Required fields are shown with yellow backgrounds and asterisks.

OMB APPROVAL

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Page 1 of * 238		SECURITIES AND EXCHANGE COMMISSION File No.* SR - 2020 WASHINGTON, D.C. 20549 Amendment No. (req. for Amendments)					
Filing by MIAX PEARL, LLC							
Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934							
Initial * ✓	Amendment *	Withdrawal	Section 19(b)(2) * Section	on 19(b)(3)(A) *	Section 19(b)(3)(B) *	
Pilot	Extension of Time Period for Commission Action *	Date Expires *		19b-4(19b-4(19b-4(f)(1)		
Notice of proposed change pursuant Section 806(e)(1) *		to the Payment, Clearing, and Settlement Act Section 806(e)(2) *		ent Act of 2010	Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934 Section 3C(b)(2) *		
Exhibit 2 Sent As Paper Document Exhibit 3 Sent As Paper Document Exhibit 3 Sent As Paper Document							
Description Provide a brief description of the action (limit 250 characters, required when Initial is checked *). Proposal to adopt rules governing the trading of equity securities.							
Contact Information Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.							
First Na	ame * Christopher		Last Name * S	olgan			
Title *	Vice President and Senior Counsel						
E-mail	E-mail * csolgan@miami-holdings.com						
Telepho		Fax					
Signature Pursuant to the requirements of the Securities Exchange Act of 1934, has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.							
(Title *) Date 01/24/2020 Senior Vice President and Deputy General Counsel							
	01/24/2020		Senior Vice Pre	sident and Depu	ty General Counsel		
Ву	Joseph Ferraro						
(Name *) NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.							

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 For complete Form 19b-4 instructions please refer to the EFFS website. The self-regulatory organization must provide all required information, presented in a Form 19b-4 Information * clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal Remove is consistent with the Act and applicable rules and regulations under the Act. The Notice section of this Form 19b-4 must comply with the guidelines for publication Exhibit 1 - Notice of Proposed Rule Change * in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Add Remove View Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3) The Notice section of this Form 19b-4 must comply with the guidelines for publication **Exhibit 1A- Notice of Proposed Rule** in the Federal Register as well as any requirements for electronic filing as published Change, Security-Based Swap Submission, by the Commission (if applicable). The Office of the Federal Register (OFR) offers or Advance Notice by Clearing Agencies * guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3) Exhibit 2 - Notices, Written Comments, Copies of notices, written comments, transcripts, other communications. If such Transcripts, Other Communications documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G. Add Remove View Exhibit Sent As Paper Document П Exhibit 3 - Form, Report, or Questionnaire Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is Add Remove View referred to by the proposed rule change. Exhibit Sent As Paper Document The full text shall be marked, in any convenient manner, to indicate additions to and **Exhibit 4 - Marked Copies** deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit Add Remove View the staff to identify immediately the changes made from the text of the rule with which it has been working. **Exhibit 5 - Proposed Rule Text** The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part Add Remove View of the proposed rule change. If the self-regulatory organization is amending only part of the text of a lengthy Partial Amendment proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial

amendment shall be clearly identified and marked to show deletions and additions.

1. <u>Text of Proposed Rule Change</u>

(a) MIAX PEARL, LLC ("MIAX PEARL" or the "Exchange"), pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² proposes to adopt rules to govern the trading of equity securities on the Exchange (referred to herein as "PEARL Equities"). As described more fully below, PEARL Equities will operate a fully automated, price/time priority execution model. The central premise of the proposal is that PEARL Equities will offer a suite of conventional order types and functionality that is designed to provide for an efficient, robust, and transparent order matching process.

A notice of the proposed rule change for publication in the <u>Federal Register</u> is attached hereto as <u>Exhibit 1</u>, and the text of the proposed rule change is attached hereto as <u>Exhibit 5</u>.

- (b) Not applicable.
- (c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved by the MIAX PEARL Board of Directors on January 31, 2019. Exchange staff will advise the Board of Directors of any action taken pursuant to delegated authority. No other action by the Exchange is necessary for the filing of the proposed rule changes.

Questions and comments on the proposed rule changes may be directed to Chris Solgan, Vice President and Senior Counsel, at (609) 897-8494.

3. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis</u> for, the Proposed Rule Change

a. <u>Purpose</u>

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

The Exchange proposes to adopt a series of rules in connection with PEARL Equities, which will be a facility of the Exchange. PEARL Equities will operate an electronic trading system developed to trade equity securities (the "System") leveraging the Exchange's existing robust and resilient technology platform. The fundamental premise of the proposal is that the Exchange will operate its equity market in a manner similar to that of other equity exchanges, with a suite of order types and deterministic functionality that will provide much needed competition to the existing three dominant exchange groups. The proposed functionality for PEARL Equities is similar to that offered by other equity exchanges, such as the Cboe BYX Exchange, Inc., ("BYX"), Cboe BZX Exchange, Inc., ("BZX"), Cboe EDGA Exchange, Inc., ("EDGA"), Cboe EDGX Exchange, Inc. ("EDGX", together with BYX, BZX, and EDGA, the "Cboe Equities Exchanges"), the Investors Exchange LLC ("IEX"), the New York Stock Exchange LLC (NYSE"), NYSE Arca, Inc. ("NYSE Arca"), and the Nasdaq Stock Market LLC ("Nasdaq"). However, other than where described below, the text of each of the proposed rules described in this proposal may differ from the rules of the other equity exchanges to provide additional specificity or to conform to the proposed structure of the PEARL Equities rule set.

The System will provide for the electronic execution of orders in equity securities as described below. All Exchange Members will be eligible to participate in PEARL Equities, provided that the Exchange has specifically authorized them to trade in the System. The System will provide a routing service for orders when trading interest is not available on PEARL Equities, and will comply with all applicable securities laws and regulations, including

Regulation NMS,³ Regulation SHO,⁴ and the Plan to Address Extraordinary Market Volatility (the "LULD Plan").⁵

PEARL Equities Members

The Exchange will authorize any Exchange Member who meets certain enumerated qualification requirements to obtain access to PEARL Equities (any such Member, an "Equity Member"). There will be two basic types of Equity Members: Equity Order Entry Firms ("OEF") and Equities Market Makers. OEFs will be those Equity Members representing orders as agent on PEARL Equities and non-market maker participants conducting proprietary trading as principal. Equities Market Makers are Equity Members registered with the Exchange as Equities Market Makers.

To become an Equities Market Maker, an Equities Member is required to register by filing a registration request with the Exchange pursuant to proposed Exchange Rule 2605.⁶ Registration as an Equities Market Maker will become effective on the day the registration request is submitted to the Exchange. An Equities Market Maker's registration in an issue will be terminated if the market maker fails to enter quotations in the issue within five (5) business days after the market makers registration in the issue becomes effective.

An unlimited number of Equities Market Makers may be registered in each equity security unless the number of Market Makers registered to make a market in a particular equity

³ 17 CFR 242.600, et seq.

⁴ 17 CFR 242.200, et seq.

See Securities Exchange Act Release Nos. 67091, 77 FR 33498 (June 6, 2012) (File No. 4-631) ("Plan Approval Order") (approving Plan as amended); and 85623, 84 FR 16086 (April 17, 2019) (approving, among other things, the operation of the Plan on a permanent basis).

Proposed Exchange Rule 2605 is substantially similar to IEX Rule 11.150.

security should be limited whenever, in the Exchange's judgement, quotation system capacity in an equity security is not sufficient to support additional Market Makers in such equity security.

The Exchange will not restrict access in any particular equity security until such time the Exchange has submitted objective standards for restricting access to the Commission for its review and approval.

Equities Market Makers will be required to electronically engage in a course of dealing to enhance liquidity available on PEARL Equities and to assist in the maintenance of a fair and orderly market. Among other things, under proposed Exchange Rule 2606(a)(1),⁷ each Equities Market Maker will have to, on a daily basis, maintain a two-sided market on a continuous basis during regular market hours for each equity security in which it is registered as an Equities Market Maker ("Two-Sided Obligation").

For each equity security in which it is registered, an Equities Market Maker must adhere to the pricing obligations set forth under proposed Exchange Rule 2606(a)(2) during Regular Trading Hours. An Equities Market Maker's pricing obligations shall not commence until the first regular way transaction is reported by the primary listing market for the security, as reported by the responsible single plan processor, and shall be suspended during a trading halt, suspension, or pause, and shall not recommence until after until the first regular way transaction is reported by the primary listing market for the security, as reported by the responsible single plan processor.

Proposed Exchange Rule 2606(a)(3) and (4) require that at the time of entry of bid (sell) interest satisfying the Two-Sided Obligation, the price of the bid (sell) interest shall be not more

Proposed Exchange Rule 2606 is substantially similar to IEX Rule 11.151, BYX <u>and</u> BZX Rules 11.8(d)(2)(D) <u>and</u> (E) <u>and</u> EDGA <u>and</u> EDGX Rules 11.20(d)(2)(D) <u>and</u> (E).

than the Designated Percentage, lower (higher) than the then current NBB (NBO), or if no NBB (NBO), not more than the Designated Percentage lower (higher) than the last reported sale from the responsible single plan processor. In the event that the NBB (NBO) (or if no NBB (NBO), the last reported sale) increases (decreases) to a level that will cause the bid (sell) interest of the Two-Sided Obligation to be more than the Defined Limit lower (higher) than the NBB (NBO) (or if no NBB (NBO), the last reported sale), or if the bid (sell) is executed or cancelled, the Equities Market Maker shall enter new bid (sell) interest at a price not more than the Designated Percentage lower (higher) than the then current NBB (NBO) (or if no NBB (NBO), the last reported sale), or identify to the Exchange current resting interest that satisfies the Two-Sided Obligation.

Proposed Exchange Rule 2606(a)(5) will provide that the NBBO shall be determined by the Exchange in accordance with its procedures for determining protected quotations under Rule 600 under Regulation NMS.

Proposed Exchange Rule 2606(a)(6)⁸ provides that the "Designated Percentage" shall be 8% for Tier 1 NMS Stocks under the LULD Plan, 28% for Tier 2 NMS Stocks under the LULD Plan with a price equal to or greater than \$1.00, and 30% for Tier 2 NMS Stocks under the LULD Plan with a price less than \$1.00, except that between 9:30 a.m. and 9:45 a.m. and between 3:35 p.m. and the close of trading, when Exchange Rule 2622(b) is not in effect, the Designated Percentage shall be 20% for Tier 1 NMS Stocks under the LULD Plan, 28% for Tier 2 NMS Stocks under the LULD Plan with a price equal to or greater than \$1.00, and 30% for Tier 2 NMS Stocks under the LULD Plan with a price less than \$1.00.

Proposed Exchange Rule 2606(a)(6) is substantially similar to IEX Rule 11.151(a)(6).

Proposed Exchange Rule 2606(a)(7)⁹ provides that the "Defined Limit" shall be 9.5% for Tier 1 NMS Stocks under the LULD Plan, 29.5% for Tier 2 NMS Stocks under the LULD Plan with a price equal to or greater than \$1.00, and 31.5% for Tier 2 NMS Stocks under the LULD Plan with a price less than \$1.00, except that between 9:30 a.m. and 9:45 a.m. and between 3:35 p.m. and the close of trading, when Exchange Rule 2622(b) is not in effect, the Defined Limit shall be 21.5% for Tier 1 NMS Stocks under the LULD Plan, 29.5% for Tier 2 NMS Stocks under the LULD Plan with a price equal to or greater than \$1.00, and 31.5% for Tier 2 NMS Stocks under the LULD Plan with a price less than \$1.00.

Proposed Exchange Rule 2606(a)(8) will specify that Equities Market Markers will not be precluded from quoting at price levels that are closer to the NBBO than the levels required by proposed Exchange Rule 2606(a).

Proposed Exchange Rule 2606(a)(9) will specify that the minimum quotation increment for quotations of \$1.00 or above in all Equity Securities shall be \$0.01. The minimum quotation increment in the System for quotations below \$1.00 in Equity Securities shall be \$0.0001. This provision is consistent with proposed Exchange Rule 2612, described below.

Proposed Exchange Rule 2606(a)(10) will provide that the individual Market Participant Identifier ("MPID") assigned to an Equities Market Maker to meet its Two-Sided Obligation pursuant to subparagraph (a)(1) of this Exchange Rule shall be referred to as the Equities Market Maker's "Primary MPID." Equities Market Makers may request the use of additional MPIDs that shall be referred to as "Supplemental MPIDs." An Equities Market Maker that ceases to meet the obligations appurtenant to its Primary MPID in any security shall not be permitted to use a Supplemental MPID for any purpose in that security.

Proposed Exchange Rule 2606(a)(7) is substantially similar to IEX Rule 11.151(a)(7).

Proposed Exchange Rule 2606(a)(11) provides that Equities Market Makers that are permitted the use of Supplemental MPIDs pursuant to proposed Exchange Rule 2606(a)(10) will be subject to the same rules applicable to the Equities Market Maker's first quotation under its Primary MPID, with one exception: the continuous two-sided quote requirement and excused withdrawal procedures described in proposed Exchange Rule 2607, described below, do not apply to Equities Market Makers' Supplemental MPIDs. Supplemental MPIDs may be identified to the Exchange as interest to satisfy an Equities Market Maker's two-sided obligation, in which case in order to be satisfactory, the Supplemental MPID's interest must be no more than the Designated Percentage from the NBBO as described and defined in proposed Exchange Rule 2606(a).

Proposed Exchange Rule 2606(b) requires that all quotations and orders to buy and sell entered into the System by Equities Market Makers be firm and automatically executable for their displayed and non-displayed size in the System by all Users. A particular Equities Market Maker's quotations may be cancelled rather than executed if designated with a Self-Trade Prevention ("STP") modifier which is the same as that of an active opposite side order and originating from the same group type as the Equities Market Maker's orders to buy or sell, as set forth in proposed Exchange Rule 2614(f). Notwithstanding the foregoing, Equities Market Makers may not use STP modifiers to evade the firm quotation obligation.

Proposed Exchange Rule 2606(c) provides that in the event that an Equities Market Maker's ability to enter or update quotations is impaired, the Equities Market Maker shall immediately contact Exchange Trading Operations to request the withdrawal of its quotations.

In the event that an Equities Market Maker's ability to enter or update quotations is impaired and the Equities Market Maker elects to remain in PEARL Equities, the Equities Market Maker shall

execute an offer to buy or sell received from another Equity Member at its quotations as disseminated through the Exchange.

Equities Market Makers receive certain benefits for carrying out their duties. For example, a lender may extend credit to a broker-dealer without regard to the restrictions in Regulation T of the Board of Governors of the Federal Reserve System if the credit is to be used to finance the broker-dealer's activities as a specialist or market maker on a national securities exchange. Thus, an Equities Market Maker has a corresponding obligation to hold itself out as willing to buy and sell equities for its own account on a regular and continuous basis to justify this favorable treatment. The Exchange believes that the proposed Two-Sided Quotation requirement for all Equities Market Makers is consistent with that typically required of market makers of similar status on other national securities exchanges.

Proposed Exchange Rule 2607 provides for Equites Market Makers to withdraw their quotations. Proposed Exchange Rule 2608 provides for Equities Market Makers to voluntarily terminate their registration with the Exchange. Proposed Exchange Rule 2609 will allow the Exchange to, pursuant to the procedures set forth in Chapter IX, suspend, condition, limit, prohibit or terminate the authority of an Equities Market Maker or Equity Member to enter quotations in one or more authorized securities for violations of applicable requirements or prohibitions. Each of these proposed Exchange Rules are consistent with the rules of other exchanges regarding the withdrawal or suspension of quotations and termination of a market maker's registration. ¹⁰

Proposed Exchange Rules 2607, 2608, and 2609 are substantially similar to IEX Rules 11.152, 11.153, and 11.154, respectively, except proposed Exchange Rule 2608(b) does not include the reinstatement limitations as set forth in IEX Rule 11.153(b). See also BYX and BZX Rules 11.5 through 11.8, and EDGA and EDGX Rules 11.17 through

Every Equity Member shall at all times maintain membership in another registered exchange that is not registered solely under Section 6(g) of the Exchange Act or with the Financial Industry Regulatory Authority ("FINRA"). OEFs that transact business with customers must at all times be members of FINRA.

Further, proposed Exchange Rule 2604¹¹ provides that an Equity Member shall maintain a list of Authorized Traders ("ATs"), defined below, who may obtain access to the Trading System on behalf of the Equity Member or the Equity Member's Sponsored Participants. The Equity Member shall update the list of ATs as necessary. Equity Members must provide the list of ATs to the Exchange upon request. An Equity Member must have reasonable procedures to ensure that all ATs comply with all Exchange Rules and all other procedures related to the System. An Equity Member must suspend or withdraw a person's status as an AT if the Exchange has determined that the person has caused the Member to fail to comply with the Rules of the Exchange and the Exchange has directed the Equity Member to suspend or withdraw the person's status as an AT. An Equity Member must have reasonable procedures to ensure that the ATs maintain the physical security of the equipment for accessing the facilities of the Exchange to prevent the improper use or access to the systems, including unauthorized entry of information into the systems. To be eligible for registration as an AT of an Equity Member a person must successfully complete the General Securities Representative Examination (Series 7), the Securities Traders Qualification Examination (Series 57), or an equivalent foreign examination

^{11.20,} which similarly do not include the reinstatement limitations as set forth in IEX Rule 11.153(b).

Proposed Exchange Rule 2604 is substantially similar to IEX Rule 11.140 and Rule 11.4 of the Cboe Equity Exchanges.

module approved by the Exchange, as defined in Interpretation and Policy .09 to Exchange Rule 3100, and any other training and/or certification programs as may be required by the Exchange.

As provided in proposed Exchange Rule 1900, Applicability, existing Exchange Rules applicable to the PEARL options market contained in Chapters I though XVIII of the Exchange Rules will apply to Equity Members unless a specific Exchange Rule applicable to the equities market (Chapters XIX through XXX of the Exchange Rules) governs or unless the context otherwise requires. Equity Members can therefore provide sponsored access to PEARL Equities to a non-Member ("Sponsored Participant") pursuant to Exchange Rule 210, Sponsored Access to the Exchange, which is specifically set forth in proposed Exchange Rule 2606(a). 12

Proposed Exchange Rule 2606(b) will govern conduct on PEARL Equities and provide that Equity Members and persons employed by or associated with any Equity Member, while using the facilities of PEARL Equities, shall not engage in conduct: (1) inconsistent with the maintenance of a fair and orderly market; (2) apt to impair public confidence in the operations of the Exchange; or (3) inconsistent with the ordinary and efficient conduct of business. Pursuant to the Rules and the arrangements referred to in proposed Exchange Rule 2602, the Exchange may: suspend an Equity Member's access to the System following a warning; or terminate an Equity Member's access to the System by notice in writing. The timing of such notice will depend on the severity of the Equity Member's misconduct.

Definitions

The Exchange proposes to define a series of terms under current Exchange Rule 100 and proposed Exchange Rule 1901, Definitions, which are to be used in proposed Chapters XIX to

See proposed Exchange Rule 2602(a) (providing that, "[t]he provisions of Rule 210, Sponsored Access to the Exchange, shall be applicable to Equity Members trading on PEARL Equities").

XXX relating to the trading of equity securities on the Exchange. Each of the terms defined in current Exchange Rule 100 and proposed Rule 1901 are either identical or substantially similar to definitions included in Rule 1.5 of the Cboe Equity Exchanges rules, NYSE Arca Rule 7.36-E(a), or IEX Rule 1.160.

Each of the definitions under proposed Exchange Rule 1901 are as follows:

- Aggressing Order. The term "Aggressing Order" shall mean an order to buy (sell) that is
 or becomes marketable against sell (buy) interest on the PEARL Equities Book. A
 resting order may become an Aggressing Order if its working price changes, if the PBBO
 or NBBO is updated, because of changes to other orders on the PEARL Equities Book, or
 when processing inbound messages.¹³
- Displayed price. The term "displayed price" shall mean the price at which a Limit Order is displayed, which may be different from the limit price or working price of the order.
- Equities Order Entry Firm. The term "Equities Order Entry Firm", "Order Entry Firm",
 or "OEF", shall mean those Equity Members representing orders as agent on PEARL
 Equities and those non-Equity Market Maker Members conducting proprietary trading.
- Equities Market Maker. The term "Equities Market Maker" shall mean a Member that acts as a Market Maker in Equity Securities, pursuant to Chapter XXVI.
- Equity Member. The term "Equity Member" is a Member authorized by the Exchange to transact business on PEARL Equities.
- Equity Securities. The term "Equity Securities" shall include any equity security defined as such pursuant to Rule 3a11-1 under the Exchange Act. 14

The defined term Aggressing Order is based on NYSE Arca Rule 7.36-E(a)(5).

The defined term Equity Securities is based on NYSE Arca Rule 5.1-E(b)(2).

- NBB, NBO and NBBO. With respect to the trading of Equity Securities, the term "NBB" shall mean the national best bid, the term "NBO" shall mean the national best offer, and the term "NBBO" shall mean the national best bid and offer.
- PEARL Equities. The term "PEARL Equities" shall mean PEARL Equities, a facility of MIAX PEARL, LLC.
- PEARL Equities Book. The term "PEARL Equities Book" shall mean the electronic book of orders in Equity Securities maintained by the Trading System.
- Protected NBB, Protected NBO and Protected NBBO. With respect to the trading of
 Equity Securities, the term "Protected NBB" or "PBB" shall mean the national best bid
 that is a Protected Quotation, the term "Protected NBO" or "PBO" shall mean the
 national best offer that is a Protected Quotation, and the term "Protected NBBO" or
 "PBBO" shall mean the national best bid and offer that is a Protected Quotation.
- Protected Bid, Protected Offer and Protected Quotation. With respect to the trading of Equity Securities, the term "Protected Bid" or "Protected Offer" shall mean a bid or offer in a stock that is (i) displayed by an automated trading center; (ii) disseminated pursuant to an effective national market system plan; and (iii) an automated quotation that is the best bid or best offer of a national securities exchange or association. The term "Protected Quotation" shall mean a quotation that is a Protected Bid or Protected Offer.
- Qualified Clearing Agency. The term "Qualified Clearing Agency" means a clearing
 agency registered with the Commission pursuant to Section 17A of the Exchange Act that
 is deemed qualified by the Exchange.

- Registered Broker or Dealer. The term "registered broker or dealer" means any
 registered broker or dealer, as defined in Section 3(a)(48) of the Exchange Act, that is
 registered with the Commission under the Exchange Act.
- Regular Trading Hours. The term "Regular Trading Hours" means the time between 9:30
 a.m. and 4:00 p.m. Eastern Time.
- Regular Trading Session. The term "Regular Trading Session" shall mean the time between the completion of the Opening Process or Contingent Open as defined in Exchange Rule 2615 and 4:00 p.m. Eastern Time.
- User. The term "User" shall mean any Member or Sponsored Participant who is authorized to obtain access to the System pursuant to Exchange Rule 2602.
- UTP Exchange Traded Products. The term "UTP Exchange Traded Products" refers to derivative securities products that are not listed on the Exchange but that trade on the Exchange pursuant to unlisted trading privileges, including the following: Equity Linked Notes, Investment Company Units, Index-Linked Exchangeable Notes, Equity Gold Shares, Equity Index-Linked Securities, Commodity-Linked Securities, Currency-Linked Securities, Fixed-Income Index-Linked Securities, Futures-Linked Securities, Multifactor-Index-Linked Securities, Trust Certificates, Currency and Index Warrants, Portfolio Depository Receipts, Trust Issued Receipts, Commodity-Based Trust Shares, Currency Trust Shares, Commodity Index Trust Shares, Commodity Futures Trust Shares, Partnership Units, Paired Trust Shares, Trust Units, Managed Fund Shares, and Managed Trust Securities.

