounts established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members:
 - (A) the date established for the account in the Industry Member or in a system of the Industry Member or
 - (B) the date when proprietary trading began in the account (i.e., the date on which the first orders were submitted from the account).

With regard to paragraphs (2) - (5), the Account Effective Date will be no later than the date trading occurs at the Industry Member or in the Industry Member's system.

- (ii) "Active Accounts" means an account that has had activity in Eligible Securities within the last six months.
- (iii) "Allocation Report" means a report made to the Central Repository by an Industry Member that identifies the Firm Designated ID for any account(s), including subaccount(s), to which executed shares are allocated and provides the security that has been allocated, the identifier of the firm reporting the allocation, the price per share of shares allocated, the side of shares allocated, the number of shares allocated to each account, and the time of the allocation; provided, for the avoidance of doubt, any such Allocation Report shall not be required to be linked to particular orders or executions.
- (iv) "Business Clock" means a clock used to record the date and time of any Reportable Event required to be reported under this Rule Series.
- (v) "CAT" means the consolidated audit trail contemplated by SEC Rule 613.
- (vi) "CAT NMS Plan" means the National Market System Plan Governing the Consolidated Audit Trail, as amended from time to time.

- (vii) "CAT-Order-ID" means a unique order identifier or series of unique order identifiers that allows the Central Repository to efficiently and accurately link all Reportable Events for an order, and all orders that result from the aggregation or disaggregation of such order.
- (viii) "CAT Reporting Agent" means a Data Submitter that is a third party that enters into an agreement with an Industry Member pursuant to which the CAT Reporting Agent agrees to fulfill such Industry Member's reporting obligations under this Section.
- (ix) "Central Repository" means the repository responsible for the receipt, consolidation, and retention of all information reported to the CAT pursuant to SEC Rule 613 and the CAT NMS Plan.
- (x) "Compliance Threshold" has the meaning set forth in paragraph (k) of this Section.
- (xi) "Customer" means:
- (1) the account holder(s) of the account at an Industry Member originating the order; and
- (2) any person from whom the Industry Member is authorized to accept trading instructions for such account, if different from the account holder(s).
- (xii) "Customer Account Information" shall include, but not be limited to, account number, account type, customer type, date account opened, and large trader identifier (if applicable); except, however, that:
- (1) in those circumstances in which an Industry Member has established a trading relationship with an institution but has not established an account with that institution, the Industry Member will:
 - (A) provide the Account Effective Date in lieu of the "date account opened";
 - (B) provide the relationship identifier in lieu of the "account number"; and
 - (C) identify the "account type" as a "relationship";
- (2) in those circumstances in which the relevant account was established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, and no "date account opened" is available for the account, the Industry Member will provide the Account Effective Date in the following circumstances:

- (A) where an Industry Member changes back office providers or clearing firms and the date account opened is changed to the date the account was opened on the new back office/clearing firm system;
- (B) where an Industry Member acquires another Industry Member and the date account opened is changed to the date the account was opened on the post-merger back office/clearing firm system;
- (C) where there are multiple dates associated with an account in an Industry Member's system, and the parameters of each date are determined by the individual Industry Member; and
- (D) where the relevant account is an Industry Member proprietary account.
- (xiii) "Customer Identifying Information" means information of sufficient detail to identify a Customer, including, but not limited to:
- (1) with respect to individuals: name, address, date of birth, individual tax payer identification number ("ITIN")/social security number ("SSN"), individual's role in the account (e.g., primary holder, joint holder, guardian, trustee, person with the power of attorney); and
- (2) with respect to legal entities: name, address, Employer Identification Number ("EIN")/Legal Entity Identifier ("LEI") or other comparable common entity identifier, if applicable; provided, however, that an Industry Member that has an LEI for a Customer must submit the Customer's LEI in addition to other information of sufficient detail to identify a Customer.
- (xiv) "Data Submitter" means any person that reports data to the Central Repository, including national securities exchanges, national securities associations, broker-dealers, the SIPs for the CQS, CTA, UTP and Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information ("OPRA") Plans, and certain other vendors or third parties that may submit data to the Central Repository on behalf of Industry Members.
- (xv) "Eligible Security" includes (1) all NMS Securities and (2) all OTC Equity Securities.
- (xvi) "Error Rate" means the percentage of Reportable Events collected by the Central Repository in which the data reported does not fully and accurately reflect the order event that occurred in the market.
- (xvii) "Firm Designated ID" means a unique identifier for each trading account designated by Industry Members for purposes of providing data to the Central Repository, where each such identifier is unique among all identifiers from any given Industry Member for each business date.