- UTP Security. The term "UTP Security" shall mean an Equity Security that is listed on a
 national securities exchange other than on the Exchange and that trades on PEARL
 Equities pursuant to unlisted trading privileges.
- Working price. The term "Working price" shall mean the price at which an order is
 eligible to trade at any given time, which may be different from the limit price or display
 price of the order.

The Exchange proposes to define additional terms under current Exchange Rule 100, Definitions, which not only relate to the trading of equity securities, but are currently utilized under the Exchange's existing rules related to options. The proposed definitions under Rule 100 will apply equally to the trading of options and equity securities on the Exchange. These proposed definitions do not alter the meaning of any Exchange Rule related to options. The Exchange simply proposes to adopt definitions of these terms under current Exchange Rule 100 to add clarity to its rules as these terms are applicable to the trading of both types of securities on the Exchange. Each of the proposed definitions under Exchange Rule 100 are as follows:

- Authorized Trader. The term "Authorized Trader" or "AT" shall mean a person who
 may submit orders (or who supervises a routing engine that may automatically submit
 orders) to the Exchange's trading facilities on behalf of his or her Equity Member or
 Sponsored Participant.
- Broker. The term "broker" shall have the same meaning as in Section 3(a)(4) of the Exchange Act.
- Dealer. The term "dealer" shall have the same meaning as in Section 3(a)(5) of the Exchange Act.

- Designated Examining Authority. The term "designated examining authority" shall mean
 a self-regulatory organization, other than the Exchange, designated by the Commission
 under Section 17(d) of the Exchange Act to enforce compliance by Equity Members with
 Exchange Rules.
- Limit price. The term "limit price" shall mean the highest (lowest) specified price at which a Limit Order to buy (sell) is eligible to trade.
- Timestamp. The term "timestamp" shall mean the effective time sequence assigned to an order for purposes of determining its priority ranking.¹⁵
- Trading Center. The term "Trading Center" shall have the same meaning as in Rule 600(b)(82) of Regulation NMS.

Execution System

The proposed equity trading system will leverage the Exchange's current state of the art technology, including its customer connectivity, messaging protocols, quotations and execution engine, order router, data feeds, and network infrastructure. Doing so minimizes the technical effort required by existing Members to begin trading equity securities on PEARL Equities.

PEARL Equities will operate a fully automated, price/time priority execution model, and offer a suite of conventional order types and deterministic functionality that is designed to provide for an efficient, robust, and transparent order matching process. PEARL Equities will be operated as an "automated market center" within the meaning of Regulation NMS, and in furtherance thereof, will display "automated quotations" within the meaning of Regulation NMS. The

The defined term "timestamp" is based on the definition of "working time" under NYSE Arca Rule 7.36-E(a)(4).

proposed model and functionality for PEARL Equities is similar to that offered by other equity exchanges, such as the Cboe Equity Exchanges, IEX, NYSE, NYSE Arca, and Nasdaq. Any proposed differences are described below and are proposed in response to industry feedback or as a means to improve upon existing functionality offered by other equity exchanges.

Like the Exchange system for options, all trading interest entered into the System will be automatically executable. Orders entered into the System that are to be displayed will either be attributed to the Equity Member or displayed anonymously. The Exchange will become a member of the Depository Trust Company ("DTC"). The System will be linked to DTC for the Exchange to transmit locked-in trades for clearance and settlement.

Hours of Operation. PEARL Equities will begin to accept orders at 7:30 a.m., Eastern Time, as described below. The System will operate between the hours of 9:30 a.m. Eastern Time and 4:00 p.m. Eastern Time, ¹⁷ with all orders being available for execution during that timeframe.

Units of Trading, Odd and Mixed Lots. Proposed Exchange Rule 2610¹⁸ provides that the unit of trading in stocks is one (1) share. 100 shares constitutes a "round lot," unless specified by the primary listing market to be fewer than 100 shares. Any amount less than a round lot shall constitute an "odd lot," and any amount greater than a round lot that is not a multiple of a round lot shall constitute a "mixed lot."

See Chapter 11 of the Cboe Equity Exchanges' Rules, Chapter 11 of the IEX Rules, NYSE Rule 7P series, NYSE Arca Rule 7-E series, and Nasdaq 4700 series.

PEARL Equities may close earlier on certain days, such as July 3, the day after Thanksgiving, and December 24.

Proposed Exchange Rule 2610 is based on IEX Rule 11.180, BYX Rule 11.10, BZX Rule 11.10, EDGA Rule 11.6(s), and EDGX Rule 11.6(s).

Proposed Exchange Rule 2611¹⁹ sets forth the requirements relating to odd and mixed lot trading on PEARL Equities. Proposed Exchange Rule 2611(b) further provides that round lot, mixed lot, and odd lot orders are treated in the same manner on the Exchange, provided that, the working and display price of a displayable odd lot order will be adjusted both on arrival and when resting on the PEARL Equities Book. Proposed Exchange Rule 2611(b)(1)(A) reflects standard behavior and provides that if the limit price of an odd lot order to buy (sell) is below (above) the PBO (PBB) of an away Trading Center, it will have a working and display price equal to the limit price.

Proposed Exchange Rule 2611(b)(1)(B) and (C) describes how the Exchange will reprice an odd-lot order to ensure it is not displayed on the Exchange's proprietary data feed at an unexecutable price. Proposed Exchange Rule 2611(b)(1)(B) provides that if the limit price of an odd lot order to buy (sell) is at or above (below) the PBO (PBB) of an away Trading Center, it will have a working price equal to the PBO (PBB). The display price will also be adjusted to one minimum price variation lower (higher) than the PBO (PBB).

The following example describes the behavior under proposed Exchange Rule 2611(b)(1)(A) and (B). Assume the PBBO of away Trading Centers is \$10.00 (100 shares) by \$10.05 (100 shares) and Exchange's BBO is \$10.01 (500 shares) by \$10.06 (500 shares). A non-

Proposed Exchange Rule 2611 is substantially similar to NYSE Rule 7.38, NYSE Arca Rule 7.38-E, NYSE American LLC ("NYSE American") Rule 7.38E, and NYSE National, Inc. ("NYSE National") Rule 7.38.

Proposed Exchange Rule 2611 would differ from NYSE Rule 7.38, NYSE Arca Rule 7.38-E, NYSE American Rule 7.38E, and NYSE National Rule 7.38 by re-pricing the odd lot order to buy (sell) to the PBB (PBO) of the Exchange when the PBB (PBO) of the Exchange was previously locked or crossed by an away Trading Center. Like the NYSE exchanges, non-displayed odd lot orders would not be subject to the above re-pricing mechanism and would be re-priced in accordance with the price sliding process for non-displayed orders described below.

routable displayed Limit Order to buy at \$10.02 (10 shares) is entered ("Order 1"). Because Order 1's limit price is below the PBO of \$10.05 displayed by an away Trading Center, it is posted to the PEARL Equities Book with a working and displayed price of \$10.02, its limit price. The Exchange's BBO remains unchanged. Next, a non-routable displayed Limit Order to buy at \$10.05 (10 shares) is entered ("Order 2"). Because Order 2's limit price equals the PBO of \$10.05 displayed by an away Trading Center, it is posted to the PEARL Equities Book with a working price of \$10.05 and a displayed price of \$10.04, one minimum price variation ("MPV") less than the PBO. The Exchange's BBO remains unchanged. Assume the PBBO of away Trading Centers changes to \$10.00 (100 shares) by \$10.06 (100 shares). To reflect changes in the away PBBO, Order 2's displayed price is updated to \$10.05 and its working price remains unchanged.

Proposed Exchange Rule 2611(b)(1)(C) provides that if the PBBO is locked or crossed and the limit price of an odd lot order to buy (sell) resting on the PEARL Equities Book is above (below) the PBO (PBB) of an away Trading Center, it will have a working and display price equal to the PBB (PBO) of the Exchange, subject to the order's limit price. The working and display price of such odd lot order will be adjusted again pursuant to proposed Exchange Rule 2611(b)(1)(A) and (B) should the PBBO unlock or uncross. Absent this proposed rule, an odd lot bid or offer could be displayed on the Exchange's proprietary data feeds at a price that appears to cross the PBBO, even if such order would not be eligible to trade at that price.

This following example describes the behavior under proposed Exchange Rule 2611(b)(1)(C) and highlights a proposed difference with similar functionality available on other equity exchanges. Assume the PBBO of away markets is \$10.00 (100 shares) by \$10.02 (100 shares) and further assume there are no orders on the PEARL Equities Book. A non-routable

displayed Limit Order to buy at \$9.99 (100 shares) is entered ("Order 1") and is posted to the PEARL Equities Book with a working and displayed price of \$9.99. The PBBO of the Exchange is now \$9.99 (100 shares) by \$0.00. Next, a non-routable displayed Limit Order to buy at \$10.01 (10 shares) is entered ("Order 2") and is posted to the PEARL Equities Book with a working and displayed price of \$10.01. The PBBO of the Exchange remains \$9.99 (100 shares) by \$0.00 because Order 2 is of odd lot size and does not update the PBB. Assume the PBBO of the away markets inverts to become \$10.00 (100 shares) by \$9.99 (100 shares). Order 1 holds its ground at \$9.99 because it is the Exchange's PBB and was locked by an away market. Order 2, however, updates to a display and working price of \$9.99, the Exchange's PBB, instead of PBB of the away markets, which is \$10.00.21

Finally, proposed Exchange Rule 2611(b)(2) provides that for an order that is partially routed to an away market on arrival, if any returned quantity of the order joins resting odd lot quantity of the original order and the returned and resting quantity, either alone or together with other odd lot sized orders, will be displayed as a new BBO, both the returned and resting quantity will be assigned a new timestamp in accordance with proposed Exchange Rules 2616, Priority of Orders, and 2617(b)(6), Priority of Routed Orders, both of which are described below.

Minimum Quotation and Trading Increments. Quotations and orders entered into the equity trading system will comply with the minimum price increments requirements of Rule 612

In such case, the Exchange understands NYSE, NYSE Arca, NYSE American, and NYSE National would price Order 2 to \$10.00, the PBB of the away Trading Center. See NYSE Rule 7.38, NYSE Arca Rule 7.38-E, NYSE American Rule 7.38E, and NYSE National Rule 7.38.

of Regulation NMS.²² Proposed Exchange Rule 2612,²³ therefore, provides that bids, offers, or orders in securities traded on the Exchange shall not be made in an increment smaller than: (i) \$0.01 if those bids, offers, or orders are priced equal to or greater than \$1.00 per share; or (ii) \$0.0001 if those bids, offers, or orders are priced less than \$1.00 per share; or (iii) any other increment established by the Commission for any security which has been granted an exemption from the minimum price increments requirements of Rule 612(a) or (b) of Regulation NMS.²⁴

Usage of Data Feeds. Proposed Exchange Rule 2613²⁵ identifies the data feeds that the Exchange will utilize for the handling, execution and routing of orders in Equity Securities, as well as for surveillance necessary to monitor compliance with applicable securities laws and Exchange Rules. The Exchange will use direct feeds as it primary source for BYX, BZX, EDGA, EDGX, Nasdaq, Nasdaq BX, Inc. ("Nasdaq BX"), Nasdaq Phlx LLC ("Nasdaq Phlx"), NYSE, NYSE American, and NYSE Arca. The Exchange will utilize data from the responsible single plan processor as its secondary source of data for these markets. The Exchange will utilize data from the responsible single plan processor as its primary source of data for FINRA's Alternative Display Facility ("ADF"), IEX, the Long Term Stock Exchange, Inc., NYSE Chicago, and NYSE National.

Proposed Exchange Rule 2613(b) provides that the Exchange may adjust its calculation of the PBBO and NBBO based on information about orders sent to other venues with protected

²² 17 CFR 242.612.

Proposed Exchange Rule 2612 is based on IEX Rule 11.210, BYX Rule 11.11, BZX Rule 11.11, EDGA Rule 11.6(i), and EDGX Rule 11.6(i).

²⁴ 17 CFR 242.612(a) and (b).

Proposed Exchange Rule 2613 is based on BYX Rule 11.26, BZX Rule 11.26, EDGA Rule 13.4, EDGX Rule 13.4, NYSE Rule 7.37(e), and Nasdaq Rule 4759.

quotations, execution reports received from those venues, and certain orders received by the Exchange. Proposed Exchange Rule 2619(c) provides that the responsible single plan processor will be the Primary Source of trade and administrative messages such as Limit-up Limit-Down Price Bands, Market-Wide Circuit Breaker decline and status messages, Regulation SHO state messages, halts and resumes, and last sale information.

Time-In-Force Instructions. The proposed System will support two time-in-force instructions, Immediate-or-Cancel ("IOC") and Regular Hours Only ("RHO"). Equity Members entering orders in to the System may designate such orders to remain in force and available for display and/or potential execution for varying periods of time. Unless cancelled earlier, once these time periods expire, the order (or unexecuted portion thereof) is cancelled. A description of the time-in-force instructions available on the System will be described under proposed Exchange Rule 2614(b).

Immediate-or-Cancel ("IOC"). IOC will be a time-in-force instruction that provides for the order to be executed in whole or in part as soon as such order is received. The portion not executed immediately on the Exchange or another Trading Center is treated as cancelled and is not posted to the PEARL Equities Book. Limit Orders with a time-in-force of IOC that are not designated as "Do Not Route" and that cannot be executed in accordance with PEARL Equities Rule 2617(a)(4) on the System when reaching the Exchange will be eligible for routing away pursuant to PEARL Equities Rule 2617(b).

Regular Hours Only ("RHO"). RHO will be a time-in-force instruction that designates the order for execution only during Regular Trading Hours, which includes the Opening Process for Equity Securities.

Order Type Modifiers. The proposed System will support the following conventional order type modifiers: Do Not Route, Post Only, Displayed, Non-Displayed, Attributable, Non-Attributable, and Intermarket Sweep Orders ("ISO"). ISOs will be described under proposed Exchange Rule 2614(d) and the remaining order type modifiers will be described under proposed Exchange Rule 2614(c). A description of which order types each modifier is compatible with will be set forth under proposed Exchange Rule 2614(a) and is described below. The characteristics and functionality of each of these order type modifiers is identical to what is currently approved for the other equity exchanges. However, as mentioned above, the text of each of the proposed rules may differ from the descriptions of similar functionality in the rules of the other equity exchanges only to the extent to provide additional specificity and/or to conform the proposed structure of the PEARL Equities rule set.

Do Not Route. An order designated as Do Not Route is a non-routable order that will be ranked and executed on the PEARL Equities Book pursuant to proposed Exchange Rule 2616 and proposed Exchange Rule 2617(a)(4) or cancelled.²⁶ Unless otherwise instructed by the User, an order designated as Do Not Route will be subject to the price sliding processes set forth in proposed Exchange Rule 2614(g) described below.

Post Only. An order designated as Post Only is a non-routable order that will be ranked and executed on the PEARL Equities Book pursuant to proposed Exchange Rule 2616 and proposed Exchange Rule 2617(a)(4).²⁷ An order designated as Post Only will only remove

The Do Not Route modifier is based on the rules of the Cboe Equity Exchanges. <u>See</u> BYX <u>and</u> BZX Rules 11.9(c)(4) <u>and</u> EDGA <u>and</u> EDGX Rules 11.6(n)(3).

The Post Only modifier is based on the rules of the Cboe Equity Exchanges. <u>See BYX and BZX Rules 11.9(c)(6) and EDGA and EDGX Rules 11.6(n)(4).</u>

liquidity from the PEARL Equities Book when: (A) the order is for a security priced below \$1.00; or (B) the value of such execution when removing liquidity equals or exceeds the value of such execution if the order instead posted to the PEARL Equities Book and subsequently provided liquidity including the applicable fees charged or rebates paid.²⁸

To determine at the time of a potential execution whether the value of such execution when removing liquidity equals or exceeds the value of such execution if the order instead posted to the PEARL Equities Book and subsequently provided liquidity, the Exchange will use the highest possible rebate paid and highest possible fee charged for such executions on the Exchange.

²⁸ As is the case on Nasdaq, the Cboe Equity Exchanges, and as proposed by Members Exchange, Inc. ("MEMX"), an incoming order designated as Post Only entered with a limit price that would lock or cross a resting contra-side Midpoint Peg Order resting on the PEARL Equities Book may post and display at the locking or crossing price (if the difference in price between the incoming order designated as Post Only and the resting midpoint is less than the forgone net rebate/fee). See EDGA and EDGX Rules 11.6(n)(4), and BYX and BZX Rules 11.9(c)(6) (providing that a Post Only order will remove contra-side liquidity from the book if the order is an order to buy or sell a security priced below \$1.00 or if the value of such execution when removing liquidity equals or exceeds the value of such execution if the order instead posted to the EDGX Book and subsequently provided liquidity, including the applicable fees charged or rebates provided). See proposed MEMX Rule 11.6(1)(2) (proposing to adopt Post Only functionality identical to that of the Cboe Equity Exchanges). See also Nasdaq Rule 4702(b)(4)(A) (providing that if the adjusted price of the Post-Only Order would lock or cross a non-displayed price on the Nasdaq Book, the Post-Only Order will be posted . . .; provided, however, the Post-Only Order will execute if. . . it is priced at \$1.00 or more and the value of price improvement associated with executing against an Order on the Nasdaq Book (as measured against the original limit price of the Order) equals or exceeds \$0.01 per share). If such a lock or cross exists, new incoming orders may remove liquidity against the locked or crossed midpoint orders, but only at a price equal to the NBBO midpoint consistent with the Exchange's proposed price priority scheme under proposed Exchange Rule 2616. See also Nasdaq and BX Post-Only Functionality Modifications, available at https://www.nasdagtrader.com/content/newsalerts/2016/postonlymodifications.pdf.

Like an order designated as Do Not Route, an order designated as Post Only will be subject to the price sliding processes set forth in proposed Exchange Rule 2614(g) described below, unless otherwise instructed by the User.

Displayed. "Displayed" is an instruction a User may attach to an order stating that the order is to be displayed by the System on the PEARL Equities Book. Unless the User elects otherwise, all orders eligible to be displayed on the PEARL Equities Book will be automatically defaulted by the System to Displayed.²⁹

Non-Displayed. "Non-Displayed" is an instruction the User may attach to an order stating that any part of the order is not to be displayed by the System on the PEARL Equities Book.³⁰

Attributable. "Attributable" is an instruction to include the User's market participant identifier ("MPID") with an order that is designated for display (price and size) on an Exchange proprietary data feed.

Non-Attributable. "Non-Attributable" is an instruction on an order that is designated for display (price and size) on an Exchange proprietary data feed to display that order on an anonymous basis.³¹

ISOs. ISO is an order instruction that may be attached to an incoming Limit Order. The operation of ISOs will be described in proposed Exchange Rule 2614(d) and is consistent with

The Displayed modifier is based on the rules EDGA and EDGX. See EDGA and EDGX Rules 11.6(e)(1).

The Non-Displayed modifier is based on the rules EDGA and EDGX. <u>See</u> EDGA <u>and</u> EDGX Rules 11.6(e)(2).

The Attributable and Non-Attributable modifiers are based on rules of the Cboe Equity Exchanges. See BYX and BZX Rules 11.9(c)(13) and (14), and EDGA and EDGX Rules 11.6(a).

the description of the ISO exception in Rules 600(b)(30) and 611(b)(5) of Regulation NMS.³² Proposed Exchange Rule 2614(d) provides that the System will accept incoming ISOs (as such term is defined in Rule 600(b)(31) of Regulation NMS). The Exchange does not intend to initially support the outbound routing of orders designated as ISO on behalf of Equity Members. Therefore, proposed Exchange Rule 2614(d) provides that ISOs are not eligible for routing pursuant to Exchange Rule 2617(b).

To be eligible for treatment as an ISO, the order must be: (A) a Limit Order; (B) marked "ISO"; and (C) the User entering the order must simultaneously route one or more additional Limit Orders marked "ISO," as necessary, to away Trading Centers to execute against the full displayed size of any Protected Quotation for the security as set forth below. Such orders, if they meet the requirements of the foregoing sentence, may be immediately executed at one or multiple price levels in the System without regard to Protected Quotations at away Trading Centers consistent with Regulation NMS (i.e., may trade through such quotations and will not be rejected or cancelled if it will lock, cross, or be marketable against an away Trading Center).

An ISO may include a time-in-force of IOC or RHO and the operation of an ISO will differ depending on the time-in-force selected. An ISO that includes a time-in-force of IOC will immediately trade with contra-side interest on the PEARL Equities Book up to its full size and limit price and any unexecuted quantity will be immediately cancelled. An ISO that includes a time-in-force of RHO, if marketable on arrival, will also immediately trade with contra-side interest on the PEARL Equities Book up to its full size and limit price. However, any unexecuted quantity of a RHO ISO will be displayed at its limit price on the PEARL Equities

³² 17 CFR 242.600(b)(30), 611(b)(5).

Book and may lock or cross a Protected Quotation that was displayed at the time of arrival of the RHO ISO.³³

A User entering an ISO with a time-in-force of IOC represents that such User has simultaneously routed one or more additional Limit Orders marked "ISO," if necessary, to away Trading Centers to execute against the full displayed size of any Protected Quotation for the security with a price that is *superior to* the ISO's limit price. A User entering an ISO with a time-in-force of RHO makes the same representation but further represents that it simultaneously routed one or more additional Limit Orders marked "ISO," if necessary, to away Trading Centers to execute against the full displayed size of any Protected Quotation for the security with a price that is *equal* to its limit price.

Proposed Exchange Rule 2614(d)(2) specifies that the Exchange will rely on the marking of an order as an ISO order when handling such order, and thus, it is the entering Equity Member's responsibility, not the Exchange's responsibility, to comply with the requirements of Regulation NMS relating to ISOs.

Re-Pricing Mechanisms. Like other equity exchanges, the System proposes to offer repricing mechanisms to Users of PEARL Equities to comply with Rule 610(d) of Regulation NMS and Rule 201 of Regulation SHO. These re-pricing mechanisms are Display Price Sliding, Non-Display Order Price Sliding, and Short Sale Price Sliding. Under Display Price Sliding and Short Sale Price Sliding, Users will be able to select between either single price sliding or multiple price sliding. The Exchange will offer Display Price Sliding (including multiple

Orders with a time-in-force of Day or RHO both expire at the end of Regular Trading Hours. Because the Exchange will not initially offer a time-in-force of Day, it proposes to handle ISOs with a time-in-force of RHO the same as Day ISOs are handled on other equity exchanges.

Display Price Sliding) and Non-Displayed Order Price Sliding (including multiple Non-Displayed Order Price Sliding) to comply with locked/crossed market and trade through restriction of Regulation NMS. The Exchange will offer Short Sale Price Sliding to comply with the tick provisions of Rule 201 of Regulation SHO.

Each of the Exchange's proposed re-pricing mechanisms is identical to functionality on other equity exchanges. However, as mentioned above, the text of each of the proposed rules may differ from the descriptions of similar functionality in the rules of the other equity exchanges only to the extent to provide additional specificity and/or to conform the proposed structure of the PEARL Equities rule set. The Exchange's re-pricing mechanisms will be described under proposed Exchange Rule 2614(g).

Display Price Sliding. Display Price Sliding is designed to prevent the display of a quotation that would lock or cross an away Trading Center in violation of Rule 610(d) of Regulation NMS.³⁴ Proposed Exchange Rule 2614(g)(1)(A) provides that an order to buy (sell) designated as Displayed that, if displayed at its limit price on the PEARL Equities Book upon entry, would create a violation of Rule 610(d) of Regulation NMS by locking or crossing the PBO (PBB) of an away Trading Center will be assigned a working price equal to the PBO (PBB) and a displayed price one (1) minimum price variation below (above) the current PBO (PBB). A User may elect to have the System only apply the Display Price Sliding Process to the extent a display-eligible order to buy (sell) at the time of entry would create a violation of Rule 610(d) of

Display Price Sliding would operate identically to Display Price Sliding on the Cboe Equity Exchanges. See BYX and BZX Rules 11.9(g)(1) and EDGA and EDGX Rules 11.6(l)(1)(B). The only difference is that the proposed text describing the operation of Display Price Sliding in proposed Exchange Rule 2614(g)(1) is written to provide additional specificity regarding its operation by, among other things, adding directional references to describe how orders subject to Display Price Sliding are to be handled.

Regulation NMS by locking the PBO (PBB) of an away Trading Center. For Users that select this order handling, any order to buy (sell) will be cancelled if, upon entry, such order would create a violation of Rule 610(d) of Regulation NMS by crossing the PBO (PBB) of an away Trading Center.

Proposed Exchange Rule 2614(g)(1)(B) provides that an order subject to the Display Price Sliding Process will retain its original limit price irrespective of the working and displayed price assigned to the order. In the event the PBBO changes such that an order to buy (sell) subject to the Display Price Sliding Process would no longer lock or cross the PBO (PBB) of an away Trading Center, the order will receive a new timestamp and will be assigned a working and displayed price at the most aggressive permissible price. All orders that are assigned new working and displayed prices pursuant to the Display Price Sliding Process will retain their priority as compared to other orders subject to the Display Price Sliding Process based upon the time such orders were initially received by the Exchange. Following the initial ranking and display of an order subject to the Display Price Sliding Process, an order will only be assigned a new working and displayed price to the extent it achieves a more aggressive price, provided, however, that the Exchange will assign an order a working price equal to the displayed price of the order in the event such order's displayed price is locked or crossed by a Protected Quotation of an away Trading Center. Such event will not result in a change in priority for the order at its displayed price.

Proposed Exchange Rule 2614(g)(1)(C) provides that the working and displayed prices of an order subject to the Display Price Sliding Process may be adjusted once or multiple times depending upon the instructions of a User and changes to the prevailing PBBO. Unless otherwise instructed by the User, the System will only adjust the working and displayed prices of

an order upon entry and then the displayed price one additional time following a change to the prevailing PBBO. The working and displayed prices of orders subject to the optional multiple price sliding process will be adjusted, as permissible, based on changes to the prevailing PBBO.

Proposed Exchange Rule 2614(g)(1)(D) provides that any display-eligible order to buy (sell) designated as Post Only that locks or crosses the PBO (PBB) displayed by the Exchange upon entry will be executed as set forth in Exchange Rule 2614(c)(2) or cancelled. Depending on User instructions, a display-eligible order to buy (sell) designated as Post Only that locks or crosses the PBO (PBB) displayed by an away Trading Center upon entry will be subject to the Display Price Sliding Process. In the event the PBBO changes such that an order designated as Post Only subject to the Display Price Sliding Process will be assigned a working price at which it could remove displayed liquidity from the PEARL Equities Book, the order will be executed as set forth in proposed Exchange Rule 2614(c)(2) or cancelled.

Finally, Proposed Exchange Rule 2614(g)(1)(E) provides that orders to buy (sell) designated as Post Only will be permitted to post and be displayed opposite the working price of orders to sell (buy) subject to the Display Price Sliding Process. In the event an order subject to the Display Price Sliding Process is ranked on the PEARL Equities Book with a working price equal to an opposite side order displayed by the Exchange, it will be subject to processing as set forth in proposed Exchange Rule 2617(a)(4).

Non-Displayed Price Sliding. Non-Displayed Price Sliding is designed to avoid potentially trading through Protected Quotations of an away Trading Center in violation of Rule Regulation NMS.³⁵ Proposed Exchange Rule 2614(g)(2) provides a non-displayed, non-routable

Non-Displayed Price Sliding would operate identically to Non-Displayed Price Sliding on the Cboe Equity Exchanges. See BYX and BZX Rules 11.9(g)(4) and EDGA and

order to buy (sell) that, upon entry, would cross the PBO (PBB) of an away Trading Center will be assigned a working price by the System equal to the PBO (PBB). In the event the PBO (PBB) changes such that the working price of a non-displayed, non-routable order to buy (sell) resting on the PEARL Equities Book would again cross the PBO (PBB) of an external market, the working price of the non-displayed order to buy (sell) will be adjusted by the System to be equal to the updated PBO (PBB) and will receive new timestamp. In the event a non-displayed, non-routable order to buy (sell) has been re-priced by the System pursuant to proposed Exchange Rule 2614(g)(2), such non-displayed order to buy (sell) will not be re-priced by the System unless it again crosses the PBO (PBB) of an away Trading Center or it achieves a more aggressive price, due to an update to the PBO (PBB) of an away Trading Center. ³⁶ Unlike under Display Price Sliding, non-displayed, non-routable buy (sell) orders will be re-priced not only upon entry, but each time the price of the order crosses the PBO (PBB) of an away Trading Center. This proposed multiple price sliding functionality under Non-Displayed Price Sliding would be mandatory, and not optional behavior.

Short Sale Price Sliding Process. Short Sale Price Sliding is designed to comply with Rule 201 of Regulation SHO by re-pricing short sale orders to a price above the NBB. 37

EDGX Rules 11.6(l)(3). The only difference is that the proposed text describing the operation of Non-Displayed Price Sliding in proposed Exchange Rule 2614(g)(2) is written to provide additional specificity regarding its operation by, among other things, adding directional references to describe how orders subject to Non-Displayed Price Sliding are to be handled.

Repricing non-displayed orders subject to Non-Displayed Price Sliding to a more aggressive price is consistent with standard functionality and the proposed Display Price Sliding process. This specificity is not included in the rules of the Cboe Equity Exchanges but is in IEX rules. See IEX Rule 11.190(h)(2).

Short Sale Price Sliding would operate identically to Short Sale Price Sliding on the Cboe Equity Exchanges. See BYX and BZX Rules 11.9(g)(5) and EDGA and EDGX Rules

Proposed Exchange Rule 2614(g)(3)(A) provides that a short sale order that, at the time of entry, could not be executed or displayed at its limit price due to a short sale price test restriction under Rule 201 of Regulation SHO ("Short Sale Period") will be assigned a working and displayed price by the System equal to one (1) minimum price variation above the current NBB ("Permitted Price"). Unless otherwise instructed by the User, the System will only adjust the working and displayed price of a short sale order upon entry. To reflect declines in the NBB during a Short Sale Period, a User may elect that the System continue to adjust the working and displayed price of a displayed short sale order to the Permitted Price down to the order's original limit price.

Proposed Exchange Rule 2614(g)(3)(B) provides that in the event the NBB changes during a Short Sale Period such that the working price of a non-displayed short sale order would lock or cross the NBB, the order will be assigned a working price by the System equal to the Permitted Price and receive a new timestamp. To reflect changes in the NBB during a Short Sale Period, the System will continue to adjust the working price of a non-displayed short sale order subject to the order's limit price.

Proposed Exchange Rule 2614(g)(3)(C) provides that during a Short Sale Period, a short sale order will be executed and displayed without regard to price if, at the time of initial display of the short sale order, the order was at a price above the then current NBB. Short sale orders that are entered into the Exchange prior to the Short Sale Period but are not displayed will be

^{11.6(}l)(2). The only difference is that the proposed text describing the operation of Short Sale Price Sliding in proposed Exchange Rule 2614(g)(3) is written to provide additional specificity regarding its operation.

adjusted to a Permitted Price.³⁸ Proposed Exchange Rule 2614(g)(3)(D) provides that short sale orders marked "short exempt" will not be subject to the Short Sale Price Sliding Process.

Proposed Exchange Rule 2614(g)(3)(E) provides that during a Short Sale Period, a short sale order will be subject to the Short Sale Price Sliding Process, even if such order is also eligible for the Display Price Sliding Process.

Order Types. The proposed System will make available to Equities Members the following three order types: Limit Orders, Market Orders, and Midpoint Peg Orders. A description of the order types available on the System will be described under proposed Exchange Rule 2614(a). Proposed Exchange Rule 2614 provides that order, instruction, and parameter combinations which are disallowed by the Exchange or incompatible by their terms, will be rejected, ignored, or overridden by the Exchange, as determined by the Exchange to facilitate the most orderly handling of User instructions. For example, a Limit Order that includes a time-in-force of IOC and a Post Only instruction will be rejected.

The characteristics and functionality of each of these order types is identical or substantially similar to what is currently approved for the other equity exchanges. However, as mentioned above, the text of each of the proposed rules may differ from the descriptions of similar functionality in the rules of the other equity exchanges only to the extent to provide additional specificity and to conform the proposed structure of the PEARL Equities rule set.

Limit Orders. Proposed Exchange Rule 2614(a)(1)³⁹ provides that Limit Orders are orders to buy or sell a stated amount of a security at a specified price or better. A "marketable"

³⁸ See NYSE Arca Rule 7.16(f)(6).

The description of Limit Orders under proposed Exchange Rule 2614(a)(1) is based on EDGA and EDGX Rules 11.8(b).

Limit Order to buy (sell) will trade with all orders to sell (buy) priced at or below (above) the PBO (PBB) for the security. Once no longer marketable, the Limit Order will be ranked on the PEARL Equities Book pursuant to proposed Exchange Rule 2616, described below.

Proposed Exchange Rule 2614(a)(1) will set forth which order type modifiers are compatible with Limit Orders. First, an incoming Limit Order may be designated as ISO. A Limit Order may also be displayed or non-displayed. A Limit Order will be displayed on the PEARL Equities Book unless the User elects that the Limit Order be non-displayed. A Limit Order may be entered as an odd lot, round lot, or mixed lot and include a time-in-force of IOC or RHO. A Limit Order with a time-in-force of RHO is eligible to participate in the Opening Process described under proposed Exchange Rule 2615. A Limit Order is eligible to participate in the Regular Trading Session.

A Limit Order may be designated as Post Only or Do Not Route. Further, a Limit Order that is designated as ISO and includes a time-in-force of RHO may also be designated as Post Only. Unless designated as Post Only or Do Not Route, a marketable Limit Order to buy (sell) will be eligible to be routed away to prices equal to or higher (lower) than the PBO (PBB) pursuant to proposed Exchange Rule 2717(b) only after trading with orders to sell (buy) on the PEARL Equities Book at each price point.

The Exchange does not propose to offer reserve quantity functionality for Limit Orders at this time. Reserve functionality is commonly understood to allow a Limit Order to have both a displayed and non-displayed quantity. See, e.g., EDGA and EDGX Rules 11.6(m).

Proposed Rule 2614(a)(1) will also describe default behavior for re-pricing Limit Orders to comply with Rule 610 of Regulation NMS,⁴¹ Rule 201 of Regulation SHO,⁴² and the LULD Plan.⁴³ Each of these re-pricing options are described in detail further below.

To comply with Rule 610 of Regulation NMS, a non-routable Limit Order to buy (sell) that, if displayed at its limit price on the PEARL Equities Book upon entry, would lock or cross the PBO (PBB) of an away Trading Center will be re-priced pursuant to the Display Price Sliding instruction, unless the User affirmatively elects to have the order immediately cancelled. A non-routable Limit Order to buy (sell) with a limit price that would cross the PBO (PBB) of an away Trading Center upon entry will not execute at a price that is higher (lower) than the PBO (PBB).

To avoid potentially trading through the PBBO of an away Trading Center, a non-displayed Limit Order to buy (sell) that, if posted to the PEARL Equities Book, would cross the PBO (PBB) of an away Trading Center will be re-priced pursuant to the Non-Displayed Order Price Sliding Process.⁴⁴

To comply with Rule 201 of Regulation SHO, when a Short Sale Period⁴⁵ is in effect, a Limit Order to sell that is designated as short and cannot be executed or displayed on the PEARL

⁴¹ 17 CFR 242.610.

⁴² 17 CFR 242.201.

See supra note 5.

Unlike the Cboe Equity Exchanges, PEARL Equities does not proposes to provide Users with the option to automatically cancel a non-displayed order that is to be repriced pursuant to the Non-Displayed Price Sliding Process. See EDGA and EDGX Rules 11.8(b)(12).

A Short Sale Period is the time during which a displayable short sale order, at the time of entry, could not be executed or displayed at its limit price due to a short sale price test

Equities Book at its limit price pursuant to Rule 201 of Regulation SHO will be re-priced to a Permitted Price pursuant to the Short Sale Price Sliding Process, unless the User affirmatively elects to have the order immediately cancelled. During a Short Sale Period, as defined in Exchange Rule 2614(g)(3)(A), the System will immediately cancel any portion of an incoming Limit Order designated as ISO and short that includes a time-in-force instruction RHO that cannot be executed or displayed at its limit price at the time of entry pursuant to Rule 201 of Regulation SHO.⁴⁶

To comply with the LULD Plan, a Limit Order to buy (sell) that is priced above (below) the Upper (Lower) Price Band shall be re-priced pursuant to proposed Exchange Rule 2622(e) (described below), unless the User affirmatively elects to have the order immediately cancelled.

The Exchange also proposes to offer Limit Order Price Protection which will provide for the cancellation of Limit Orders priced too far away from a specified reference price at the time the order first becomes eligible to trade.⁴⁷ A Limit Order entered before Regular Trading Hours that becomes eligible to trade during Regular Trading Hours will be subject to Limit Order Price Protection at the time Regular Trading Hours begins.⁴⁸

A Limit Order to buy (sell) will be rejected if it is priced at or above (below) a specified dollar value and percentage away from the following: (1) the PBO for Limit Orders to buy, the

restriction under Rule 201 of Regulation SHO. 17 CFR 201. <u>See also proposed</u> Exchange Rule 2614(g)(3)(A).

See EDGA and EDGX Rule 11.8(c)(6).

The Exchange's proposed Limit Order Price Protection is based on NYSE Rule 7.31(a)(2)(B) and Nasdaq Rule 4757(c).

Further, a Limit Order in a security that is subject to a trading halt will become first eligible to trade when the halt is lifted and continuous trading has resumed.

PBB for Limit Orders to sell; (2) if the PBO or PBB is unavailable, the consolidated last sale price disseminated during the Regular Trading Hours on trade date; (3) if the PBO, PBB, and a consolidated last sale price are unavailable, the prior day's Official Closing Price identified as such by the primary listing exchange, adjusted to account for events such as corporate actions and news events. This differs from Limit Order Price Protection offered by Nasdaq, ⁴⁹ which only utilizes the PBBO as a reference price, and the NYSE, ⁵⁰ which only calculates reference prices based on the corresponding "numerical guideline" percentages set forth in NYSE Rule 7.10(c)(1), Clearly Erroneous Executions. The Exchange believes this difference is reasonable because utilizing a waterfall of reference prices should result in specified percentages that are more reflective of the current trading environment for the security and provide an alternative reference price when the NBBO and/or last sale price are unavailable.

Also unlike Limit Order Price Protection offered by NYSE and Nasdaq, Equity Members will be able to customize the specified dollar and percentages on a per session basis. If an Equity Member does not provide PEARL Equities specified dollar values or percentages for their order(s), default specified dollar and percentages established by the Exchange will be applied. The default specified dollar and percentages will be posted to the Exchange's website and the Exchange will announce any changes to those dollar and percentages via a Regulatory Circular. The Exchange believes this difference is also reasonable because it provides Equity Members with greater flexibility in establishing protections that better reflect their risk profile.

⁴⁹ Nasdaq Rule 4757(c).

⁵⁰ NYSE Rule 7.31(a)(2)(B).

Limit Order Price Protection thresholds for buy (sell) orders that are not entered at a permissible MPV for the security, as defined in proposed Exchange Rule 2612, will be rounded down (up) to the nearest price at the applicable MPV.

Market Orders. Proposed Rule 2614(a)(2)⁵¹ provides that a Market Order is an order to buy (sell) a stated amount of a security that is to be executed at the PBO (PBB) or better upon entry. A Market Order shall not trade through a Protected Quotation. The System will only execute a Market Order upon entry and, if eligible, route the Market Order to an away Trading Center. The System will never post a Market Order to the PEARL Equities Book, unlike as is done by other national securities exchanges.⁵²

A Market Order may be entered as an odd, round, or mixed lot. A Market Order may only include a time-in-force of IOC. A Market Order with a time-in-force of RHO will be rejected. A Market Order is not eligible to participate in the Opening Process under proposed Exchange Rule 2615 described below. A Market Order is eligible to participate in the Regular Trading Session.

A Market Order may also be designated as Do Not Route. For a Market Order that is not designated as Do Not Route, any portion of that Market Order that cannot be executed in accordance with Rule 2617(a)(4) upon entry will be eligible to be routed away pursuant to Rule 2617(b). Any returned quantity of a routed Market Order will be immediately cancelled. A Market Order that is designated

The description of Market Orders under proposed Exchange Rule 2614(a)(2) is based on EDGA and EDGX Rules 11.8(a).

^{52 &}lt;u>See, e.g., EDGA and EDGX Rules 11.8(a)(4)</u> (providing for the posting of Market Orders when the NBO (NBB) is greater (less) than the Upper (Lower) Price Band or when an Short Sale Circuit Breaker is in effect). <u>See also NYSE Rule 7.31(a)(1).</u>

as Do Not Route will be cancelled if, when reaching the Exchange, it cannot be executed on the System in accordance with Rule 2617(a)(4). Equity Members may also elect that their Market Order to buy (sell) be cancelled if the PBO (PBB) an away Trading Center is not available upon entry.

The System will cancel a non-routable Market Order that cannot be executed at a price that complies with Rule 201 of Regulation SHO and the Limit-Up Limit-Down Plan. During a Short Sale Period, a short sale Market Order designated as Do Not Route that cannot be executed at a Permitted Price or better upon entry will be cancelled. This may occur when there are no orders to buy priced above the NBB resting on the PEARL Equities Book against which the incoming Market Order to sell could execute against in compliance with Rule 201 of Regulation SHO.

Further, any portion of a Market Order to buy (sell) will be cancelled if it cannot be executed because at the time it is received by the System the NBO (NBB) is greater (less) than the Upper (Lower) Price Band in accordance with the LULD Plan. In such case, a Market Order to buy (sell) cannot execute against the NBO (NBB) because the NBO (NBB) is outside of the applicable Price Band and, therefore, not available for execution.

Midpoint Peg Orders. Proposed Rule 2614(a)(3)⁵³ provides that a Midpoint Peg Order is a non-displayed Limit Order that is assigned a working price pegged to the midpoint of the PBBO. A Midpoint Peg Order to buy (sell) with a limit price that is equal to or higher (lower) than the midpoint of the PBBO will be assigned a working price at the midpoint of the PBBO and may execute at the midpoint of the PBBO or better subject to its limit price. A Midpoint Peg

The description of Midpoint Peg Orders under proposed Exchange Rule 2614(a)(3) is based on EDGA Rule 11.8(d), EDGX Rule 11.8(d), NYSE Rule 7.31(d)(3), and NYSE Arca Rule 7.31-E(d)(3).

Order to buy (sell) with a limit price that is lower (higher) than the midpoint of the PBBO will be assigned a working price equal to its limit price and may execute at its limit price or better.

An Aggressing Midpoint Peg Order to buy (sell) will trade with resting orders to sell (buy) with a working price at or below (above) the midpoint of the PBBO at the working price of the resting orders.⁵⁴ Resting Midpoint Peg Orders to buy (sell) will trade at the midpoint of the PBBO against all Aggressing Orders to sell (buy) priced at or below (above) the midpoint of the PBBO.⁵⁵

A Midpoint Peg Order will be accepted but will not be eligible for execution when the PBB or PBO is not available, the PBBO is crossed, and, if instructed by the User, when the PBBO is locked. A Midpoint Peg Order that is eligible for execution when the PBBO is locked will be executable at the locking price. A Midpoint Peg Order will become eligible for execution and receive a new timestamp when the PBB and/or PBO both become available, or the PBBO unlocks or uncrosses and a new midpoint of the PBBO is established. In such case, pursuant to proposed Exchange Rule 2616, all such Midpoint Peg Orders will retain their priority as compared to each other based upon the time priority of such orders immediately prior to being deemed not eligible for execution as set forth above. 57

A Midpoint Peg Order may include a time-in-force of IOC or RHO. A Midpoint Peg Order with a time-in-force of RHO is eligible to participate in the Opening Process under

⁵⁴ See NYSE Rule 7.31(d)(3)(C).

⁵⁵ <u>Id</u>.

See IEX Rule 11.190(h)(3)(C)(i) (stating that in the event the market becomes locked, the Exchange shall consider the midpoint price to be equal to the locking price).

Describing when a Midpoint Peg Orders would not be eligible for execution is based on NYSE Rule 7.31(d)(3) and NYSE Arca Rule 7.31-E(d)(3).

proposed Exchange Rule 2615 described above. A Midpoint Peg Order is eligible to participate in the Regular Trading Session. A Midpoint Peg Order may be entered as an odd lot, round lot, or mixed lot. Midpoint Peg Orders are not eligible for routing pursuant to Exchange Rule 2617(b). A Midpoint Peg Order may be designated as Post Only.

Cancel/Replace Messages. Like other equity exchanges, the Exchange will allow a User to cancel or replace their existing order resting on the PEARL Equities Book. However, orders may only be cancelled or replaced if the order has a time-in-force term other than IOC and if the order has not yet been executed in full. If an order has been routed to another Trading Center, the order will be placed in a "Pending" state until the routing process is completed. Executions that are completed when the order is in the "Pending" state will be processed normally. Further, only the price, sell long, sell short, or short exempt indicator, and size terms of the order may be changed by a Replace Message. If a User desires to change any other terms of an existing order the existing order must be cancelled and a new order must be entered. No cancellation or replacement of an order will be effective until such message has been received and processed by the System. The Exchange's proposed cancel/replace functionality will be described under proposed Exchange Rule 2614(e).