- (xviii) "Industry Member" means a member of a national securities exchange or a member of a national securities association.
- (xix) "Industry Member Data" has the meaning set forth in paragraph (c)(i)(2) of this Section.
- (xx) "Initial Plan Processor" means the first Plan Processor selected by the Operating Committee in accordance with SEC Rule 613, Section 6.1 of the CAT NMS Plan and the National Market System Plan Governing the Process for Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail.
- (xxi) "Listed Option" or "Option" have the meaning set forth in Rule 600(b)(35) of Regulation NMS.
- (xxii) "Manual Order Event" means a non-electronic communication of order-related information for which Industry Members must record and report the time of the event.
- (xxiii) "Material Terms of the Order" includes: the NMS Security or OTC Equity Security symbol; security type; price (if applicable); size (displayed and non-displayed); side (buy/sell); order type; if a sell order, whether the order is long, short, short exempt; open/close indicator (except on transactions in equities); time in force (if applicable); if the order is for a Listed Option, option type (put/call), option symbol or root symbol, underlying symbol, strike price, expiration date, and open/close (except on market maker quotations); and any special handling instructions.
- (xxiv) "NMS Security" means any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in Listed Options.
- (xxv) "NMS Stock" means any NMS Security other than an option.
- (xxvi) "Operating Committee" means the governing body of the CAT NMS, LLC designated as such and described in Article IV of the CAT NMS Plan.
- (xxvii) "Options Market Maker" means a broker-dealer registered with an exchange for the purpose of making markets in options contracts traded on the exchange.
- (xxviii) "Order" or "order", with respect to Eligible Securities, shall include:
 - (1) Any order received by an Industry Member from any person;
 - (2) Any order originated by an Industry Member; or
 - (3) Any bid or offer.

- (xxix) "OTC Equity Security" means any equity security, other than an NMS Security, subject to prompt last sale reporting rules of a registered national securities association and reported to one of such association's equity trade reporting facilities.
- (xxx) "Participant" means each Person identified as such in Exhibit A of the CAT NMS Plan, as amended, in such Person's capacity as a Participant in CAT NMS, LLC.
- (xxxi) "Person" means any individual, partnership, limited liability company, corporation, joint venture, trust, business trust, cooperative or association and any heirs, executors, administrators, legal representatives, successors and assigns of such Person where the context so permits.
- (xxxii) "Plan Processor" means the Initial Plan Processor or any other Person selected by the Operating Committee pursuant to SEC Rule 613 and Sections 4.3(b)(i) and 6.1 of the CAT NMS Plan, and with regard to the Initial Plan Processor, the National Market System Plan Governing the Process for Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail, to perform the CAT processing functions required by SEC Rule 613 and set forth in the CAT NMS Plan.
- (xxxiii) "Received Industry Member Data" has the meaning set forth in paragraph (c)(i)(2) of this Section.
- (xxxiv) "Recorded Industry Member Data" has the meaning set forth in paragraph (c)(i)(1) of this Section.
- (xxxv) "Reportable Event" includes, but is not limited to, the original receipt or origination, modification, cancellation, routing, execution (in whole or in part) and allocation of an order, and receipt of a routed order.
- (xxxvi) "SRO" means any self-regulatory organization within the meaning of Section 3(a)(26) of the Exchange Act.
- (xxxvii) "SRO-Assigned Market Participant Identifier" means an identifier assigned to an Industry Member by an SRO, or an identifier used by a Participant.
- (xxxviii) "Small Industry Member" means an Industry Member that qualifies as a small broker-dealer as defined in Rule 0-10(c) under the Securities Exchange Act of 1934, as amended.
- (xxxix) "Trading Day" shall have the meaning as is determined by the Operating Committee. For the avoidance of doubt, the Operating Committee may establish different Trading Days for NMS Stocks (as defined in SEC Rule 600(b)(47)), Listed Options, OTC Equity Securities, and any other securities that are included as Eligible Securities from time to time.

(b) Consolidated Audit Trail - Clock Synchronization

(i) Clock Synchronization

- (1) Each Industry Member shall synchronize its Business Clocks, other than such Business Clocks used solely for Manual Order Events or used solely for the time of allocation on Allocation Reports, at a minimum to within a fifty (50) millisecond tolerance of the time maintained by the atomic clock of the National Institute of Standards and Technology ("NIST"), and maintain such synchronization.
- (2) Each Industry Member shall synchronize (A) its Business Clocks used solely for Manual Order Events and (B) its Business Clocks used solely for the time of allocation on Allocation Reports at a minimum to within a one second tolerance of the time maintained by the NIST atomic clock, and maintain such synchronization.
- (3) The tolerance for paragraphs (i)(1) and (2) of this Rule includes all of the following:
 - (A) The difference between the NIST atomic clock and the Industry Member's Business Clock;
 - (B) The transmission delay from the source; and
 - (C) The amount of drift of the Industry Member's Business Clock.
- (4) Business Clocks must be synchronized every business day before market open to ensure that timestamps for Reportable Events are accurate. To maintain clock synchronization, Business Clocks must be checked against the NIST atomic clock and resynchronized, as necessary, throughout the day.

(ii) Documentation

Industry Members must document and maintain their synchronization procedures for Business Clocks. Industry Members must keep a log of the times when they synchronize their Business Clocks and the results of the synchronization process. This log should include notice of any time a Business Clock drifts more than the applicable tolerance specified in paragraph (b)(i) of this Section. Such log must include results for a period of not less than five years ending on the then current date, or for the entire period for which the Industry Member has been required to comply with this Rule if less than five years.

(iii) Certification

Each Industry Member shall certify to the Exchange that its Business Clocks satisfy the synchronization requirements set forth in paragraph (b)(i) of this Section periodically in accordance with the certification schedule established by the Operating Committee pursuant to the CAT NMS Plan.

(iv) Violation Reporting

Each Industry Member with Business Clocks must report to the Plan Processor and the Exchange violations of paragraph (b)(i) of this Section pursuant to the thresholds set by the Operating Committee pursuant to the CAT NMS Plan.

(c) Consolidated Audit Trail – Industry Member Data Reporting

- (i) Recording and Reporting Industry Member Data
- (1) Subject to paragraph (3) below, each Industry Member shall record and electronically report to the Central Repository the following details for each order and each Reportable Event, as applicable ("Recorded Industry Member Data") in the manner prescribed by the Operating Committee pursuant to the CAT NMS Plan:
 - (A) for original receipt or origination of an order:
 - (i) Firm Designated ID(s) for each Customer;
 - (ii) CAT-Order-ID;
 - (iii) SRO-Assigned Market Participant Identifier of the Industry Member receiving or originating the order;
 - (iv) date of order receipt or origination;
 - (v) time of order receipt or origination (using timestamps pursuant to paragraph (f) of this Section); and
 - (vi) Material Terms of the Order;
 - (B) for the routing of an order:
 - (i) CAT-Order-ID;
 - (ii) date on which the order is routed;
 - (iii) time at which the order is routed (using timestamps pursuant to paragraph (f) of this Section);
 - (iv) SRO-Assigned Market Participant Identifier of the Industry Member routing the order;
 - (v) SRO-Assigned Market Participant Identifier of the Industry Member or Participant to which the order is being routed;
 - (vi) if routed internally at the Industry Member, the identity and nature of the department or desk to which the order is routed; and
 - (vii) Material Terms of the Order;