Self-Trade Protection Modifiers. Like PEARL Options and other equity exchanges, the Exchange will allow Equity Members to use STP modifiers. Any order designated with an STP modifier will be prevented from executing against a contra-side order also designated with an STP modifier and originating from the same MPID, Exchange Member identifier, or trade group identifier (any such identifier, a "Unique Identifier"). The Exchange proposes to offer the following four (4) STP modifiers to Equity Members: Cancel Newest, Cancel Oldest, Decrement and Cancel, and Cancel Both. The STP modifier on the order with the most recent time stamp

controls the interaction between two orders marked with STP modifiers. The Exchange's proposed STP modifiers will be described under proposed Exchange Rule 2614(f).

Cancel Newest. An order marked with the Cancel Newest modifier will not execute against a contra-side order marked with any STP modifier originating from the same Unique Identifier. The order with the most recent time stamp marked with the Cancel Newest modifier will be cancelled back to the originating User(s). The contra-side order with the older timestamp marked with an STP modifier will remain on the PEARL Equities Book.

Cancel Oldest. An order marked with the Cancel Oldest modifier will not execute against a contra-side order marked with any STP modifier originating from the same Unique Identifier. The order with the older time stamp marked with the STP modifier will be cancelled back to the originating User(s). The contra-side order with the most recent timestamp marked with the STP modifier will remain on the PEARL Equities Book.

Decrement and Cancel. An order marked with the Decrement and Cancel modifier will not execute against contra-side interest marked with any STP modifier originating from the same Unique Identifier. If both orders are equivalent in size, both orders will be cancelled back to the originating User(s). If both orders are not equivalent in size, the equivalent size will be cancelled back to the originating User(s) and the larger order will be decremented by the size of the smaller order, with the balance remaining on the PEARL Equities Book.

Cancel Both. An order marked with the Cancel Both modifier will not execute against contra-side interest marked with any STP modifier originating from the same Unique Identifier. The entire size of both orders will be cancelled back to the originating User(s).

Opening Procedures. The Exchange will open trading in Equities Securities at the start of Regular Trading Hours and following a halt by matching buy and sell orders at the midpoint

of the NBBO, as described below. The Exchange's opening process will be described under proposed Exchange Rule 2615,⁵⁸ which provides that prior to the beginning of Regular Trading Hours,⁵⁹ Users who wish to participate in the Opening Process may enter orders to buy or sell that are designated as RHO. Orders cancelled before the Opening Process will not participate in the Opening Process.

Only orders that include a time-in-force of RHO may participate in the Opening Process. Orders designated as Post Only, ISOs, and orders that include a time-in-force other than RHO are not eligible to participate in the Opening Process. As described above, because Market Orders may only include a time-in-force of IOC, they are not eligible to participate in the Opening Process. Meanwhile, Limit Orders and Midpoint Peg orders that include a time-inforce of RHO are eligible to participate in the Opening Process. Like PEARL Options, all STP modifiers, as defined in proposed Exchange Rule 2614(f), will be honored during the Opening Process.

Proposed Exchange Rule 2615(b) provides that during the Opening Process, the Exchange attempts to match eligible buy and sell orders at the midpoint of the NBBO, the calculation of which is described below. All orders eligible to trade at the midpoint will be processed in time sequence, beginning with the order with the oldest timestamp. The Opening Process will conclude when no remaining orders, if any, can be matched at the midpoint of the

Proposed Exchange Rule 2615 is based on BZX Rule 11.24, BYX Rule 11.23, and EDGA and EDGX Rules 11.7.

According to proposed Exchange Rule 2600(a), Users may begin to enter orders starting at 7:30 a.m. Eastern Time.

See Exchange Rule 503 (not stating that self-trade prevention modifiers are ignored during the opening process). The Cboe Equity Exchanges ignore self-trade protection modifiers during their opening and re-opening processes. See BZX Rule 11.24(b), BYX Rules 11.23(b), and EDGA and EDGX Rules 11.7(b).

NBBO. At the conclusion of the Opening Process, the unexecuted portion of orders that were eligible to participate in the Opening Process will be placed on the PEARL Equities Book in time sequence, cancelled, executed, or routed to away Trading Centers in accordance with the terms of the order.

Proposed Exchange Rule 2615(c) will describe how the Exchange calculates the midpoint of the NBBO. When the primary listing exchange is the NYSE or NYSE American, the Opening Process will be priced at the midpoint of the: (i) first NBBO subsequent to the first reported trade and first two-sided quotation on the primary listing exchange after 9:30:00 a.m. Eastern Time; or (ii) then prevailing NBBO when the first two-sided quotation is published by the primary listing exchange after 9:30:00 a.m. Eastern Time, but before 9:45:00 a.m. Eastern Time if no first trade is reported by the primary listing exchange within one second of publication of the first two-sided quotation by the primary listing exchange. For any other primary listing exchange, such as Nasdaq, Arca, and BZX, the Opening Process will be priced at the midpoint of the first NBBO subsequent to the first two-sided quotation published by the primary listing exchange after 9:30:00 a.m. Eastern Time.

If the conditions to establish the price of the Opening described above do not occur by 9:45:00 a.m. Eastern Time, the Exchange may conduct a Contingent Open and match all orders eligible to participate in the Opening Process at the midpoint of the then prevailing NBBO.⁶¹ The Exchange believes matching orders at the midpoint of the NBBO as part of the Contingent Open provides consistent order handling to Users that wish to participate in the PEARL Equities

The Cboe Equity Exchanges do not attempt to match orders at the midpoint to the NBBO in such a situation. They handle orders in time sequence, beginning with the order with the oldest timestamp, and place orders on the book, and such orders are routed, cancelled, or executed in accordance with the terms of the order. See BZX Rule 11.24(d), BYX Rule 11.23(d), EDGA and EDGX Rules 11.7(d).

Opening Process by executing their eligible orders at the midpoint of the NBBO, regardless of whether the opening process occurs at or near 9:30 a.m. Eastern Time, or later as part of a Contingent Open. Those Users that do not wish to participate in the Contingent Open are free to cancel their orders at any time and to resubmit those orders after the Contingent Open occurs and continuous trading begins.

If the midpoint of the NBBO is not available for the Contingent Open, all orders will be handled in time sequence, beginning with the order with the oldest timestamp, and be placed on the PEARL Equities Book, cancelled, executed, or routed to away Trading Centers in accordance with the terms of the order. Users not seeking an execution at the midpoint of the NBBO during the Contingent Open may cancel their orders before 9:45 a.m. and re-enter those orders after the Contingent Open occurs.

While an Equity Security is subject to a halt, suspension, or pause in trading, the Exchange will accept orders for queuing prior to the resumption of trading in the security for participation in the Re-Opening Process. The Re-Opening Process following a halt will occur in the same manner as the Opening Process with the following two exceptions. First, ISOs, orders that include a time-in-force of IOC and orders designated as Post Only will be cancelled or rejected, as applicable. Second, the Re-Opening Process will occur at the midpoint of the: (i) first NBBO subsequent to the first reported trade and first two-sided quotation on the primary listing exchange following the resumption of trading after a halt, suspension, or pause; or (ii) NBBO when the first two-sided quotation is published by the primary listing exchange following the resumption of trading after a halt, suspension, or pause if no first trade is reported by the listing exchange within one second of publication of the first two-sided quotation by the listing exchange.

Where neither of the above conditions required to establish the price of the Re-Opening Process have occurred, the Equity Security may be opened for trading at the discretion of the Exchange. For example, the Exchange would exercise this discretion where the primary listing exchange lifted the halt but has not disseminated a reported trade or two-sided quotation and other non-primary listing exchanges have begun trading the security. In such case, all orders will be handled in time sequence, beginning with the order with the oldest timestamp, and be placed on the PEARL Equities Book, cancelled, executed, or routed to away Trading Centers in accordance with the terms of the order.

Order Priority. After the opening process, trades on PEARL Equities will occur when a buy order and a sell order are matched for execution on the PEARL Equities Book. All non-marketable orders resting on the PEARL Equities Book will be ranked and maintained based on price/time priority in the following manner: (1) price; (2) priority category; (3) time; and (4) ranking restrictions applicable to an order or modifier condition. As such, the System will execute trading interest within a priority category in the System in price/time priority, meaning it will execute all trading interest at the best price level within a priority category in time sequence before executing trading interest within the next priority category. Once all trading interest at that price is exhausted, the System will execute trading interest in the same fashion at the next best price level. Proposed Exchange Rule 2616 will describe the priority of orders resting on the PEARL Equities Book and is consistent with other equity exchanges that employ a price/time priority model, such as the Cboe Equity Exchanges and NYSE Arca. 62

See BZX and BYX Rules 11.12 and EDGA and EDGX Rules 11.9. See also NYSE Arca Rule 7.36-E.

Proposed Exchange Rule 2616(a)(1) provides that all orders will be ranked based on the working price of an order. Orders to buy will be ranked from highest working price to lowest working price. Orders to sell will be ranked from lowest working price to highest working price. If the working price of an order changes, the price priority of the order will also change.

In general, displayed orders at their displayed prices have priority over non-displayed orders at that same price. Proposed Exchange Rule 2616(a)(1)(A) provides the priority categories and proposed Exchange Rule 2616(a)(2)(A) specifies that within each priority category, where orders to buy (sell) are entered into the Trading System and resting in the PEARL Equities Book at the same working price, the order clearly established as the first entered into the Trading System at such particular price shall have precedence at that price, up to the number of shares specified in the order. Equally priced orders within each priority category will be ranked in time priority with displayed Limit Orders for which their working price is displayed having first priority. Non-marketable Limit Orders for which their working price is non-displayed have second priority.⁶³ Proposed Exchange Rule 2616(a)(2)(B) provides that for purposes of order priority, ISOs will be treated like Limit Orders.

Proposed Exchange Rule 2616(a)(3) provides that within each priority category, orders will be ranked based on time with each order being assigned a timestamp equal to the time the order is first placed on the PEARL Equities Book. An order is assigned a timestamp based on its original entry time, which is the time when an order is first placed in the PEARL Equities Book.

Proposed Exchange Rule 2616(a)(3)(A)(i) provides that an order that is fully routed to an

This second priority category would include the non-displayed working price of an order with a different displayed price due to the order having been re-priced pursuant to the Display Price Sliding Process under proposed Exchange Rule 2614(g)(1). This second priority category would also include Midpoint Peg Orders at their working price.

away Trading Center on arrival will not be assigned a timestamp time unless and until any unexecuted portion of the order returns to the PEARL Equities Book. Proposed Exchange Rule 2616(a)(3)(A)(ii) provides that for an order that is partially routed to an away Trading Center on arrival, the portion that is not routed will be assigned a timestamp. If any unexecuted portion of the order returns to the PEARL Equities Book and joins any remaining resting portion of the original order, the returned portion of the order will be assigned the same timestamp as the resting portion of the order. If the resting portion of the original order has already executed and any unexecuted portion of the order returns to the PEARL Equities Book, the returned portion of the order will be assigned a new timestamp. Proposed Exchange Rule 2616(a)(3)(B) provides that an order will be assigned a new timestamp any time the working price of an order changes.

Proposed Exchange Rule 2616(a)(4) provides that when Users elect that their orders not execute against an order with the same Unique Identifier by using an STP modifier described above, the Trading System will not permit such orders to execute against one another, regardless of priority ranking.

Proposed Exchange Rule 2616(a)(5) describes the priority treatment where a User cancels or replaces an order resting on the PEARL Equities Book. Proposed Exchange Rule 2616(a)(5) provides that the order will retain its timestamp and retain its priority only where the modification involves a decrease in the size of the order or a change in position from (A) sell to sell short; (B) sell to sell short exempt; (C) sell short to sell; (D) sell short to sell short exempt; (E) sell short exempt to sell; and (F) sell short exempt to sell short. Any other modification to an order, including an increase in the size of the order and/or price change, will result in such order

^{64 &}lt;u>See NYSE Arca Rule 7.36-E(f)(1)(B).</u>

losing time priority as compared to other orders in the PEARL Equities Book and the timestamp for such order being revised to reflect the time of the modification.

Proposed Exchange Rule 2616(a)(6) provides that the remainder of an order that is partially executed against an incoming order or Aggressing Order will retain its timestamp.

Lastly, proposed Exchange Rule 2616(b) sets forth the information that will be collected and made available to quotation vendors for dissemination pursuant to the requirements of Rule 602 of Regulation NMS, 65 which will include the best-ranked order(s) to buy and the best-ranked order(s) to sell that are displayed on the PEARL Equities Book and the aggregate displayed size of such orders. Proposed Exchange Rule 2616(b) further provides that PEARL Equities will transmit for display to the appropriate network processor for each equity security: (1) the highest price to buy wherein the aggregate size of all displayed buy interest in the Trading System greater than or equal to that price is one round lot or greater; (2) the aggregate size of all displayed buy interest in the Trading System greater than or equal to the price in (1) above, rounded down to the nearest round lot; (3) the lowest price to sell wherein the aggregate size of all displayed sell interest in the Trading System less than or equal to that price is one round lot or greater; and (4) the aggregate size of all displayed sell interest in the Trading System less than or equal to the price in paragraph (3) above, rounded down to the nearest round lot.

Order Execution. The System will utilize technology currently used by the Exchange's options trading system for purposes of order execution in Equity Securities. The order execution process for equity securities is based on functionality currently approved for use on the Cboe Equities Exchanges, NYSE, NYSE Arca, and NASDAQ. As discussed above, the System will allow Equity Members to enter Market Orders, Limit Orders, and Midpoint Peg Orders to buy

Proposed Exchange Rule 2616(c) is based on Nasdaq Rule 4756(b)(2)

and sell Equity Securities on PEARL Equities. The orders will be designated for display or nondisplay in the System.

Proposed Exchange Rule 2617(a) provides that any order falling within the below parameters shall be referred to as executable. Like on other equity exchanges, an order will be cancelled back to the User if, based on market conditions, User instructions, applicable Exchange Rules and/or the Exchange Act and the rules and regulations thereunder, such order is not executable, cannot be routed to another Trading Center and cannot be posted to the PEARL Equities Book.⁶⁶

Proposed Exchange Rule 2617(a) will further provide that the System will comply with all applicable securities laws and regulations, including Regulation NMS, ⁶⁷ Regulation SHO, ⁶⁸ and the LULD Plan. ⁶⁹ Proposed Exchange Rule 2617(a)(4)(A) and (B) describe the process for matching incoming and Aggressing Orders for execution against contra-side orders resting on the PEARL Equities Book. ⁷⁰ An Aggressing Order and an incoming order to buy (sell) will be automatically executed to the extent that it is priced at an amount that equals or exceeds (is less than) any order to sell (buy) in the PEARL Equities Book and is executable. Such order to buy (sell) will be matched for execution against sell (buy) orders resting on the PEARL Equities Book according to the price-time priority ranking of the resting orders.

⁶⁶ See BYX and BZX Rules 11.13(a) and EDGA and EDGX Rules 11.10(a).

⁶⁷ 17 CFR 242.600, et seq.

⁶⁸ 17 CFR 242.200, et seq.

See <u>supra</u> note 5.

Proposed Exchange Rule 2617(a)(4)(A) and (B) are based on NYSE Rule 7.37(a), BZX and BYX Rules 11.13(a)(4)(A) and (B), and EDGA and EDGX Rules 11.10(a)(4)(A) and (B).

Proposed Exchange Rule 2617(a)(4)(C) provides that certain orders, based on their operation and User instructions, are permitted to post and rest on the PEARL Equities Book at prices that lock contra-side liquidity, provided, however, that the System will never display a locked market. Proposed Exchange Rule 2617(a)(4)(C) further provides that if an Aggressing Order or an incoming order to buy (sell) will execute upon entry against an order to sell (buy) at the same price as such displayed order to buy (sell), the Aggressing Order or incoming order to buy (sell) will be cancelled or posted to the PEARL Equities Book and ranked in accordance with Exchange Rule 2616.

Proposed Exchange Rule 2617(a)(4)(D) governs the price at which an order is executable when it is posted non-displayed on the PEARL Equities Book and there is a contra-side displayed order at a price which results in an internally locked book. Specifically, for securities priced equal to or greater than \$1.00 per share, in the case where a non-displayed order to sell (buy) is posted on the PEARL Equities Book at a price that locks a displayed order to buy (sell) pursuant to proposed Exchange Rule 2617(a)(4)(C) described above, an Aggressing Order or an incoming order to buy (sell) described in proposed Exchange Rules 2617(a)(4)(A) and (B) described above is a Market Order or a Limit Order priced more aggressively than the order to buy (sell) displayed on the PEARL Equities Book will execute against the non-displayed order to sell (buy) resting on the PEARL Equities Book at one-half minimum price variation greater

Proposed Exchange Rule 2617(a)(4)(C) is based on BZX <u>and BYX Rules 11.13(a)(4)(C)</u>, and EDGA and EDGX Rules 11.10(a)(4)(C).

Proposed Exchange Rule 2617(a)(4)(D) is based on BZX <u>and BYX Rules 11.13(a)(4)(D), and EDGA and EDGX Rules 11.10(a)(4)(D). See also Securities Exchange Act Release No. 82087 (November 15, 2017), 82 FR 55472 (November 21, 2017) (SR-BatsEDGA-2017-29) (describing the operation of this same functionality on EDGA).</u>

(less) than the price of the resting displayed order to buy (sell). Proposed Exchange Rule 2617(a)(4)(D) will not be applicable for bids or offers under \$1.00 per share.

For example, assume the PBBO was \$16.10 by \$16.11 resulting in a midpoint of \$16.105. An order to buy at \$16.11 is resting non-displayed on the PEARL Equities Book. A Limit Order to sell at \$16.11 designated as Post Only is subsequently entered. Assume that the order to sell designated as Post Only will not remove any liquidity upon entry pursuant to the Exchange's proposed economic best interest functionality under proposed Exchange Rule 2614(c)(2), and will post to the PEARL Equities Book and be displayed at \$16.11. The display of this order will, in turn, make the resting non-displayed bid not executable at \$16.11. If an incoming order to sell at \$16.10 is entered into the PEARL Equities Book, the resting non-displayed order to buy originally priced at \$16.11 will execute against the incoming order to sell at \$16.105 per share, thus providing a half-penny of price improvement as compared to the order's limit price of \$16.11.

Also consider the following example where the execution occurs at a sub-penny price that is not at the midpoint of the PBBO. Assume the PBBO is \$16.08 by \$16.10 resulting in a midpoint of \$16.09. An order to sell at \$16.08 is resting non-displayed on the PEARL Equities Book. A Limit Order to buy at \$16.08 designated as Post Only is subsequently entered. Assume that the order to buy designated as Post Only will not remove any liquidity upon entry pursuant to the Exchange's economic best interest functionality under proposed Exchange Rule 2614(c)(2), and will post to the PEARL Equities Book and be displayed at \$16.08. The display of this order will, in turn, make the resting non-displayed order to sell not executable at \$16.08. If an incoming order to buy is entered into the PEARL Equities Book at a price greater than \$16.08, the resting non-displayed order to sell originally priced at \$16.08 will execute against the

incoming order to buy at \$16.085 per share, thus providing a half-penny of price improvement as compared to the order's limit price of \$16.08.

Routing. PEARL Equities routing functionality is described in proposed Exchange Rule 2617(b). PEARL Equities will support orders that are designated to be routed to the PBBO as well as orders that will execute only within PEARL Equities. Routable orders that are designated to execute at the PBBO will be routed to other equity markets to be executed when PEARL Equities is not at the PBBO consistent with Rules 610(d) and 611 of Regulation NMS. The System will ensure that an order will not be executed at a price that trades through another equities Trading Center. An order that is designated as routable by a User will be routed in compliance with the applicable trade through restrictions. As described above, any order entered with a price that will lock or cross a Protected Quotation that is not eligible for routing will be subject to the Display Price Sliding process under proposed Exchange Rule 2614(g), unless the User elected that the order be cancelled.

In addition, an order marked "short" when a short sale price test restriction pursuant to Rule 201 of Regulation SHO is in effect is not eligible for routing by the Exchange. An order that is ineligible for routing due to a short sale price test restriction that includes a time-in-force of IOC will be cancelled upon entry, while a non-routable short sale order with a time-in-force of RHO will be subject to the Short Sale Price Sliding process under proposed Exchange Rule 2614(g)(3). The Exchange will handle routable orders in connection with the Limit-Up Limit-Down Plan as described in proposed Exchange Rule 2622, described below.

Proposed Exchange Rule 2617(b) is based various portions of BZX <u>and BYX Rule 11.13(b)</u>, EDGA <u>and EDGX Rule 11.11</u>, <u>and NYSE Rule 7.36(f)(1)(B)</u>.

⁷⁴ 17 CFR 242.610(d), 611.

As the Exchange currently does for options, PEARL Equities will route orders in Equity Securities via one or more routing brokers that are not affiliated with the Exchange. This routing process will be described under proposed Exchange Rule 2617(b)(1), which is identical to current Exchange Rule 529 that is applicable to options. For each routing broker used by the Exchange, an agreement will be in place between the Exchange and the routing broker that will, among other things, restrict the use of any confidential and proprietary information that the routing broker receives to legitimate business purposes necessary for routing orders at the direction of the Exchange.

The function of the routing broker will be to route orders in Equity Securities trading on PEARL Equities to other equity Trading Centers pursuant to PEARL Equities rules on behalf of PEARL Equities ("Routing Services"). Use of Routing Services to route orders to other market centers is optional. Parties that do not desire to use the Routing Services provided by the Exchange must designate their orders as not available for routing.

The System will designate routable Market Orders and marketable Limit Orders as IOC and will cause such orders to be routed for execution to one or more Trading Centers for potential execution, per the entering User's instructions, in compliance with Rule 611 under Regulation NMS, Regulation SHO, and the Limit-Up Limit-Down Plan. After the System receives responses to Market Orders that were routed away, to the extent an order is not executed in full through the routing process, the System will cancel any unexecuted portion back to the User.

See Exchange Rule 529.

The Exchange's routing logic will not provide any advantage to Users when routing orders to away Trading Centers as compared to other routing methods.

For marketable Limit Orders, after the System receives responses to orders that were routed away, to the extent an order is not executed in full through the routing process, the System will process the balance of such order in accordance with the parameters set by the User when the order was originally entered. As such, the System will either: (i) cancel the unfilled balance of the order back to the User; (ii) process the unfilled balance of an order as an order designated as Do Not Route subject to the price sliding processes described in proposed Exchange Rules 2614(g) and 2622(e); or (iii) by executing against the PEARL Equities Book and/or re-routing orders to other Trading Centers until the original incoming order is executed in its entirety or its limit price is reached. If the order's limit price is reached, the order will be posted in the PEARL Equities Book, subject to the price sliding processes set forth proposed Exchange Rules 2614(g) and 2622(e). Proposed Exchange Rule 2617(b)(4)(C) would specify that to the extent the System is unable to access a Protected Quotation and there are no other accessible Protected Quotations at the NBBO, the System will treat the order as non-routable, provided, however, that this provision will not apply to Protected Quotations published by a Trading Center against which the Exchange has declared self-help pursuant to proposed Exchange Rule 2617(d).⁷⁷

To start, the Trading System provides a single routing option named "Order Protection".

Order Protection is a routing option under which an order checks the Trading System for available shares and then is routed to attempt to execute against Protected Quotations at away

Trading Centers. For purposes of clarity and should additional routing options be offered in the

Proposed Exchange Rule 2617(b)(4)(C) is based on BZX <u>and</u> BYX Rule 11.13(b)(2)(E) with the only difference being that BZX and BYX will cancel the order in the scenario covered by the rule while the Exchange proposed to treat the order as non-routable.

future, ⁷⁸ proposed Exchange Rule 2617(b)(5)(A) specifies that all routable orders will be defaulted to the Order Protection routing option.

Proposed Exchange Rule 2617(b)(5) provides that routing options may be combined with all available order types and times-in-force instructions, with the exception of order types and times-in-force instructions whose terms are inconsistent with the terms of a particular routing option. For example, a routing option would be incompatible with a designation that the order also include a Post Only or Do Not Route instruction and an order that includes such a combination will be rejected. The Trading System will consider the quotations only of accessible Trading Centers. The term "Trading System routing table" will refer to the proprietary process for determining the specific trading venues to which the Trading System routes orders and the order in which it routes them. The Exchange reserves the right to maintain a different Trading System routing table for different routing options and to modify the Trading System routing table at any time without notice.

Proposed Exchange Rule 2617(b)(6) sets forth the priority of routed orders and provides that orders routed by the Trading System to other Trading Centers are not ranked and maintained in the PEARL Equities Book pursuant to proposed Exchange Rule 2616, and therefore are not available for execution against incoming orders and Aggressing Orders pursuant to proposed Exchange Rule 2617(a), described above. Once routed by the Trading System, an order becomes subject to the rules and procedures of the destination Trading Center. The request to cancel an order routed to another Trading Center will not be processed unless and until all or a portion of the order returns unexecuted. For an order that is partially routed to another Trading Center on

The Exchange will file a proposed rule change with the Commission pursuant to Section 19(b) of the Exchange Act prior to offering additional routing options.

arrival, the portion that is not routed is assigned a timestamp. If any unexecuted portion of the order returns to the PEARL Equities Book and joins any remaining resting portion of the original order, the returned portion of the order is assigned the same timestamp as the resting portion of the order. If the resting portion of the original order has already executed and any unexecuted portion of the order returns to the Exchange Book, the returned portion of the order is assigned a new timestamp. Following the routing process described above, unless the terms of the order direct otherwise, any unfilled portion of the order shall be ranked in the PEARL Equities Book in accordance with the terms of such order under proposed Exchange Rule 2616 and such order shall be eligible for execution under proposed Exchange Rule 2617.

Risk Settings and Trade Risk Metrics. The Exchange also proposes to offer to all Users of PEARL Equities the ability to establish certain risk control parameters that are intended to assist Users in managing their market risk. The proposed risk controls are set forth under proposed Exchange Rule 2618(a) and are based on those of other equity exchanges. ⁸⁰ The proposed risk controls are designed to offer Users protection from entering orders outside of certain size and price parameters, as well as selected order type and modifier combinations. The proposed risk controls are also designed to offer Users protection from the risk of duplicative executions.

In addition to the proposed risk settings described above, the Exchange proposes to offer risk functionality that permits Users to block new orders, to cancel all open orders, or to both block new orders and cancel all open orders. Furthermore, the Exchange proposes to offer risk

⁷⁹ See NYSE Rule 7.36(f)(1)(B).

See Interpretation and Policy .01 to BYX and BZX Rules 11.13, and Interpretation and Policy .01 to EDGA and EDGX Rules 11.10. See also IEX Rule 11.190(f).

functionality that automatically cancels a User's orders to the extent the User loses its connection to PEARL Equities.

Like other equity exchanges, the Exchange proposes to also offer Purge Ports, which will be a dedicated port that permits a User to simultaneously cancel all or a subset of its orders across multiple logical ports by requesting the Exchange to effect such cancellation. A User initiating such a request may also request that the Exchange block all or a subset of its new inbound orders across multiple logical ports. The block will remain in effect until the earlier of the time at which the User requests the Exchange remove the block or the end of the current trading day.

In particular, the risk control parameters will be useful to Equities Market Makers, who are required to continuously quote in the Equity Securities to which they are assigned. Though the proposed risk controls will be most useful to Equities Market Makers, the Exchange proposes to offer the functionality to all participant types.

In addition to the optional risk control parameters described above, the Exchange proposes to prevent all incoming orders, including those marked ISO, from executing at a price outside the Trading Collar price range.⁸¹ The Trading Collar functionality will not apply to orders eligible for execution during the Opening Process proposed under Exchange Rule 2615. The Trading Collar functionality will be described in proposed Exchange Rule 2618(b). Like other equity exchanges,⁸² the Trading Collar will prevent buy orders from trading or routing at prices above the collar and prevents sell orders from trading or routing at prices below the collar.

The Exchange will apply the proposed Trading Collar price ranges during continuous trading including times when the market for a security is crossed.

^{82 &}lt;u>See</u> IEX Rule 11.190(f).

The Trading Collar price range will be calculated using the greater of numerical guidelines for clearly erroneous executions under proposed Exchange Rule 2621 or a specified dollar value established by the Exchange. One difference from other equity exchanges, for Market Orders only, the Exchange proposes to allow Users to select a dollar value lower than the Exchange specified percentages and dollar values on an order by order basis. In such case, the dollar value selected by the User will override the Exchange's default percentage and dollar values.

Allowing Users to select a dollar value lower than the Exchange specified percentages and dollar values for their Market Orders provides Users with the ability to augment their risk settings to levels that are commensurate with their risk appetite.

Executions will be permitted at prices within the Trading Collar price range, inclusive of the boundaries. Upon entry, any portion of an order to buy (sell) that will execute, post, or route at a price above (below) the Trading Collar Price will be cancelled.

The Trading Collar price range will be calculated based on a Trading Collar Reference Price. The Exchange proposes a sequence of prices to determine the Trading Collar Reference Price to be used if a certain reference price is unavailable. The Exchange will first utilize the consolidated last sale price disseminated during the Regular Trading Hours on trade date as the Trading Collar Reference Price. If not available, the prior day's Official Closing Price identified as such by the primary listing exchange, adjusted to account for events such as corporate actions and news events will be used. If neither are available to use as the Trading Collar Reference Price, the Exchange will suspend the Trading Collar function, in the interest of maintaining a fair and orderly market in the impacted security.

The Exchange will calculate the Trading Collar price range for a security by applying the Numerical Guideline and reference price to the Trading Collar Reference Price. The result is

added to the Trading Collar Reference Price to determine the Trading Collar Price for buy orders, while the result is subtracted from the Trading Collar Reference Price to determine the Trading Collar Price for sell orders. The Trading Collar Price for an order to buy (sell) that is not in the minimum price variation ("MPV") for the security, as defined in Exchange Rule 2616, will be rounded down (up) to the nearest price at the applicable MPV. The appropriate Trading Collar Price is applied to all orders upon entry. Unlike IEX, the Trading Collar Price is not enforced throughout the life of the order and will not be updated once the order is resting on the PEARL Equities Book.

As stated above, the Trading Collar price range will be calculated using the greater of numerical guidelines for clearly erroneous executions under proposed Exchange Rule 2621 or a specified default dollar value established by the Exchange. The Numerical Guideline to be used in the Trading Collar Price calculation are set forth in the following table.

Trading Collar Reference Price	Regular Trading Hours Numerical
	Guidelines
Greater than \$0.00 up to and including	10%
\$25.00	
Greater than \$25.00 up to and including	5%
\$50.00	
Greater than \$50.00	3%

The Exchange proposes to utilize dollar values in addition to the above percentages to ensure that the Trading Collars do not necessarily constrict the Trading Collars for low priced securities. The Exchange does not propose to specify its default dollar values in proposed

Exchange Rule 2621, but rather to post these values on its website. ⁸³ The Exchange believes not including the specified dollar values in its Rules will enable it to modify these values in response to changing market conditions, but in no event will the Exchange adjust these dollar values intraday. In all circumstances, the Exchange will announce in advance any changes to the specified dollar value via a Regulatory Circular to be distributed to all Equity Members and via its website. As noted above, Users who find the Exchange's specified dollar values as too great can select a dollar value lower for their Market Orders on an order-by-order basis.

Clearly Erroneous Executions. The Exchange proposes to adopt Exchange Rule 2621 regarding clearly erroneous executions, which will be identical in all material respects to the standardized rules of other equity exchanges governing clearly erroneous executions.⁸⁴

LULD Plan and Trading Halts.

Market-Wide Circuit Breakers. The Exchange proposes to adopt Rule 2622, paragraphs (a) through (d) of which provides for the market-wide circuit breaker pilot program and be identical to that of other equity exchanges. Proposed Exchange Rule 2622(a) - (d) will operate on a pilot basis set to expire at the close of business on October 18, 2020 and will be identical in all material respects to the standardized market-wide circuit breaker rules of other equity exchanges. If the pilot is not either extended or approved permanently at the end of the pilot

The Exchange notes that the Cboe Equity Exchanges post their dollar values on their website, rather than their rules. See page 9 of the Cboe US Equities/Options Web Port Controls Specification available at https://cdn.batstrading.com/resources/membership/bats web portal port controls specification.pdf.

See IEX Rule 11.270, Clearly Erroneous Executions.

⁸⁵ See IEX Rule 11.280, BYX and BZX Rules 11.18, and EDGA and EDGX Rules 11.16.

period, the Exchange shall amend proposed Exchange Rule 2622 to be consistent with similar rules of other equity exchanges.

LULD Plan Compliance. Proposed Exchange Rule 2622(e) sets forth the Exchange's mechanism for complying with the LULD Plan and is identical in all material respects to the rules of other equities exchanges. ⁸⁶ In sum, proposed Exchange Rule 2622(e) states that the Exchange is a Participant in the LULD Plan and requires that Equity Members comply with the LULD Plan's provisions.

Proposed Exchange Rule 2622(e) also describes the Exchange's order handling procedures to comply with the LULD Plan. In sum, depending on a User's instructions, the System will re-price and/or cancel buy (sell) interest that is priced or could be executed above (below) the Upper (Lower) Price Band. When re-pricing resting orders because such orders are above (below) the Upper (Lower) Price Band, the Exchange will provide new timestamps to such orders. The Exchange will also provide new timestamps to resting orders at the less aggressive price to which such orders are re-priced. Like other equity exchanges, any resting interest that is re-priced pursuant to proposed Exchange Rule 2622(e) will maintain priority ahead of interest that was originally less aggressively priced, regardless of the original timestamps for such orders.

The System will only execute Market Orders or orders that include a time-in-force of IOC at or within the LULD Price Bands. The Exchange proposes to re-price limit-priced interest

See BYX and BZX Rule 11.18(e), and EDGA and EDGX Rule 11.16(e). See also IEX Rule 11.280.

See <u>supra</u> note 5. The Exchange intends to become a Participant in the LULD Plan prior to launching PEARL Equities.

As proposed, only limit priced interest with a time-in-force of RHO may rest on the PEARL Equities Book.

that is priced outside of the LULD Price Bands as follows: limit-priced interest to buy (sell) that is priced above (below) the Upper (Lower) Price Band will be re-priced to the Upper (Lower) Price Band. The System will re-price resting limit-priced interest to buy (sell) to the Upper (Lower) Price Band if Price Bands move such that the price of resting limit-priced interest to buy (sell) would be above (below) the Upper (Lower) Price Band. If the Price Bands move again and a User has opted into the Exchange's optional multiple price sliding process, as described in proposed Exchange Rule 2614(g)(1)(C), the System shall re-price such limit-priced interest to the most aggressive permissible price to the order's limit price. Otherwise, the order will not be re-priced again. All other displayed and non-displayed limit interest repriced pursuant to proposed Exchange Rule 2622(e) will remain at its new price unless the Price Bands move such that the price of resting limit-priced interest to buy (sell) would again be above (below) the Upper (Lower) Price Band. Limit-priced interest priced above (below) the Upper (Lower) Price Band will be cancelled if the User elected that the order not be re-priced pursuant to the above described process.

The Exchange will not route buy (sell) interest at a price above (below) the Upper (Lower) Price Band. During a Short Sale Period, as defined in proposed Exchange Rule 2614(g)(3)(A), short sale orders not marked short exempt priced below the Lower Price Band shall be repriced to the higher of the Lower Price Band or the Permitted Price, as defined in proposed Exchange Rule 2614(g)(3)(A).

At the end of the Trading Pause (as defined in the LULD Plan), the Exchange will reopen the security in a manner similar to its opening procedures set forth in proposed Exchange Rule 2615, described above. On the occurrence of any trading halt pursuant to proposed marketwide circuit breaker mechanism or LULD Plan, all outstanding orders in the System will remain on the PEARL Equities Book, unless the User has designated that its orders be cancelled.

Proprietary Market Data. The Exchange will offer two standard proprietary market data products for PEARL Equites, the Top of Market feed and the Depth of Market feed. Each of these proprietary market data products are described in proposed Exchange Rule 2625.

Proposed Exchange Rule 2625(a) provides that the Depth of Market feed is a data feed that contains the displayed price and size of each order in an Equity Security entered in the Trading System, as well as order execution information, order cancellations, order modifications, order identification numbers, and administrative messages. Proposed Exchange Rule 2625(b) provides that the Top of Market Feed is a data feed that contains the price and aggregate size of displayed top of book quotations, order execution information, and administrative messages for Equity Securities entered into the Trading System. 90

The Exchange will also offer historical data for PEARL Equities upon request. As such, proposed Exchange Rule 2625(c) provides that Historical Data is a data product that offers historical equity security data for orders entered into the System upon request. 91

Retail Order Attribution Program. As described above, the Exchange proposes to allow Users to attach an "Attributable" instruction to their displayed orders so that their MPID is included with their order on the Exchange's proprietary market data feeds. The Exchange also

The description of the Depth of Market feed under proposed Exchange Rule 2625(a) is based on EDGA Rule 13.8(a), EDGX Rule 13.8(a), and IEX Rule 11.330(a)(3).

The description of the Top of Market feed under proposed Exchange Rule 2625(b) is based on EDGA Rule 13.8(c), EDGX Rule 13.8(c), and IEX Rule 11.330(a)(1).

The description of Historical Data under proposed Exchange Rule 2625(b) is based on BYX Rule 11.22(h), BZX Rule 11.22(h), and IEX Rule 11.330(a)(5).

proposes to offer another form of attribution to Equity Members that qualify as Retail Member Organizations ("RMOs") (defined below). In sum, under the proposed Retail Order Attribution Program ("Program"), RMOs will be able to designate that their Retail Orders (defined below) be identified as "Retail", rather than by their MPID, on the Exchange's proprietary data feeds. ⁹² Proposed Exchange Rule 2626(f) describes the Retail Order Attribution and provides that RMOs may designate that their Retail Orders be identified as Retail on an order-by-order basis.

Proposed Exchange Rule 2626(a) sets forth definitions applicable to the Program. Retail Member Organization or RMO is be defined as "an Equity Member (or a division thereof) that has been approved by the Exchange under this Rule to submit Retail Orders." A "Retail Order" is defined as an agency or riskless principal order that meets the criteria of FINRA Rule 5320.03 that originates from a natural person and is submitted to the Exchange by a Retail Member Organization, provided that no change is made to the terms of the order with respect to price or side of market and the order does not originate from a trading algorithm or any other computerized methodology.

Proposed Exchange Rule 2626(b) through (d) sets forth the qualification and application process for Equity Members to become RMOs and participate in the Program, how an Equity Member's RMO status may be revoked, and the process to appeal a denial or revocation of RMO status.

The Exchange's proposed Retail Order Attribution Program is substantially similar to EDGX Rule 11.21, with the only differences being that (1) proposed Exchange Rule 2622(e) will not provide for dedicated ports for Retail Orders, (2) Exchange Rule 2626(e) will be marked "Reserved" and not account for dedicated retail order ports as is done on EDGX, and (3) Exchange Rule 2626(f) will not account for Retail Priority Orders, as this functionality would not be offered by PEARL Equites.

Proposed Exchange Rule 2626(b) sets forth the RMO qualification and application process. To qualify as an RMO, an Equity Member must conduct a retail business or route retail orders on behalf of another broker-dealer. For purposes of this Exchange Rule, conducting a retail business shall include carrying retail customer accounts on a fully disclosed basis.

To become a Retail Member Organization, a Member must submit: (A) an application form; (B) supporting documentation, which may include sample marketing literature, website screenshots, other publicly disclosed materials describing the Equity Member's retail order flow, and any other documentation and information requested by the Exchange in order to confirm that the applicant's order flow will meet the requirements of the Retail Order definition; and (C) an attestation, in a form prescribed by the Exchange, that substantially all orders submitted as Retail Orders will qualify as such under this Exchange Rule.

After an applicant submits the application form, supporting documentation, and attestation, the Exchange shall notify the applicant of its decision in writing. A disapproved applicant may: (A) request an appeal of such disapproval by the Exchange as provided in proposed Exchange Rule 2626(d), described below; and/or (B) reapply for RMO status 90 days after the disapproval notice is issued by the Exchange. An RMO may voluntarily withdraw from such status at any time by giving written notice to the Exchange.

An RMO must have written policies and procedures reasonably designed to assure that it will only designate orders as Retail Orders if all requirements of a Retail Order are met. Such written policies and procedures must require the Equity Member to: (i) exercise due diligence before entering a Retail Order to assure that entry as a Retail Order is in compliance with the requirements of this Exchange Rule, and (ii) monitor whether orders entered as Retail Orders meet the applicable requirements. If an RMO does not itself conduct a retail business but routes

Retail Orders on behalf of another broker-dealer, the RMO's supervisory procedures must be reasonably designed to assure that the orders it receives from such other broker-dealer that are designated as Retail Orders meet the definition of a Retail Order. The RMO must: (i) obtain an annual written representation, in a form acceptable to the Exchange, from each other broker-dealer that sends the RMO orders to be designated as Retail Orders that entry of such orders as Retail Orders will be in compliance with the requirements of this Exchange Rule; and (ii) monitor whether Retail Order flow routed on behalf of such other broker-dealers meets the applicable requirements.

Proposed Exchange Rule 2626(c) states that if an RMO designates orders submitted to the Exchange as Retail Orders and the Exchange determines, in its sole discretion, that such orders fail to meet any of the requirements set forth in proposed Exchange Rule 2626(a) described above, the Exchange may disqualify an Equity Member from its status as an RMO. The Exchange shall determine if and when an Equity Member is disqualified from its status as an RMO. When disqualification determinations are made, the Exchange shall provide a written disqualification notice to the Equity Member.

Exchange Rule 2626(d) provides for an appeal process for RMOs that are disqualified or denied RMO status. An RMO that is disqualified under proposed Exchange Rule 2626(c) may appeal the disqualification, and/or reapply for RMO status 90 days after the date of the disqualification notice from the Exchange. If an Equity Member disputes the Exchange's decision to disapprove its RMO application or disqualify it as an RMO, the Equity Member ("appellant") may request, within five business days after notice of the decision is issued by the Exchange, that the Retail Attribution Panel (the "Panel") review the decision to determine if it was correct. The Panel will consist of the Exchange's Chief Regulatory Officer ("CRO"), or a

designee of the CRO, and two officers of the Exchange designated by the Chief Information Officer ("CIO"). The Panel will review the facts and render a decision within the time frame prescribed by the Exchange and may overturn or modify an action taken by the Exchange under proposed Exchange Rule 2626. A determination by the Panel shall constitute final action by the Exchange.

Miscellaneous Rules based on other Equity Exchanges. The Exchange also proposes to adopt the following rules, which are identical in all material respects to those of other equities exchanges: Rule 2619, Trade Reporting and Execution, ⁹³ Rule 2620, Clearance and Settlement, Anonymity, ⁹⁴ Rule 2623, Short Sales, ⁹⁵ and Rule 2624, Locking or Crossing Quotations in NMS Stocks. ⁹⁶

Conduct and Operational Rules for Equity Members

The Exchange proposes to adopt rules that are identical in all material respects to the approved rules of other equity exchanges, ⁹⁷ including rules covering similar subject matter as existing Exchange Rules and, the Exchange's affiliate, Miami International Securities Exchange,

See BYX and BZX Rules 11.14, and EDGA and EDGX Rules 11.12.

See BYX and BZX Rules 11.15, and EDGA and EDGX Rules 11.13. See also IEX Rule 11.250.

^{95 &}lt;u>See BYX and BZX Rules 11.19. See also IEX Rule 11.290.</u>

See BYX and BZX Rules 11.20. See also IEX Rule 11.310.

See, e.g., IEX Chapter 3 (Rules of Fair Practice), Rule 4.200 (Margin), Chapter 5 (Supervision), Chapter 6 (Miscellaneous Provisions), and Chapter 10 (Trading Practice Rules). The Exchange will request an exemption from the rule filing requirements of Section 19(b) of the Exchange Act for those rules of another self-regulatory organization ("SRO") that it proposes to incorporate by reference and to the extent such rules are effected solely by virtue of a change to any of those rules.

LLC ("MIAX") applicable to options. ⁹⁸ Thus, the Exchange proposes to adopt rules regarding: Rules of Fair Practice (Chapter XXI), Books, Records, and Reports (Chapter XXII), Supervision (Chapter XXIII), Margin (Chapter XXIV), Chapter XXVII (Trading Practice Rules), and other miscellaneous provisions (Chapter XXVIII). At times, certain proposed Rules for PEARL Equities cross reference an existing Exchange Rule applicable to options where the subject matter is either identical or substantially similar. In other cases, the Exchange proposes to adopt a standalone Rule for PEARL Equities where an existing Exchange Rule for options contained terminology specific for options trading.

The Exchange notes that certain requirements that will be applicable to Equity Members are contained in other sections of the Exchange's existing Rules. For example, the Exchange has included rules regarding equity participation into proposed Exchange Rule 2000, but also proposed to include references to applicable registration requirements that are already contained in Chapter II of the Exchange's existing Rules.

Unlisted Trading Privileges

The Exchange proposes to adopt Chapter XXIX regarding securities traded pursuant to unlisted trading privileges and setting standards for certain equity derivative securities that are identical to the rules of equity exchanges. Proposed Exchange Rule 2900, Unlisted Trading Privileges, provide that the Exchange may extend unlisted trading privileges ("UTP") to any

Under the proposed rules for PEARL Equities, the Exchange incorporated by reference an existing Exchange rule applicable options where that rule did not solely incorporate a rule of the Exchange's affiliate, MIAX, by reference, but also included substantive requirements. In the case where an existing Exchange Rule applicable to options incorporated by reference a MIAX Rule, the Exchange proposed a rule for equities that directly incorporated the same MIAX rule by reference.