for the receipt of an order that has been routed, the following information: CAT-Order-ID; (i) date on which the order is received; (ii) (iii) time at which the order is received (using timestamps pursuant to paragraph (f) of this Section); (iv) SRO-Assigned Market Participant Identifier of the Industry Member receiving the order; (v) SRO-Assigned Market Participant Identifier of the Industry Member or Participant routing the order; and (vi) Material Terms of the Order; (D) if the order is modified or cancelled: (i) CAT-Order-ID; date the modification or cancellation is received or (ii) originated; time at which the modification or cancellation is received or originated (using timestamps pursuant to paragraph (f) of this Section); (iv) price and remaining size of the order, if modified; other changes in the Material Terms of the Order, if (v) modified; and whether the modification or cancellation instruction was given by the Customer or was initiated by the Industry Member; (E) if the order is executed, in whole or in part: (i) CAT-Order-ID; (ii) date of execution; time of execution (using timestamps pursuant to paragraph (f)); (iv) execution capacity (principal, agency or riskless principal); execution price and size; (v)

- (vi) SRO-Assigned Market Participant Identifier of the Industry Member executing the order;
- (vii) whether the execution was reported pursuant to an effective transaction reporting plan or the Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information; and
- (F) other information or additional events as may be prescribed pursuant to the CAT NMS Plan.
- (2) Subject to paragraph (3) below, each Industry Member shall record and report to the Central Repository the following, as applicable ("Received Industry Member Data" and collectively with the information referred to in paragraph (c)(i)(1) of this Section "Industry Member Data")) in the manner prescribed by the Operating Committee pursuant to the CAT NMS Plan:
 - (A) if the order is executed, in whole or in part:
 - (i) An Allocation Report;
 - (ii) SRO-Assigned Market Participant Identifier of the clearing broker or prime broker, if applicable; and
 - (iii) CAT-Order-ID of any contra-side order(s);
 - (B) if the trade is cancelled, a cancelled trade indicator; and
 - (C) for original receipt or origination of an order, the Firm Designated ID for the relevant Customer, and in accordance with paragraph (d), Customer Account Information and Customer Identifying Information for the relevant Customer.
- (3) Each Industry Member that is an Options Market Maker is not required to report to the Central Repository the Industry Member Data regarding the routing, modification or cancellation of its quotes in Listed Options. Each Industry Member that is an Options Market Maker shall report to the Exchange the time at which its quote in a Listed Option is sent to the Exchange (and, if applicable, any subsequent quote modification time and/or cancellation time when such modification or cancellation is originated by the Options Market Maker).
- (ii) Timing of Recording and Reporting
- (1) Each Industry Member shall record Recorded Industry Member Data contemporaneously with the applicable Reportable Event.
 - (2) Each Industry Member shall report:

- (A) Recorded Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on the Trading Day following the day the Industry Member records such Recorded Industry Member Data; and
- (B) Received Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on the Trading Day following the day the Industry Member receives such Received Industry Member Data.
- (3) Industry Members may, but are not required to, voluntarily report Industry Member Data prior to the applicable 8:00 a.m. Eastern Time deadline.

(iii) Applicable Securities

- (1) Each Industry Member shall record and report to the Central Repository the Industry Member Data as set forth in paragraph (c)(i) of this Section for each NMS Security registered or listed for trading on such exchange or admitted to unlisted trading privileges on such exchange.
- (2) Each Industry Member shall record and report to the Central Repository the Industry Member Data as set forth in this paragraph (c)(i) of this Section for each Eligible Security for which transaction reports are required to be submitted to FINRA.

(iv) Security Symbology

- (1) For each exchange-listed Eligible Security, each Industry Member shall report Industry Member Data to the Central Repository using the symbology format of the exchange listing the security.
- (2) For each Eligible Security that is not exchange-listed, each Industry Member shall report Industry Member Data to the Central Repository using such symbology format as approved by the Operating Committee pursuant to the CAT NMS Plan.

(v) Error Correction

For each Industry Member for which errors in Industry Member Data submitted to the Central Repository have been identified by the Plan Processor or otherwise, such Industry Member shall submit corrected Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on T+3.