^{99 &}lt;u>See, e.g.</u>, proposed MEMX Rule 14.1. <u>See also BYX, EDGA, and EDGX Rules 14.1.</u>

NMS Stock that is listed on another national securities exchange or with respect to which UTP may otherwise be extended in accordance with Section 12(f) of the Exchange Act and any such security shall be subject to all Exchange rules applicable to trading on the Exchange, unless otherwise noted.

Any UTP security that is a UTP Exchange Traded Product, as defined in proposed Exchange Rule 1901, will be subject to the additional following requirements set forth in proposed Exchange Rule 2900 and based on the rules of other equity exchanges.

Proposed Exchange Rule 2900(b)(1) provides that the Exchange will distribute an information circular prior to the commencement of trading in each such UTP Exchange Traded Product that generally includes the same information as is contained in the information circular provided by the listing exchange, including (a) the special risks of trading the new Exchange Traded Product, (b) the Exchange Rules that will apply to the new Exchange Traded Product, and (c) information about the dissemination of value of the underlying assets or indices.

Proposed Exchange Rule 2900(b)(2) sets forth requirements regarding the product's description and applies only to UTP Exchange Traded Products that are the subject of an order by the Commission exempting such series from certain prospectus delivery requirements under Section 24(d) of the Investment Company Act of 1940 and are not otherwise subject to prospectus delivery requirements under the Securities Act of 1933.

The Exchange will inform Equity Members of the application of the provisions of proposed Exchange Rule 2900(b)(2)(B) to UTP Exchange Traded Products by means of an information circular. Proposed Exchange Rule 2900(b)(2)(B) requires that Equity Members provide each purchaser of UTP Exchange Traded Products a written description of the terms and characteristics of those securities, in a form approved by the Exchange or prepared by the open-

ended management company issuing such securities, not later than the time a confirmation of the first transaction in such securities is delivered to such purchaser. In addition, Equity Members will include a written description with any sales material relating to UTP Exchange Traded Products that is provided to customers or the public. Any other written materials provided by an Equity Member to customers or the public making specific reference to the UTP Exchange Traded Products as an investment vehicle must include a statement substantially in the following form:

"A circular describing the terms and characteristics of [the UTP Exchange Traded Products] has been prepared by the [open-ended management investment company name] and is available from your broker. It is recommended that you obtain and review such circular before purchasing [the UTP Exchange Traded Products]."

An Equity Member carrying an omnibus account for a non-Member is required to inform such non-Member that execution of an order to purchase UTP Exchange Traded Products for such omnibus account will be deemed to constitute an agreement by the non-Member to make such written description available to its customers on the same terms as are directly applicable to the Equity Member under this Rule.

Proposed Exchange Rule 2900(b)(2)(C) provides that upon request of a customer, an Equity Member will also provide a prospectus for the particular UTP Exchange Traded Product.

Proposed Exchange Rule 2900(b)(3) governs trading halts and provides that the Exchange will halt trading in a UTP Exchange Traded Product as provided for in proposed Exchange Rule 2622. Nothing in proposed Exchange Rule 2900(b)(3) is intended to limit the power of the Exchange under the Rules or procedures of the Exchange with respect to the

Exchange's ability to suspend trading in any securities if such suspension is necessary for the protection of investors or in the public interest.

Proposed Exchange Rule 2900(b)(4) sets forth restriction on Equity Members acting as Equities Market Makers on the Exchange in a UTP Exchange Traded Product that derives its value from one or more currencies, commodities, or derivatives based on one or more currencies or commodities, or is based on a basket or index composed of currencies or commodities (collectively, "Reference Assets"):

First, Equities Market Makers must file with the Exchange, in a manner prescribed by the Exchange, and keep current a list identifying all accounts for trading the underlying physical asset or commodity, related futures or options on futures, or any other related derivatives (collectively with Reference Assets, "Related Instruments"), which the Equity Member acting as a registered Equites Market Maker on the Exchange may have or over which it may exercise investment discretion. No Equities Market Maker will be permitted to trade in the underlying physical asset or commodity, related futures or options on futures, or any other related derivatives, in an account in which an Equity Member acting as a registered Equities Market Maker on the Exchange, directly or indirectly, controls trading activities, or has a direct interest in the profits or losses thereof, which has not been reported to the Exchange as required by proposed Exchange Rule 2900.

Second, an Equities Market Maker on the Exchange will, in a manner prescribed by the Exchange, be required to file with the Exchange and keep current a list identifying any accounts ("Related Instrument Trading Accounts") for which Related Instruments are traded: (i) in which the Equities Market Maker holds an interest; (ii) over which it has investment discretion; or (iii) in which it shares in the profits and/or losses. An Equities Market Maker on the Exchange will

not be permitted to have an interest in, exercise investment discretion over, or share in the profits and/or losses of a Related Instrument Trading Account that has not been reported to the Exchange as required by proposed Exchange Rule 2900.

Third, in addition to the existing obligations under Exchange rules regarding the production of books and records under proposed Chapter XXII described above, an Equities Market Maker on the Exchange will be required to, upon request by the Exchange, make available to the Exchange any books, records, or other information pertaining to any Related Instrument Trading Account or to the account of any registered or non-registered employee affiliated with the Equities Market Maker on the Exchange for which Related Instruments are traded.

Lastly, proposed Exchange Rule 2900(b)(4) provides that an Equities Market Maker on the Exchange will not use any material nonpublic information in connection with trading a Related Instrument.

Proposed Exchange Rule 2900(b)(5) provides that the Exchange will enter into comprehensive surveillance sharing agreements with markets that trade components of the index or portfolio on which the UTP Exchange Traded Product is based to the same extent as the listing exchange's rules require the listing exchange to enter into comprehensive surveillance sharing agreements with such markets.

Dues, Fees, Assessments, and Other Charges

The Exchange proposes to adopt rules with regard to fees it may charge that are identical or substantially similar to the rules of the Cboe Equity Exchanges and IEX. 100 Proposed

See Chapter 15 of IEX Rules and Chapter 15 of the Rules of each of the Cboe Equity Exchanges. The Exchange will file a separate proposed rule change with the Commission to establish its fee structure.

Exchange Rule 3000(a) will set forth the Exchange's general ability to prescribe dues, fees, assessments and other charges.

Proposed Exchange Rule 3000(b) describes the manner in which the Exchange will assess fees related to Section 31 of the Exchange Act to Member transactions on PEARL Equities. Proposed Exchange Rule 3000(c) provides that the Exchange will provide Equity Members notice of all relevant dues, fees, assessment and other charges and that such notice will be made via the Exchange's website or other reasonable method. Proposed Exchange Rule 3000(d) provides that to the extent the Exchange is charged a fee by a third party that results directly from an Equity Member cross-connecting its trading hardware to the Exchange's System from another Trading Center's system that is located in the same data center as the Exchange, the Exchange will pass that fee on, in full, to the Equity Member. ¹⁰¹

Proposed Exchange Rule 3001 provides that any revenues received by the Exchange from fees derived from its regulatory function or regulatory fines related to PEARL Equities will not be used for non-regulatory purposes or distributed to the stockholder, but rather, shall be applied to fund the legal and regulatory operations of the Exchange (including surveillance and enforcement activities), or, as the case may be, shall be used to pay restitution and disgorgement of funds intended for customers (except in the event of liquidation of the Exchange, in which case Miami International Holdings, Inc. will be entitled to the distribution of the remaining assets of the Exchange). ¹⁰²

Proposed Exchange Rule 3000(d) is based on IEX Rule 15.110(d).

Proposed Exchange Rule 3001 is based on Rule 15.2 of each of the Cboe Equity Exchanges.

Proposed Exchange Rule 3002(a) provides that each Equity Member, and all applicants for registration as such, shall be required to provide a clearing account number for an account at the National Securities Clearing Corporation ("NSCC") for purposes of permitting the Exchange to debit any undisputed or final fees, fines, charges and/or other monetary sanctions or other monies due and owing to the Exchange or other charges pursuant to Exchange Rule 3000, including the Exchange Fee Schedule thereto; Regulatory Transaction Fees pursuant to Exchange Rules 1202 and 1203 to the extent the Exchange were to determine to charge such fees; and fines, sanctions and other charges pursuant to Chapters IX, X, and XI of the Exchange Rulebook which are due and owing to the Exchange. ¹⁰³

Proposed Exchange Rule 3002(b) provides that all disputes concerning fees, dues or charges assessed by the Exchange must be submitted to the Exchange in writing and must be accompanied by supporting documentation. All disputes related to fees, dues or other charges must be submitted to the Exchange no later than sixty (60) days after the date of the monthly invoice. All Exchange invoices are due in full on a timely basis and payable in accordance with proposed Exchange Rule 3002(a). Any disputed amount resolved in the Member's favor will be subsequently credited to the clearing account number for an account at the NSCC.

National Market System Plans

The Exchange will operate as a full and equal participant in the national market system for equity trading established under Section 11A of the Exchange Act, just as its options market participates today. The Exchange is currently a member of the National Market System Plan for

Proposed Exchange Rule 3002 is based on IEX Rule 15.120.

the Selection and Reservation of Securities Symbols. The Exchange will also become a member of the following national market systems plans applicable to the trading of equity securities:

- The National Market System Plan to Address Extraordinary Market Volatility;
- The Joint Self-Regulatory Organization Plan Governing the Collection,
 Consolidation and Dissemination of Quotation and Transaction Information for
 Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privileges
 Basis ("NASDAQ/UTP Plan," "UTP Plan");
- The Second Restatement of the Consolidated Tape Association ("CTA") Plan and the Restated Consolidated Quotation ("CQ") Plan ("CTA/CQ Plans"); and
- The National Market System Plan Establishing Procedures Under Rule 605 of Regulation NMS.

The Exchange expects to participate in those plans on the same terms currently applicable to current members of those plans, and it expects little or no plan impact due to the proposed operation of PEARL Equities is similar to several other existing equity exchanges.

Regulation

The Exchange will leverage many of the structures it established to operate as a national securities exchange in compliance with Section 6 of the Exchange Act. As described in more detail below, there will be three elements of that regulation: (1) the Exchange will join the existing equities industry agreements and establish new agreements, as necessary, pursuant to Section 17(d) of the Exchange Act, as it has with respect to its options market, (2) the Exchange's Regulatory Services Agreement ("RSA") with FINRA will govern many aspects of the regulation and discipline of Members that participate in equities trading, just as it does for

options market regulation, and (3) the Exchange will authorize Equity Members to trade on PEARL Equities and conduct surveillance of equity trading as it does today for options.

Section 17(d) of the Exchange Act and the related Exchange Act rules permit SROs to allocate certain regulatory responsibility to avoid duplicative oversight and regulation. Under Exchange Act Rule 17d-1, the Commission designates one SRO to be the Designated Examining Authority, or DEA, for each broker-dealer that is a member of more than one SRO. The DEA is responsible for the financial aspects of that broker-dealer's regulatory oversight. Because Members also must be members of at least one other SRO, the Exchange will generally not be designated as the DEA for any of its Members.

Rule 17d-2 of the Exchange Act permits SROs to file with the Commission plans under which the SROs allocate among each other the responsibility to receive regulatory reports from, and examine and enforce compliance with specified provisions of the Exchange Act and rules thereunder and SRO rules by, firms that are members of more than one SRO ("common members"). If such plan is declared effective by the Commission, an SRO that is a party to the plan is relieved of regulatory responsibility as to any common member for whom responsibility is allocated under the plan to another SRO. The Exchange will establish 17d-2 Plans for Allocation of Regulatory Responsibilities, including, subject to Commission approval, (i) a plan with FINRA pursuant to which the Exchange and FINRA will agree to allocate to FINRA, with respect to common members, regulatory responsibility for overseeing and enforcing certain applicable laws, rules, and regulations of PEARL Equities, (ii) joining the multi-party plan with FINRA and other national securities exchanges for the surveillance, investigation, and enforcement of common insider trading rules, and (iii) joining the multi-party plan with FINRA and other national securities exchanges for the allocation of regulatory responsibilities with

respect to certain Regulation NMS Rules. In addition, the Exchange will (i) expand its existing RSA with FINRA, pursuant to which FINRA performs various regulatory services on behalf of the Exchange, subject to the Exchange's ultimate responsibility, including the review of membership applications and the conduct of investigations, disciplinary and hearing services, (ii) join the Intermarket Surveillance Group ("ISG"), and (iii) submit a Minor Rule Violation Plan to the Commission under Rule 19d-1(c)(2) of the Exchange Act.

FINRA also currently surveils options trading on behalf of the Exchange pursuant to an existing RSA designed to detect violations of Exchange rules and applicable federal securities laws. This existing RSA will be expanded to provide for FINRA to also surveil equities trading on PEARL Equities on behalf of the Exchange and the Exchange will remain responsible for FINRA's performance under this RSA. The Exchange represents that these procedures are adequate to properly monitor Exchange trading of equity securities and to deter and detect violations of Exchange rules and applicable federal securities laws. The surveillances referred to above generally focus on detecting securities trading outside their normal patterns, which could be indicative of manipulative or other violative activity. When such situations are detected, surveillance analysis follows and investigations are opened, where appropriate, to review the behavior of all relevant parties for all relevant trading violations.

Pursuant to proposed Exchange Rule 2900(b)(5), with respect to securities traded under proposed Chapter 14 of the Exchange Rules pursuant to unlisted trading privileges, the Exchange shall enter into a comprehensive surveillance sharing agreement with markets trading components of the index or portfolio on which shares of an exchange-traded product is based to the same extent as the listing exchange's rules require the listing exchange to enter into a comprehensive surveillance sharing agreement with such markets. FINRA, on behalf of the

Exchange, may obtain information, and will communicate information as needed, regarding trading in the shares of the exchange-traded products, as well as in the underlying exchange-traded securities and instruments with other markets and other entities that are members of ISG. In addition, the Exchange may obtain information regarding trading in such shares and underlying securities and instruments from markets and other entities that are members of ISG or with which the Exchange has in place a comprehensive surveillance sharing agreement. In addition, FINRA, on behalf of the Exchange, is able to access, as needed, trade information for certain fixed income securities held by the Fund reported to FINRA's Trade Reporting and Compliance Engine ("TRACE").

b. <u>Statutory Basis</u>

The Exchange believes that its proposed rule change is consistent with Section 6(b) of the Act¹⁰⁴ and 11A of the Act¹⁰⁵ in general, and furthers the objectives of Sections 6(b)(5)¹⁰⁶ and 11A(a)(1) of the Act¹⁰⁷ in particular, in that it is designed to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest; and are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

¹⁵ U.S.C. 78f(b).

¹⁵ U.S.C. 78k-1.

¹⁵ U.S.C. 78f(b)(5).

¹⁵ U.S.C. 78k-1(a)(1).

As described above, the fundamental premise of the proposal is that the Exchange will operate its equity market in a manner similar to that of other equity exchanges, with a suite of order types and deterministic functionality leveraging the Exchange's existing robust and resilient technology platform. The Exchange believes PEARL Equities will benefit individual investors, equity trading firms, and the equities market generally by providing much needed competition to the existing three dominant exchange groups. The entry of an innovative, cost competitive market such as PEARL Equities will promote competition, spurring existing exchanges to improve their own executions systems and reduce trading costs.

The Exchange proposes to offer a suite of conventional order types and order type modifiers that are designed to provide for an efficient, robust, and transparent order matching process. The basis for a majority of the rules of PEARL Equities are the approved rules of other equity exchanges, which have already been found consistent with the Exchange Act. Therefore, the Exchange does not believe that any of the proposed order types and order type functionality raise any new or novel issues that have not been previously considered by the Commission.

In few instances where the Exchange proposed functionality that differs from that of other equities exchanges, it has done so either to improve upon an existing process, such as in the case of the proposed Opening Process¹⁰⁸ and proposed risk controls,¹⁰⁹ or to adopt functionality to address and maintain a fair and orderly market, such as re-pricing of odd lot sized orders.¹¹⁰

Specifically, the Exchange believes proposed Exchange Rules 2611(b) describing how the Exchange will re-price an odd-lot order removes impediments to and perfect the mechanism

See proposed Exchange Rule 2615.

See proposed Exchange Rules 2614(a)(1)(I) and 2618.

See proposed Exchange Rule 2611.

of a free and open market and a national market system by reducing the potential for an odd lot order to appear on the Exchange's proprietary data feeds as though it is locking or crossing the PBBO. The proposed re-pricing of odd lot orders is also similar to that of other equity exchanges.¹¹¹

The Exchange further believes that the functionality that it proposes to offer is consistent with Section 6(b)(5) of the Act¹¹² because the System is designed to be efficient and its operation transparent, thereby facilitating transactions in securities, removing impediments to and perfecting the mechanisms of a free and open national market system. As noted above, the Exchange's proposed rules, order type functionality, and order matching process are designed to comply with all applicable regulatory requirements, including Regulation NMS, Regulation SHO, and the LULD Plan.

The Exchange believes that the rules of PEARL Equities as well as the proposed method of monitoring for compliance with and enforcing such rules is also consistent with the Exchange Act, particularly Sections 6(b)(1), 6(b)(5) and 6(b)(6) of the Act, which require, in part, that an exchange have the capacity to enforce compliance with, and provide appropriate discipline for, violations of the rules of the Commission and of the exchange. The Exchange has proposed to adopt rules necessary to regulate Equity Members that are nearly identical to the approved rules of other equities exchanges. The Exchange proposes to regulate activity on PEARL Equities in the same way it regulates activity on its options market, specifically through various Exchange

Proposed Exchange Rule 2611 would differ from NYSE Rule 7.38, NYSE Arca Rule 7.38-E, NYSE American Rule 7.38E, and NYSE National Rule 7.38 by re-pricing the odd lot order to buy (sell) to the PBB (PBO) of the Exchange when the PBB (PBO) of the Exchange was previously locked or crossed by an away Trading Center.

¹⁵ U.S.C. 78(f)(5).

¹⁵ U.S.C. 78f(b)(1), 78f(b)(5) and 78f(b)(6).

specific functions, an RSA with FINRA, as well as participation in industry plans, including plans pursuant to Rule 17d-2 under the Exchange Act.

4. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange operates in an intensely competitive global marketplace for transaction services. Relying on its array of services and benefits, the Exchange competes for the privilege of providing market services to broker-dealers. The Exchange's ability to compete in this environment is based in large part on the quality of its trading systems, the overall quality of its market and its attractiveness to the largest number of investors, as measured by speed, likelihood and cost of executions, as well as spreads, fairness, and transparency.

Consolidation amongst U.S. equities exchanges has led to nearly all being owned and operated by three primary exchange groups, ¹¹⁴ thereby diminishing the competitive landscape among equities exchanges. This proposal will enhance competition by allowing the Exchange to leverage its existing robust technology platform to provide a resilient, deterministic, and transparent execution platform for equity securities. The proposed rule change will insert an additional, much needed, competitive dynamic to existing equities landscape by allowing the Exchange to compete with existing equity exchanges on order types, order type functionality, risk controls, and order matching processes.

Currently, 12 of the 14 registered U.S. equity exchanges are owned by three groups: Cboe Holdings, Inc. operates four equities exchanges, BYX, BZX, EDGA, and EDGX; the Intercontinental Exchange Group, Inc. ("ICE") operates five equities exchanges, NYSE, NYSE American, NYSE Arca, NYSE National, and NYSE Chicago; and Nasdaq, Inc. operates three equities exchanges, Nasdaq, Nasdaq Phlx, and Nasdaq BX. IEX and the Long Term Stock Exchange, Inc. ("LTSE") are the only two independently operated equities exchanges. The LTSE has yet to commence operations.

The proposed rule change will reduce overall trading costs and increase price competition, both pro-competitive developments, and will promote further initiative and innovation among market centers and market participants.

5. <u>Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others</u>

No written comments were either solicited or received.

Extension of Time Period for Commission Action

The Exchange does not consent to an extension of the time period for Commission action.

7. <u>Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)</u>

Not applicable.

8. <u>Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission</u>

The proposed rules governing PEARL Equities are based on the rules currently operative on other national securities exchanges that trade equity securities, as cited throughout this proposed rule change. However, as noted above, the text of each of the proposed rules described in this proposal may differ from the rules of the other equity exchanges only to the extent to provide additional specificity and/or to conform the proposed structure of the PEARL Equities rule set. The Exchange also notes differences between its rules and that of other equity exchanges.

Voluntary Termination of Registration as an Equities Market Maker. The Exchange notes that proposed Exchange Rule 2608(b), which governs the potential reinstatement of an Equities Market Maker that accidentally withdraws as an Equities Market Maker, is substantially similar to and based on IEX Rule 11.153. However, unlike the similar IEX rule, the Exchange

has not included the reinstatement limitations as set forth in IEX Rule 11.153(b)(3).

Odd Lots. Proposed Exchange Rule 2611, which sets forth the requirements relating to odd lot trading is substantially similar to and partially based on the rules of other equities exchanges, including, but not limited to, NYSE Rule 7.38, NYSE Arca Rule 7.38-E, NYSE American Rule 7.38E, and NYSE National Rule 7.38. Specifically, the Exchange has proposed paragraphs (b), (b)(1) and (b)(1)(A) of proposed Rule 2611 based on paragraphs (b), (b)(1) and (b)(1)(A) of NYSE Rule 7.38. As noted above, however, proposed paragraphs (b)(1)(B) and (b)(1)(C) of proposed Rule 2611 differ from the NYSE exchanges' rules regarding how the display and working price of an odd-lot order will be adjusted in certain situations. The Exchange proposed that, pursuant to paragraph (b)(1)(B) of proposed Rule 2611, if the limit price of an odd lot order to buy (sell) is at or above (below) the PBO (PBB) of an away Trading Center, it will have a working price equal to the PBO (PBB). The display price will also be adjusted to one minimum price variation lower (higher) than the PBO (PBB). Paragraph (b)(1)(C) of proposed Exchange Rule 2611 provides that if the PBBO is locked or crossed and the limit price of an odd lot order to buy (sell) is above (below) the PBO (PBB) of an away Trading Center, it will have a working and display price equal to the PBB (PBO) of the Exchange. The working and display price of such odd lot order will be adjusted again pursuant to paragraphs (A) and (B) should the PBBO unlock or uncross.

Limit Order Price Protection. Proposed Exchange Rule 2614(a)(1)(I), which governs Limit Order Price Protection, is based on NYSE Rule 7.31(a)(2)(B) and Nasdaq Rule 4757(c), but differs from the NYSE and Nasdaq rules in the reference price calculation. Similar to NYSE Rule 7.31(a)(2)(B) and Nasdaq Rule 4757(c), Limit Orders priced too far away from a specified reference price at the time the order first becomes eligible to trade will be cancelled. A Limit

Order to buy (sell) will be rejected if it is priced at or above (below) a specified percentage away from the following: (1) the PBO for Limit Orders to buy, the PBB for Limit Orders to sell; (2) if the PBO or PBB is unavailable, the consolidated last sale price disseminated during the Regular Trading Hours on trade date; (3) if the PBO, PBB, and a consolidated last sale price are unavailable, the prior day's Official Closing Price identified as such by the primary listing exchange, adjusted to account for events such as corporate actions and news events. This will differ from Limit Order Price Protection offered by Nasdaq Rule 4757(c), which utilizes the NBBO as a reference price, and the NYSE Rule 7.31(a)(2)(B), which utilizes reference prices based on NYSE's corresponding "numerical guideline" percentage set forth in NYSE Rule 7.10(c)(1), Clearly Erroneous Executions. Also unlike Limit Order Price Protection offered by the NYSE and Nasdaq rules, Equity Members will be able to customize the specified percentages on a per session basis. If an Equity Member does not provide PEARL Equities custom dollar and percentage values for their order(s), default specified percentages established by the Exchange will be applied.

Opening Process. Proposed Exchange Rule 2615, which will govern the Opening Process, also differs from BZX, BYX, EDGA and EDGX rules. Unlike BZX Rule 11.24(b), BYX Rule 11.23(b), and EDGA and EDGX Rules 11.7(b), all STP modifiers, as defined in proposed Exchange Rule 2614(f), will be honored during the Opening Process as is done on PEARL Options under Exchange Rule 503. Proposed Rule 2615(c) will describe how the Exchange calculates the midpoint of the NBBO. If the conditions to establish the price of the Opening Process set forth under proposed Exchange Rule 2615(c) do not occur by 9:45:00 a.m. Eastern Time, the PEARL Equities Exchange may conduct a Contingent Open and match all orders eligible to participate in the Opening Process at the midpoint of the then prevailing

NBBO. This differs from the Cboe Equity Exchanges, which do not attempt to match orders at the midpoint to the NBBO in such a situation and rather transition to continuous trading. BZX Rule 11.24(d), BYX Rule 11.23(d), and EDGA and EDGX Rules 11.7(d) provide that orders are handled in time sequence, beginning with the order with the oldest time stamp, and place orders on the book, and such orders are routed, cancelled, or executed in accordance with the terms of the order.

Trading/Routing Collars. Proposed Exchange Rule 2614(a)(2), which will govern Market Orders and Market Order instructions, will also be different from NYSE, Nasdaq and BZX, BYX, EDGX and EDGA rules. The description of Market Orders under proposed Exchange Rule 2614(a)(2) is based on EDGA Rule 11.8(a) and EDGX Rule 11.8(a), and provides that a Market Order is an order to buy (sell) a stated amount of a security that is to be executed at the PBO (PBB) or better upon entry. Further, a Market Order shall not trade through a Protected Quotation. Proposed paragraphs (A) and (B) of proposed Exchange Rule 2614(a)(2) are based on EDGX and EDGA Rule 11.8(a). However, proposed paragraph (C) of proposed Exchange Rule 2614(a)(2) will be different from NYSE, Nasdaq and BZX, BYX, EDGX and EDGA rules. Proposed paragraph (C) provides that a Market Order that is designated as Do Not Route will be cancelled if, upon entry, it cannot be executed on the System in accordance with proposed Rule 2617(a)(4), which will govern order execution and routing. Accordingly, the Exchange proposes that the System will never post a Market Order to the PEARL Equities Book, unlike as is done pursuant to EDGA Rule 11.8(a)(4) and EDGX Rule 11.8(a)(4) (providing for the posting or Market Orders when the NBO (NBB) is greater (less) than the Upper (Lower) Price Band or when an Short Sale Circuit Breaker is in effect), as well as NYSE Rule 7.31(a)(1).

Midpoint Peg Order. Proposed Exchange Rule 2614(a)(3), which will govern Midpoint

Peg Orders and Midpoint Peg Order instructions, also differs from BZX, BYX, EDGX and EDGA equity rules. The description of Midpoint Peg Orders under proposed Rule 2614(a)(3) is based on EDGA Rule 11.8(d), EDGX Rule 11.8(d), NYSE Rule 7.31(d)(3), and NYSE Arca Rule 7.31-E(d)(3). The Exchange, however, is proposing to simplify its initial functionality by not providing Users the ability to elect that the working price of a Midpoint Peg Order to buy (sell) be pegged to a price one minimum price variation higher (lower) than the NBB (NBO) if such price is lower (higher) than the midpoint of the NBBO.

Cancel/Replace Messages. Proposed Exchange Rule 2614(e), which will govern cancel and replace messages for an existing order entered by the User, also differs from BZX, BYX, EDGX and EDGA rules equity rules. The description of the System's proposed cancel and replace messages, as well as the proposed limitations, is based on BZX and BYX Rule 11.9(e), as well as EDGX and EDGA Rule 11.10(e). The difference is that the Exchange proposed not to allow a User to change a Limit Order to a Market Order.

Risk Settings and Trade Risk Metrics. Proposed Rule 2618, which will govern risk settings and trade risk metrics, also differs from IEX's rules. The Numerical Guidelines table used in the Trading Collar Price calculation pursuant to proposed paragraph (b)(1)(D) of proposed Exchange Rule 2618, is based on IEX Rule 11.190. The difference with IEX, but like the practice of the Cboe Equity Exchanges, is that the Exchange will also provide dollar values that will be posted to the Exchange's website, and any changes to the dollar values will be announced in advance via a Regulatory Circular for clearly erroneous executions. Another difference with IEX is that the Exchange proposes that for Market Orders only, a User may select a dollar value other than the specified dollar values on an order by order basis. In such case, the dollar value selected by the User will override specific dollar and percentage values set

forth in the Numerical Guideline table of proposed Exchange Rule 2618.

* * * * *

Finally, the Exchange proposed several minor changes within its proposed rules as compared to the rules of the Cboe Exchanges to correct minor typographical errors and formatting discrepancies.

- 9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act

 Not applicable.
- 10. <u>Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act</u>

Not applicable.

11. Exhibits

- Exhibit 1. Completed notice of proposed rule change for publication in the <u>Federal</u>
 Register.
- Exhibits 2-4. Not applicable.
- Exhibit 5. Text of the proposed rule change.

EXHIBIT 1

SECURITIES AND F	EXCHANGE COMMISSION
(Release No. 34-	; File No. SR-PEARL-2020-03)
, 2020	

Self-Regulatory Organizations: Notice of Filing of a Proposed Rule Change by MIAX PEARL, LLC to Adopt Rules Governing the Trading of Equity Securities

Pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² notice is hereby given that on _______, 2020, MIAX PEARL, LLC ("MIAX PEARL" or "Exchange") filed with the Securities and Exchange Commission ("Commission") a proposed rule change ") a proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. <u>Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed</u> <u>Rule Change</u>

The Exchange proposes to adopt rules to govern the trading of equity securities on the Exchange (referred to herein as "PEARL Equities"). The text of the proposed rule change is available on the Exchange's website at http://www.miaxoptions.com/rule-filings/pearl, at MIAX PEARL's principal office, and at the Commission's Public Reference Room.

II. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change</u>

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

below, of the most significant aspects of such statements.

A. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change</u>

1. <u>Purpose</u>

The Exchange proposes to adopt a series of rules in connection with PEARL Equities, which will be a facility of the Exchange. PEARL Equities will operate an electronic trading system developed to trade equity securities (the "System") leveraging the Exchange's existing robust and resilient technology platform. The fundamental premise of the proposal is that the Exchange will operate its equity market in a manner similar to that of other equity exchanges, with a suite of order types and deterministic functionality that will provide much needed competition to the existing three dominant exchange groups. The proposed functionality for PEARL Equities is similar to that offered by other equity exchanges, such as the Cboe BYX Exchange, Inc., ("BYX"), Cboe BZX Exchange, Inc., ("BZX"), Cboe EDGA Exchange, Inc., ("EDGA"), Cboe EDGX Exchange, Inc. ("EDGX", together with BYX, BZX, and EDGA, the "Cboe Equities Exchanges"), the Investors Exchange LLC ("IEX"), the New York Stock Exchange LLC (NYSE"), NYSE Arca, Inc. ("NYSE Arca"), and the Nasdaq Stock Market LLC ("Nasdaq"). However, other than where described below, the text of each of the proposed rules described in this proposal may differ from the rules of the other equity exchanges to provide additional specificity or to conform to the proposed structure of the PEARL Equities rule set.

The System will provide for the electronic execution of orders in equity securities as described below. All Exchange Members will be eligible to participate in PEARL Equities, provided that the Exchange has specifically authorized them to trade in the System. The System will provide a routing service for orders when trading interest is not available on PEARL Equities, and will comply with all applicable securities laws and regulations, including

Regulation NMS,³ Regulation SHO,⁴ and the Plan to Address Extraordinary Market Volatility (the "LULD Plan").⁵

PEARL Equities Members

The Exchange will authorize any Exchange Member who meets certain enumerated qualification requirements to obtain access to PEARL Equities (any such Member, an "Equity Member"). There will be two basic types of Equity Members: Equity Order Entry Firms ("OEF") and Equities Market Makers. OEFs will be those Equity Members representing orders as agent on PEARL Equities and non-market maker participants conducting proprietary trading as principal. Equities Market Makers are Equity Members registered with the Exchange as Equities Market Makers.

To become an Equities Market Maker, an Equities Member is required to register by filing a registration request with the Exchange pursuant to proposed Exchange Rule 2605.⁶ Registration as an Equities Market Maker will become effective on the day the registration request is submitted to the Exchange. An Equities Market Maker's registration in an issue will be terminated if the market maker fails to enter quotations in the issue within five (5) business days after the market makers registration in the issue becomes effective.

An unlimited number of Equities Market Makers may be registered in each equity security unless the number of Market Makers registered to make a market in a particular equity security should be limited whenever, in the Exchange's judgement, quotation system capacity in

³ 17 CFR 242.600, <u>et seq</u>.

⁴ 17 CFR 242.200, et seq.

See Securities Exchange Act Release Nos. 67091, 77 FR 33498 (June 6, 2012) (File No. 4-631) ("Plan Approval Order") (approving Plan as amended); and 85623, 84 FR 16086 (April 17, 2019) (approving, among other things, the operation of the Plan on a permanent basis).

⁶ Proposed Exchange Rule 2605 is substantially similar to IEX Rule 11.150.

an equity security is not sufficient to support additional Market Makers in such equity security.

The Exchange will not restrict access in any particular equity security until such time the Exchange has submitted objective standards for restricting access to the Commission for its review and approval.

Equities Market Makers will be required to electronically engage in a course of dealing to enhance liquidity available on PEARL Equities and to assist in the maintenance of a fair and orderly market. Among other things, under proposed Exchange Rule 2606(a)(1),⁷ each Equities Market Maker will have to, on a daily basis, maintain a two-sided market on a continuous basis during regular market hours for each equity security in which it is registered as an Equities Market Maker ("Two-Sided Obligation").

For each equity security in which it is registered, an Equities Market Maker must adhere to the pricing obligations set forth under proposed Exchange Rule 2606(a)(2) during Regular Trading Hours. An Equities Market Maker's pricing obligations shall not commence until the first regular way transaction is reported by the primary listing market for the security, as reported by the responsible single plan processor, and shall be suspended during a trading halt, suspension, or pause, and shall not recommence until after until the first regular way transaction is reported by the primary listing market for the security, as reported by the responsible single plan processor.

Proposed Exchange Rule 2606(a)(3) and (4) require that at the time of entry of bid (sell) interest satisfying the Two-Sided Obligation, the price of the bid (sell) interest shall be not more than the Designated Percentage, lower (higher) than the then current NBB (NBO), or if no NBB (NBO), not more than the Designated Percentage lower (higher) than the last reported sale from

Proposed Exchange Rule 2606 is substantially similar to IEX Rule 11.151, BYX and BZX Rules 11.8(d)(2)(D) and (E) and EDGA and EDGX Rules 11.20(d)(2)(D) and (E).

the responsible single plan processor. In the event that the NBB (NBO) (or if no NBB (NBO), the last reported sale) increases (decreases) to a level that will cause the bid (sell) interest of the Two-Sided Obligation to be more than the Defined Limit lower (higher) than the NBB (NBO) (or if no NBB (NBO), the last reported sale), or if the bid (sell) is executed or cancelled, the Equities Market Maker shall enter new bid (sell) interest at a price not more than the Designated Percentage lower (higher) than the then current NBB (NBO) (or if no NBB (NBO), the last reported sale), or identify to the Exchange current resting interest that satisfies the Two-Sided Obligation.

Proposed Exchange Rule 2606(a)(5) will provide that the NBBO shall be determined by the Exchange in accordance with its procedures for determining protected quotations under Rule 600 under Regulation NMS.

Proposed Exchange Rule 2606(a)(6)⁸ provides that the "Designated Percentage" shall be 8% for Tier 1 NMS Stocks under the LULD Plan, 28% for Tier 2 NMS Stocks under the LULD Plan with a price equal to or greater than \$1.00, and 30% for Tier 2 NMS Stocks under the LULD Plan with a price less than \$1.00, except that between 9:30 a.m. and 9:45 a.m. and between 3:35 p.m. and the close of trading, when Exchange Rule 2622(b) is not in effect, the Designated Percentage shall be 20% for Tier 1 NMS Stocks under the LULD Plan, 28% for Tier 2 NMS Stocks under the LULD Plan with a price equal to or greater than \$1.00, and 30% for Tier 2 NMS Stocks under the LULD Plan with a price less than \$1.00.

Proposed Exchange Rule 2606(a)(7)⁹ provides that the "Defined Limit" shall be 9.5% for Tier 1 NMS Stocks under the LULD Plan, 29.5% for Tier 2 NMS Stocks under the LULD Plan with a price equal to or greater than \$1.00, and 31.5% for Tier 2 NMS Stocks under the LULD

Proposed Exchange Rule 2606(a)(6) is substantially similar to IEX Rule 11.151(a)(6).

Proposed Exchange Rule 2606(a)(7) is substantially similar to IEX Rule 11.151(a)(7).

Plan with a price less than \$1.00, except that between 9:30 a.m. and 9:45 a.m. and between 3:35 p.m. and the close of trading, when Exchange Rule 2622(b) is not in effect, the Defined Limit shall be 21.5% for Tier 1 NMS Stocks under the LULD Plan, 29.5% for Tier 2 NMS Stocks under the LULD Plan with a price equal to or greater than \$1.00, and 31.5% for Tier 2 NMS Stocks under the LULD Plan with a price less than \$1.00.

Proposed Exchange Rule 2606(a)(8) will specify that Equities Market Markers will not be precluded from quoting at price levels that are closer to the NBBO than the levels required by proposed Exchange Rule 2606(a).

Proposed Exchange Rule 2606(a)(9) will specify that the minimum quotation increment for quotations of \$1.00 or above in all Equity Securities shall be \$0.01. The minimum quotation increment in the System for quotations below \$1.00 in Equity Securities shall be \$0.0001. This provision is consistent with proposed Exchange Rule 2612, described below.

Proposed Exchange Rule 2606(a)(10) will provide that the individual Market Participant Identifier ("MPID") assigned to an Equities Market Maker to meet its Two-Sided Obligation pursuant to subparagraph (a)(1) of this Exchange Rule shall be referred to as the Equities Market Maker's "Primary MPID." Equities Market Makers may request the use of additional MPIDs that shall be referred to as "Supplemental MPIDs." An Equities Market Maker that ceases to meet the obligations appurtenant to its Primary MPID in any security shall not be permitted to use a Supplemental MPID for any purpose in that security.

Proposed Exchange Rule 2606(a)(11) provides that Equities Market Makers that are permitted the use of Supplemental MPIDs pursuant to proposed Exchange Rule 2606(a)(10) will be subject to the same rules applicable to the Equities Market Maker's first quotation under its Primary MPID, with one exception: the continuous two-sided quote requirement and excused withdrawal procedures described in proposed Exchange Rule 2607, described below, do not

apply to Equities Market Makers' Supplemental MPIDs. Supplemental MPIDs may be identified to the Exchange as interest to satisfy an Equities Market Maker's two-sided obligation, in which case in order to be satisfactory, the Supplemental MPID's interest must be no more than the Designated Percentage from the NBBO as described and defined in proposed Exchange Rule 2606(a).

Proposed Exchange Rule 2606(b) requires that all quotations and orders to buy and sell entered into the System by Equities Market Makers be firm and automatically executable for their displayed and non-displayed size in the System by all Users. A particular Equities Market Maker's quotations may be cancelled rather than executed if designated with a Self-Trade Prevention ("STP") modifier which is the same as that of an active opposite side order and originating from the same group type as the Equities Market Maker's orders to buy or sell, as set forth in proposed Exchange Rule 2614(f). Notwithstanding the foregoing, Equities Market Makers may not use STP modifiers to evade the firm quotation obligation.

Proposed Exchange Rule 2606(c) provides that in the event that an Equities Market Maker's ability to enter or update quotations is impaired, the Equities Market Maker shall immediately contact Exchange Trading Operations to request the withdrawal of its quotations. In the event that an Equities Market Maker's ability to enter or update quotations is impaired and the Equities Market Maker elects to remain in PEARL Equities, the Equities Market Maker shall execute an offer to buy or sell received from another Equity Member at its quotations as disseminated through the Exchange.

Equities Market Makers receive certain benefits for carrying out their duties. For example, a lender may extend credit to a broker-dealer without regard to the restrictions in Regulation T of the Board of Governors of the Federal Reserve System if the credit is to be used to finance the broker-dealer's activities as a specialist or market maker on a national securities

exchange. Thus, an Equities Market Maker has a corresponding obligation to hold itself out as willing to buy and sell equities for its own account on a regular and continuous basis to justify this favorable treatment. The Exchange believes that the proposed Two-Sided Quotation requirement for all Equities Market Makers is consistent with that typically required of market makers of similar status on other national securities exchanges.

Proposed Exchange Rule 2607 provides for Equites Market Makers to withdraw their quotations. Proposed Exchange Rule 2608 provides for Equities Market Makers to voluntarily terminate their registration with the Exchange. Proposed Exchange Rule 2609 will allow the Exchange to, pursuant to the procedures set forth in Chapter IX, suspend, condition, limit, prohibit or terminate the authority of an Equities Market Maker or Equity Member to enter quotations in one or more authorized securities for violations of applicable requirements or prohibitions. Each of these proposed Exchange Rules are consistent with the rules of other exchanges regarding the withdrawal or suspension of quotations and termination of a market maker's registration.¹⁰

Every Equity Member shall at all times maintain membership in another registered exchange that is not registered solely under Section 6(g) of the Exchange Act or with the Financial Industry Regulatory Authority ("FINRA"). OEFs that transact business with customers must at all times be members of FINRA.

Further, proposed Exchange Rule 2604¹¹ provides that an Equity Member shall maintain

Proposed Exchange Rules 2607, 2608, and 2609 are substantially similar to IEX Rules 11.152, 11.153, and 11.154, respectively, except proposed Exchange Rule 2608(b) does not include the reinstatement limitations as set forth in IEX Rule 11.153(b). See also BYX and BZX Rules 11.5 through 11.8, and EDGA and EDGX Rules 11.17 through 11.20, which similarly do not include the reinstatement limitations as set forth in IEX Rule 11.153(b).

Proposed Exchange Rule 2604 is substantially similar to IEX Rule 11.140 and Rule 11.4 of the Cboe Equity Exchanges.

a list of Authorized Traders ("ATs"), defined below, who may obtain access to the Trading System on behalf of the Equity Member or the Equity Member's Sponsored Participants. The Equity Member shall update the list of ATs as necessary. Equity Members must provide the list of ATs to the Exchange upon request. An Equity Member must have reasonable procedures to ensure that all ATs comply with all Exchange Rules and all other procedures related to the System. An Equity Member must suspend or withdraw a person's status as an AT if the Exchange has determined that the person has caused the Member to fail to comply with the Rules of the Exchange and the Exchange has directed the Equity Member to suspend or withdraw the person's status as an AT. An Equity Member must have reasonable procedures to ensure that the ATs maintain the physical security of the equipment for accessing the facilities of the Exchange to prevent the improper use or access to the systems, including unauthorized entry of information into the systems. To be eligible for registration as an AT of an Equity Member a person must successfully complete the General Securities Representative Examination (Series 7), the Securities Traders Qualification Examination (Series 57), or an equivalent foreign examination module approved by the Exchange, as defined in Interpretation and Policy .09 to Exchange Rule 3100, and any other training and/or certification programs as may be required by the Exchange.

As provided in proposed Exchange Rule 1900, Applicability, existing Exchange Rules applicable to the PEARL options market contained in Chapters I though XVIII of the Exchange Rules will apply to Equity Members unless a specific Exchange Rule applicable to the equities market (Chapters XIX through XXX of the Exchange Rules) governs or unless the context otherwise requires. Equity Members can therefore provide sponsored access to PEARL Equities to a non-Member ("Sponsored Participant") pursuant to Exchange Rule 210, Sponsored Access

to the Exchange, which is specifically set forth in proposed Exchange Rule 2606(a). 12

Proposed Exchange Rule 2606(b) will govern conduct on PEARL Equities and provide that Equity Members and persons employed by or associated with any Equity Member, while using the facilities of PEARL Equities, shall not engage in conduct: (1) inconsistent with the maintenance of a fair and orderly market; (2) apt to impair public confidence in the operations of the Exchange; or (3) inconsistent with the ordinary and efficient conduct of business. Pursuant to the Rules and the arrangements referred to in proposed Exchange Rule 2602, the Exchange may: suspend an Equity Member's access to the System following a warning; or terminate an Equity Member's access to the System by notice in writing. The timing of such notice will depend on the severity of the Equity Member's misconduct.

Definitions

The Exchange proposes to define a series of terms under current Exchange Rule 100 and proposed Exchange Rule 1901, Definitions, which are to be used in proposed Chapters XIX to XXX relating to the trading of equity securities on the Exchange. Each of the terms defined in current Exchange Rule 100 and proposed Rule 1901 are either identical or substantially similar to definitions included in Rule 1.5 of the Cboe Equity Exchanges rules, NYSE Arca Rule 7.36-E(a), or IEX Rule 1.160.

Each of the definitions under proposed Exchange Rule 1901 are as follows:

Aggressing Order. The term "Aggressing Order" shall mean an order to buy (sell) that is
or becomes marketable against sell (buy) interest on the PEARL Equities Book. A
resting order may become an Aggressing Order if its working price changes, if the PBBO

See proposed Exchange Rule 2602(a) (providing that, "[t]he provisions of Rule 210, Sponsored Access to the Exchange, shall be applicable to Equity Members trading on PEARL Equities").

- or NBBO is updated, because of changes to other orders on the PEARL Equities Book, or when processing inbound messages.¹³
- Displayed price. The term "displayed price" shall mean the price at which a Limit Order is displayed, which may be different from the limit price or working price of the order.
- Equities Order Entry Firm. The term "Equities Order Entry Firm", "Order Entry Firm",
 or "OEF", shall mean those Equity Members representing orders as agent on PEARL
 Equities and those non-Equity Market Maker Members conducting proprietary trading.
- Equities Market Maker. The term "Equities Market Maker" shall mean a Member that acts as a Market Maker in Equity Securities, pursuant to Chapter XXVI.
- Equity Member. The term "Equity Member" is a Member authorized by the Exchange to transact business on PEARL Equities.
- Equity Securities. The term "Equity Securities" shall include any equity security defined as such pursuant to Rule 3a11-1 under the Exchange Act.¹⁴
- NBB, NBO and NBBO. With respect to the trading of Equity Securities, the term "NBB" shall mean the national best bid, the term "NBO" shall mean the national best offer, and the term "NBBO" shall mean the national best bid and offer.
- PEARL Equities. The term "PEARL Equities" shall mean PEARL Equities, a facility of MIAX PEARL, LLC.
- PEARL Equities Book. The term "PEARL Equities Book" shall mean the electronic book of orders in Equity Securities maintained by the Trading System.
- Protected NBB, Protected NBO and Protected NBBO. With respect to the trading of

The defined term Aggressing Order is based on NYSE Arca Rule 7.36-E(a)(5).