(d) Consolidated Audit Trail - Customer Information Reporting

(i) Initial Set of Customer Information

Each Industry Member shall submit to the Central Repository the Firm

Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account prior to such Industry Member's

commencement of reporting to the Central Repository and in accordance with the deadlines set forth in paragraph (i) of this Section.

(ii) Daily Updates to Customer Information

Each Industry Member shall submit to the Central Repository any updates, additions or other changes to the Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account on a daily basis.

(iii) Periodic Updates to Complete Set of Customer Information

On a periodic basis as designated by the Plan Processor and approved by the Operating Committee, each Industry Member shall submit to the Central Repository a complete set of Firm Designated IDs, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account.

(iv) Error Correction

For each Industry Member for which errors in Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account submitted to the Central Repository have been identified by the Plan Processor or otherwise, such Industry Member shall submit corrected data to the Central Repository by 5:00 p.m. on T+3.

(e) Consolidated Audit Trail – Industry Member Information Reporting

Each Industry Member shall submit to the Central Repository information sufficient to identify such Industry Member, including CRD number and LEI, if such LEI has been obtained, prior to such Industry Member's commencement of reporting to the Central Repository and in accordance with the deadlines set forth in paragraph (i), and keep such information up to date as necessary.

(f) Consolidated Audit Trail - Time Stamps

(i) Millisecond Time Stamps

- (1) Subject to paragraphs (f)(i)(2) and (f)(ii) of this Section, each Industry Member shall record and report Industry Member Data to the Central Repository with time stamps in milliseconds.
- (2) Subject to paragraph (f)(ii) of this Section, to the extent that any Industry Member's order handling or execution systems utilize time stamps in increments finer than milliseconds, such Industry Member shall record and report Industry Member Data to the Central Repository with time stamps in such finer increment.

(ii) One Second Time Stamps/Electronic Order Capture

- (1) Each Industry Member may record and report Manual Order Events to the Central Repository in increments up to and including one second, provided that each Industry Member shall record and report the time when a Manual Order Event has been captured electronically in an order handling and execution system of such Industry Member ("Electronic Capture Time") in milliseconds; and
- (2) Each Industry Member may record and report the time of Allocation Reports in increments up to and including one second.

(g) Consolidated Audit Trail – Clock Synchronization Rule Violation

An Industry Member that engages in a pattern or practice of reporting Reportable Events outside of the required clock synchronization time period as set forth in this Rule Series without reasonable justification or exceptional circumstances may be considered in violation of this Rule.

(h) Consolidated Audit Trail – Connectivity and Data Transmission

(i) Data Transmission

Each Industry Member shall transmit data as required under the CAT NMS Plan to the Central Repository utilizing such format(s) as may be provided by the Plan Processor and approved by the Operating Committee.

(ii) Connectivity

Each Industry Member shall connect to the Central Repository using a secure method(s), including but not limited to private line(s) and virtual private network connection(s).

(iii) CAT Reporting Agents

- (1) Any Industry Member may enter into an agreement with a CAT Reporting Agent pursuant to which the CAT Reporting Agent agrees to fulfill the reporting obligations of such Industry Member under this Section. Any such agreement shall be evidenced in writing, which shall specify the respective functions and responsibilities of each party to the agreement that are required to effect full compliance with the requirements of this Section.
- (1) shall be maintained by each party to the agreement.
- (3) Each Industry Member remains primarily responsible for compliance with the requirements of this Section, notwithstanding the existence of an agreement described in this paragraph.

(i) Consolidated Audit Trail – Development and Testing

(i) Development

- (1) Connectivity and Acceptance Testing
- (i) Industry Members (other than Small Industry Members) shall begin connectivity and acceptance testing with the Central Repository no later than August 15, 2018.
- (ii) Small Industry Members shall begin connectivity and acceptance testing with the Central Repository no later than August 15, 2019.
 - (2) Reporting Customer and Industry Member Information
- (i) Industry Members (other than Small Industry Members) shall begin reporting Customer and Industry Member information, as required by paragraphs (d)(i) and (e) of this Section, respectively, to the Central Repository for processing no later than October 15, 2018.
- (ii) Small Industry Members shall begin reporting Customer and Industry Member information, as required by paragraphs (d)(i) and (e) of this Section, respectively, to the Central Repository for processing no later than October 15, 2019.

(3) Submission of Order Data

- (i) Industry Members (other than Small Industry Members)
- (A) Industry Members (other than Small Industry Members) are permitted, but not required, to submit order data for testing purposes beginning no later than May 15, 2018.
- (B) Industry Members (other than Small Industry Members) shall participate in the coordinated and structured testing of order submission, which will begin no later than August 15, 2018.

(ii) Small Industry Members

- (A) Small Industry Members are permitted, but not required, to submit order data for testing purposes beginning no later than May 15, 2019.
- (B) Small Industry Members shall participate in the coordinated and structured testing of order submission, which will begin no later than August 15, 2019.
- (4) Submission of Options Market Maker Quote. Industry Members are permitted, but not required to, submit Quote Sent Time on Options Market Maker quotes, beginning no later than October 15, 2018.

(ii) Testing

Each Industry Member shall participate in testing related to the Central Repository, including any industry-wide disaster recovery testing, pursuant to the schedule established pursuant to the CAT NMS Plan.

(j) Consolidated Audit Trail - Recordkeeping

Each Industry Member shall maintain and preserve records of the information required to be recorded under this Rule Series for the period of time and accessibility specified in SEC Rule 17a-4(b). The records required to be maintained and preserved under this Section may be immediately produced or reproduced on "micrographic media" as defined in SEC Rule 17a-4(f)(1)(i) or by means of "electronic storage media" as defined in SEA Rule 17a-4(f)(1)(ii) that meet the conditions set forth in SEC Rule 17a-4(f) and be maintained and preserved for the required time in that form.

(k) Consolidated Audit Trail – Timely, Accurate and Complete Data

(i) General

Industry Members are required to record and report data to the Central Repository as required by this Section in a manner that ensures the timeliness, accuracy, integrity and completeness of such data.

(ii) LEIs

Without limiting the requirement set forth in paragraph (i), Industry Members are required to accurately provide the LEIs in their records as required by this Section and may not knowingly submit inaccurate LEIs to the Central Repository; provided, however, that this requirement does not impose any additional due diligence obligations on Industry Members with regard to LEIs for CAT purposes.

(iii) Compliance with Error Rate

If an Industry Member reports data to the Central Repository with errors such that the error percentage exceeds the maximum Error Rate established by the Operating Committee pursuant to the CAT NMS Plan, then such Industry Member would not be in compliance with this Section.

(iv) Compliance Thresholds

Each Industry Member shall be required to meet a separate compliance threshold which will be an Industry Member-specific rate that may be used as the basis for further review or investigation into the Industry Member's performance with regard to the CAT (the "Compliance Thresholds"). Compliance Thresholds will compare an Industry Member's error rate to the aggregate Error Rate over a period of time to be defined by the Operating Committee. An Industry Member's performance with respect to its

<u>Compliance Threshold will not signify, as a matter of law, that such Industry Member has violated this Section.</u>

(1) Consolidated Audit Trail – Compliance Dates

(i) General

Except as set forth in paragraphs (l)(ii) and (l)(iii) of this Section or otherwise set forth in this Section, these rules are fully effective and members must comply with their terms.

(ii) Clock Synchronization

- (1) Each Industry Member shall comply with paragraph (l)(ii) of this Section with regard to Business Clocks that capture time in milliseconds commencing on or before March 15, 2017.
- (2) Each Industry Member shall comply with paragraph (l)(ii) of this Section with regard to Business Clocks that do not capture time in milliseconds commencing on or before February 19, 2018 (pending approval of exemptive relief regarding the compliance date for Business Clocks that do not capture time in milliseconds).

(iii) CAT Data Reporting

- (1) Each Industry Member (other than a Small Industry Member) shall record and report the Industry Member Data to the Central Repository by November 15, 2018.
- (2) Each Industry Member that is a Small Industry Member shall record and report the Industry Member Data to the Central Repository by November 15, 2019.