The defined term Equity Securities is based on NYSE Arca Rule 5.1-E(b)(2).

Equity Securities, the term "Protected NBB" or "PBB" shall mean the national best bid that is a Protected Quotation, the term "Protected NBO" or "PBO" shall mean the national best offer that is a Protected Quotation, and the term "Protected NBBO" or "PBBO" shall mean the national best bid and offer that is a Protected Quotation.

- Protected Bid, Protected Offer and Protected Quotation. With respect to the trading of Equity Securities, the term "Protected Bid" or "Protected Offer" shall mean a bid or offer in a stock that is (i) displayed by an automated trading center; (ii) disseminated pursuant to an effective national market system plan; and (iii) an automated quotation that is the best bid or best offer of a national securities exchange or association. The term "Protected Quotation" shall mean a quotation that is a Protected Bid or Protected Offer.
- Qualified Clearing Agency. The term "Qualified Clearing Agency" means a clearing
 agency registered with the Commission pursuant to Section 17A of the Exchange Act that
 is deemed qualified by the Exchange.
- Registered Broker or Dealer. The term "registered broker or dealer" means any
 registered broker or dealer, as defined in Section 3(a)(48) of the Exchange Act, that is
 registered with the Commission under the Exchange Act.
- Regular Trading Hours. The term "Regular Trading Hours" means the time between 9:30 a.m. and 4:00 p.m. Eastern Time.
- Regular Trading Session. The term "Regular Trading Session" shall mean the time between the completion of the Opening Process or Contingent Open as defined in Exchange Rule 2615 and 4:00 p.m. Eastern Time.
- User. The term "User" shall mean any Member or Sponsored Participant who is authorized to obtain access to the System pursuant to Exchange Rule 2602.
- UTP Exchange Traded Products. The term "UTP Exchange Traded Products" refers to

derivative securities products that are not listed on the Exchange but that trade on the Exchange pursuant to unlisted trading privileges, including the following: Equity Linked Notes, Investment Company Units, Index-Linked Exchangeable Notes, Equity Gold Shares, Equity Index-Linked Securities, Commodity-Linked Securities, Currency-Linked Securities, Fixed-Income Index-Linked Securities, Futures-Linked Securities, Multifactor-Index-Linked Securities, Trust Certificates, Currency and Index Warrants, Portfolio Depository Receipts, Trust Issued Receipts, Commodity-Based Trust Shares, Currency Trust Shares, Commodity Index Trust Shares, Commodity Futures Trust Shares, Partnership Units, Paired Trust Shares, Trust Units, Managed Fund Shares, and Managed Trust Securities.

- UTP Security. The term "UTP Security" shall mean an Equity Security that is listed on a
 national securities exchange other than on the Exchange and that trades on PEARL
 Equities pursuant to unlisted trading privileges.
- Working price. The term "Working price" shall mean the price at which an order is
 eligible to trade at any given time, which may be different from the limit price or display
 price of the order.

The Exchange proposes to define additional terms under current Exchange Rule 100, Definitions, which not only relate to the trading of equity securities, but are currently utilized under the Exchange's existing rules related to options. The proposed definitions under Rule 100 will apply equally to the trading of options and equity securities on the Exchange. These proposed definitions do not alter the meaning of any Exchange Rule related to options. The Exchange simply proposes to adopt definitions of these terms under current Exchange Rule 100 to add clarity to its rules as these terms are applicable to the trading of both types of securities on the Exchange. Each of the proposed definitions under Exchange Rule 100 are as follows:

- Authorized Trader. The term "Authorized Trader" or "AT" shall mean a person who
 may submit orders (or who supervises a routing engine that may automatically submit
 orders) to the Exchange's trading facilities on behalf of his or her Equity Member or
 Sponsored Participant.
- Broker. The term "broker" shall have the same meaning as in Section 3(a)(4) of the Exchange Act.
- Dealer. The term "dealer" shall have the same meaning as in Section 3(a)(5) of the Exchange Act.
- Designated Examining Authority. The term "designated examining authority" shall mean a self-regulatory organization, other than the Exchange, designated by the Commission under Section 17(d) of the Exchange Act to enforce compliance by Equity Members with Exchange Rules.
- Limit price. The term "limit price" shall mean the highest (lowest) specified price at which a Limit Order to buy (sell) is eligible to trade.
- Timestamp. The term "timestamp" shall mean the effective time sequence assigned to an order for purposes of determining its priority ranking.¹⁵
- Trading Center. The term "Trading Center" shall have the same meaning as in Rule 600(b)(82) of Regulation NMS.

Execution System

The proposed equity trading system will leverage the Exchange's current state of the art technology, including its customer connectivity, messaging protocols, quotations and execution engine, order router, data feeds, and network infrastructure. Doing so minimizes the technical

The defined term "timestamp" is based on the definition of "working time" under NYSE Arca Rule 7.36-E(a)(4).

effort required by existing Members to begin trading equity securities on PEARL Equities.

PEARL Equities will operate a fully automated, price/time priority execution model, and offer a suite of conventional order types and deterministic functionality that is designed to provide for an efficient, robust, and transparent order matching process. PEARL Equities will be operated as an "automated market center" within the meaning of Regulation NMS, and in furtherance thereof, will display "automated quotations" within the meaning of Regulation NMS. The proposed model and functionality for PEARL Equities is similar to that offered by other equity exchanges, such as the Cboe Equity Exchanges, IEX, NYSE, NYSE Arca, and Nasdaq. ¹⁶ Any proposed differences are described below and are proposed in response to industry feedback or as a means to improve upon existing functionality offered by other equity exchanges.

Like the Exchange system for options, all trading interest entered into the System will be automatically executable. Orders entered into the System that are to be displayed will either be attributed to the Equity Member or displayed anonymously. The Exchange will become a member of the Depository Trust Company ("DTC"). The System will be linked to DTC for the Exchange to transmit locked-in trades for clearance and settlement.

Hours of Operation. PEARL Equities will begin to accept orders at 7:30 a.m., Eastern Time, as described below. The System will operate between the hours of 9:30 a.m. Eastern Time and 4:00 p.m. Eastern Time, ¹⁷ with all orders being available for execution during that timeframe.

See Chapter 11 of the Cboe Equity Exchanges' Rules, Chapter 11 of the IEX Rules,
 NYSE Rule 7P series, NYSE Arca Rule 7-E series, and Nasdaq 4700 series.

PEARL Equities may close earlier on certain days, such as July 3, the day after Thanksgiving, and December 24.

Units of Trading, Odd and Mixed Lots. Proposed Exchange Rule 2610¹⁸ provides that the unit of trading in stocks is one (1) share. 100 shares constitutes a "round lot," unless specified by the primary listing market to be fewer than 100 shares. Any amount less than a round lot shall constitute an "odd lot," and any amount greater than a round lot that is not a multiple of a round lot shall constitute a "mixed lot."

Proposed Exchange Rule 2611¹⁹ sets forth the requirements relating to odd and mixed lot trading on PEARL Equities. Proposed Exchange Rule 2611(b) further provides that round lot, mixed lot, and odd lot orders are treated in the same manner on the Exchange, provided that, the working and display price of a displayable odd lot order will be adjusted both on arrival and when resting on the PEARL Equities Book. Proposed Exchange Rule 2611(b)(1)(A) reflects standard behavior and provides that if the limit price of an odd lot order to buy (sell) is below (above) the PBO (PBB) of an away Trading Center, it will have a working and display price equal to the limit price.

Proposed Exchange Rule 2611(b)(1)(B) and (C) describes how the Exchange will reprice an odd-lot order to ensure it is not displayed on the Exchange's proprietary data feed at an unexecutable price.²⁰ Proposed Exchange Rule 2611(b)(1)(B) provides that if the limit price of

Proposed Exchange Rule 2610 is based on IEX Rule 11.180, BYX Rule 11.10, BZX Rule 11.10, EDGA Rule 11.6(s), and EDGX Rule 11.6(s).

Proposed Exchange Rule 2611 is substantially similar to NYSE Rule 7.38, NYSE Arca Rule 7.38-E, NYSE American LLC ("NYSE American") Rule 7.38E, and NYSE National, Inc. ("NYSE National") Rule 7.38.

Proposed Exchange Rule 2611 would differ from NYSE Rule 7.38, NYSE Arca Rule 7.38-E, NYSE American Rule 7.38E, and NYSE National Rule 7.38 by re-pricing the odd lot order to buy (sell) to the PBB (PBO) of the Exchange when the PBB (PBO) of the Exchange was previously locked or crossed by an away Trading Center. Like the NYSE exchanges, non-displayed odd lot orders would not be subject to the above re-pricing mechanism and would be re-priced in accordance with the price sliding process for non-displayed orders described below.

an odd lot order to buy (sell) is at or above (below) the PBO (PBB) of an away Trading Center, it will have a working price equal to the PBO (PBB). The display price will also be adjusted to one minimum price variation lower (higher) than the PBO (PBB).

The following example describes the behavior under proposed Exchange Rule 2611(b)(1)(A) and (B). Assume the PBBO of away Trading Centers is \$10.00 (100 shares) by \$10.05 (100 shares) and Exchange's BBO is \$10.01 (500 shares) by \$10.06 (500 shares). A nonroutable displayed Limit Order to buy at \$10.02 (10 shares) is entered ("Order 1"). Because Order 1's limit price is below the PBO of \$10.05 displayed by an away Trading Center, it is posted to the PEARL Equities Book with a working and displayed price of \$10.02, its limit price. The Exchange's BBO remains unchanged. Next, a non-routable displayed Limit Order to buy at \$10.05 (10 shares) is entered ("Order 2"). Because Order 2's limit price equals the PBO of \$10.05 displayed by an away Trading Center, it is posted to the PEARL Equities Book with a working price of \$10.05 and a displayed price of \$10.04, one minimum price variation ("MPV") less than the PBO. The Exchange's BBO remains unchanged. Assume the PBBO of away Trading Centers changes to \$10.00 (100 shares) by \$10.06 (100 shares). To reflect changes in the away PBBO, Order 2's displayed price is updated to \$10.05 and its working price remains unchanged.

Proposed Exchange Rule 2611(b)(1)(C) provides that if the PBBO is locked or crossed and the limit price of an odd lot order to buy (sell) resting on the PEARL Equities Book is above (below) the PBO (PBB) of an away Trading Center, it will have a working and display price equal to the PBB (PBO) of the Exchange, subject to the order's limit price. The working and display price of such odd lot order will be adjusted again pursuant to proposed Exchange Rule 2611(b)(1)(A) and (B) should the PBBO unlock or uncross. Absent this proposed rule, an odd lot bid or offer could be displayed on the Exchange's proprietary data feeds at a price that

appears to cross the PBBO, even if such order would not be eligible to trade at that price.

This following example describes the behavior under proposed Exchange Rule 2611(b)(1)(C) and highlights a proposed difference with similar functionality available on other equity exchanges. Assume the PBBO of away markets is \$10.00 (100 shares) by \$10.02 (100 shares) and further assume there are no orders on the PEARL Equities Book. A non-routable displayed Limit Order to buy at \$9.99 (100 shares) is entered ("Order 1") and is posted to the PEARL Equities Book with a working and displayed price of \$9.99. The PBBO of the Exchange is now \$9.99 (100 shares) by \$0.00. Next, a non-routable displayed Limit Order to buy at \$10.01 (10 shares) is entered ("Order 2") and is posted to the PEARL Equities Book with a working and displayed price of \$10.01. The PBBO of the Exchange remains \$9.99 (100 shares) by \$0.00 because Order 2 is of odd lot size and does not update the PBB. Assume the PBBO of the away markets inverts to become \$10.00 (100 shares) by \$9.99 (100 shares). Order 1 holds its ground at \$9.99 because it is the Exchange's PBB and was locked by an away market. Order 2, however, updates to a display and working price of \$9.99, the Exchange's PBB, instead of PBB of the away markets, which is \$10.00.²¹

Finally, proposed Exchange Rule 2611(b)(2) provides that for an order that is partially routed to an away market on arrival, if any returned quantity of the order joins resting odd lot quantity of the original order and the returned and resting quantity, either alone or together with other odd lot sized orders, will be displayed as a new BBO, both the returned and resting quantity will be assigned a new timestamp in accordance with proposed Exchange Rules 2616, Priority of Orders, and 2617(b)(6), Priority of Routed Orders, both of which are described below.

In such case, the Exchange understands NYSE, NYSE Arca, NYSE American, and NYSE National would price Order 2 to \$10.00, the PBB of the away Trading Center. See NYSE Rule 7.38, NYSE Arca Rule 7.38-E, NYSE American Rule 7.38E, and NYSE National Rule 7.38.

Minimum Quotation and Trading Increments. Quotations and orders entered into the equity trading system will comply with the minimum price increments requirements of Rule 612 of Regulation NMS.²² Proposed Exchange Rule 2612,²³ therefore, provides that bids, offers, or orders in securities traded on the Exchange shall not be made in an increment smaller than: (i) \$0.01 if those bids, offers, or orders are priced equal to or greater than \$1.00 per share; or (ii) \$0.0001 if those bids, offers, or orders are priced less than \$1.00 per share; or (iii) any other increment established by the Commission for any security which has been granted an exemption from the minimum price increments requirements of Rule 612(a) or (b) of Regulation NMS.²⁴

Usage of Data Feeds. Proposed Exchange Rule 2613²⁵ identifies the data feeds that the Exchange will utilize for the handling, execution and routing of orders in Equity Securities, as well as for surveillance necessary to monitor compliance with applicable securities laws and Exchange Rules. The Exchange will use direct feeds as it primary source for BYX, BZX, EDGA, EDGX, Nasdaq, Nasdaq BX, Inc. ("Nasdaq BX"), Nasdaq Phlx LLC ("Nasdaq Phlx"), NYSE, NYSE American, and NYSE Arca. The Exchange will utilize data from the responsible single plan processor as its secondary source of data for these markets. The Exchange will utilize data from the responsible single plan processor as its primary source of data for FINRA's Alternative Display Facility ("ADF"), IEX, the Long Term Stock Exchange, Inc., NYSE Chicago, and NYSE National.

Proposed Exchange Rule 2613(b) provides that the Exchange may adjust its calculation

²² 17 CFR 242.612.

Proposed Exchange Rule 2612 is based on IEX Rule 11.210, BYX Rule 11.11, BZX Rule 11.11, EDGA Rule 11.6(i), and EDGX Rule 11.6(i).

²⁴ 17 CFR 242.612(a) and (b).

Proposed Exchange Rule 2613 is based on BYX Rule 11.26, BZX Rule 11.26, EDGA Rule 13.4, EDGX Rule 13.4, NYSE Rule 7.37(e), and Nasdaq Rule 4759.

of the PBBO and NBBO based on information about orders sent to other venues with protected quotations, execution reports received from those venues, and certain orders received by the Exchange. Proposed Exchange Rule 2619(c) provides that the responsible single plan processor will be the Primary Source of trade and administrative messages such as Limit-up Limit-Down Price Bands, Market-Wide Circuit Breaker decline and status messages, Regulation SHO state messages, halts and resumes, and last sale information.

Time-In-Force Instructions. The proposed System will support two time-in-force instructions, Immediate-or-Cancel ("IOC") and Regular Hours Only ("RHO"). Equity Members entering orders in to the System may designate such orders to remain in force and available for display and/or potential execution for varying periods of time. Unless cancelled earlier, once these time periods expire, the order (or unexecuted portion thereof) is cancelled. A description of the time-in-force instructions available on the System will be described under proposed Exchange Rule 2614(b).

Immediate-or-Cancel ("IOC"). IOC will be a time-in-force instruction that provides for the order to be executed in whole or in part as soon as such order is received. The portion not executed immediately on the Exchange or another Trading Center is treated as cancelled and is not posted to the PEARL Equities Book. Limit Orders with a time-in-force of IOC that are not designated as "Do Not Route" and that cannot be executed in accordance with PEARL Equities Rule 2617(a)(4) on the System when reaching the Exchange will be eligible for routing away pursuant to PEARL Equities Rule 2617(b).

Regular Hours Only ("RHO"). RHO will be a time-in-force instruction that designates the order for execution only during Regular Trading Hours, which includes the Opening Process for Equity Securities.

Order Type Modifiers. The proposed System will support the following conventional

order type modifiers: Do Not Route, Post Only, Displayed, Non-Displayed, Attributable, Non-Attributable, and Intermarket Sweep Orders ("ISO"). ISOs will be described under proposed Exchange Rule 2614(d) and the remaining order type modifiers will be described under proposed Exchange Rule 2614(c). A description of which order types each modifier is compatible with will be set forth under proposed Exchange Rule 2614(a) and is described below. The characteristics and functionality of each of these order type modifiers is identical to what is currently approved for the other equity exchanges. However, as mentioned above, the text of each of the proposed rules may differ from the descriptions of similar functionality in the rules of the other equity exchanges only to the extent to provide additional specificity and/or to conform the proposed structure of the PEARL Equities rule set.

Do Not Route. An order designated as Do Not Route is a non-routable order that will be ranked and executed on the PEARL Equities Book pursuant to proposed Exchange Rule 2616 and proposed Exchange Rule 2617(a)(4) or cancelled.²⁶ Unless otherwise instructed by the User, an order designated as Do Not Route will be subject to the price sliding processes set forth in proposed Exchange Rule 2614(g) described below.

Post Only. An order designated as Post Only is a non-routable order that will be ranked and executed on the PEARL Equities Book pursuant to proposed Exchange Rule 2616 and proposed Exchange Rule 2617(a)(4).²⁷ An order designated as Post Only will only remove liquidity from the PEARL Equities Book when: (A) the order is for a security priced below \$1.00; or (B) the value of such execution when removing liquidity equals or exceeds the value of such execution if the order instead posted to the PEARL Equities Book and subsequently

The Do Not Route modifier is based on the rules of the Cboe Equity Exchanges. <u>See</u> BYX <u>and</u> BZX Rules 11.9(c)(4) <u>and</u> EDGA <u>and</u> EDGX Rules 11.6(n)(3).

The Post Only modifier is based on the rules of the Cboe Equity Exchanges. <u>See BYX and BZX Rules 11.9(c)(6) and EDGA and EDGX Rules 11.6(n)(4).</u>

provided liquidity including the applicable fees charged or rebates paid.²⁸

To determine at the time of a potential execution whether the value of such execution when removing liquidity equals or exceeds the value of such execution if the order instead posted to the PEARL Equities Book and subsequently provided liquidity, the Exchange will use the highest possible rebate paid and highest possible fee charged for such executions on the Exchange.

Like an order designated as Do Not Route, an order designated as Post Only will be subject to the price sliding processes set forth in proposed Exchange Rule 2614(g) described below, unless otherwise instructed by the User.

Displayed. "Displayed" is an instruction a User may attach to an order stating that the order is to be displayed by the System on the PEARL Equities Book. Unless the User elects

https://www.nasdagtrader.com/content/newsalerts/2016/postonlymodifications.pdf.

²⁸ As is the case on Nasdaq, the Cboe Equity Exchanges, and as proposed by Members Exchange, Inc. ("MEMX"), an incoming order designated as Post Only entered with a limit price that would lock or cross a resting contra-side Midpoint Peg Order resting on the PEARL Equities Book may post and display at the locking or crossing price (if the difference in price between the incoming order designated as Post Only and the resting midpoint is less than the forgone net rebate/fee). See EDGA and EDGX Rules 11.6(n)(4), and BYX and BZX Rules 11.9(c)(6) (providing that a Post Only order will remove contra-side liquidity from the book if the order is an order to buy or sell a security priced below \$1.00 or if the value of such execution when removing liquidity equals or exceeds the value of such execution if the order instead posted to the EDGX Book and subsequently provided liquidity, including the applicable fees charged or rebates provided). See proposed MEMX Rule 11.6(1)(2) (proposing to adopt Post Only functionality identical to that of the Cboe Equity Exchanges). See also Nasdaq Rule 4702(b)(4)(A) (providing that if the adjusted price of the Post-Only Order would lock or cross a non-displayed price on the Nasdaq Book, the Post-Only Order will be posted . . .; provided, however, the Post-Only Order will execute if. . . it is priced at \$1.00 or more and the value of price improvement associated with executing against an Order on the Nasdaq Book (as measured against the original limit price of the Order) equals or exceeds \$0.01 per share). If such a lock or cross exists, new incoming orders may remove liquidity against the locked or crossed midpoint orders, but only at a price equal to the NBBO midpoint consistent with the Exchange's proposed price priority scheme under proposed Exchange Rule 2616. See also Nasdaq and BX Post-Only Functionality Modifications, available at

otherwise, all orders eligible to be displayed on the PEARL Equities Book will be automatically defaulted by the System to Displayed.²⁹

Non-Displayed. "Non-Displayed" is an instruction the User may attach to an order stating that any part of the order is not to be displayed by the System on the PEARL Equities Book.³⁰

Attributable. "Attributable" is an instruction to include the User's market participant identifier ("MPID") with an order that is designated for display (price and size) on an Exchange proprietary data feed.

Non-Attributable. "Non-Attributable" is an instruction on an order that is designated for display (price and size) on an Exchange proprietary data feed to display that order on an anonymous basis.³¹

ISOs. ISO is an order instruction that may be attached to an incoming Limit Order. The operation of ISOs will be described in proposed Exchange Rule 2614(d) and is consistent with the description of the ISO exception in Rules 600(b)(30) and 611(b)(5) of Regulation NMS.³² Proposed Exchange Rule 2614(d) provides that the System will accept incoming ISOs (as such term is defined in Rule 600(b)(31) of Regulation NMS). The Exchange does not intend to initially support the outbound routing of orders designated as ISO on behalf of Equity Members. Therefore, proposed Exchange Rule 2614(d) provides that ISOs are not eligible for routing

The Displayed modifier is based on the rules EDGA and EDGX. <u>See EDGA and EDGX</u> Rules 11.6(e)(1).

The Non-Displayed modifier is based on the rules EDGA and EDGX. <u>See EDGA and EDGX Rules 11.6(e)(2).</u>

The Attributable and Non-Attributable modifiers are based on rules of the Cboe Equity Exchanges. See BYX and BZX Rules 11.9(c)(13) and (14), and EDGA and EDGX Rules 11.6(a).

³² 17 CFR 242.600(b)(30), 611(b)(5).

pursuant to Exchange Rule 2617(b).

To be eligible for treatment as an ISO, the order must be: (A) a Limit Order; (B) marked "ISO"; and (C) the User entering the order must simultaneously route one or more additional Limit Orders marked "ISO," as necessary, to away Trading Centers to execute against the full displayed size of any Protected Quotation for the security as set forth below. Such orders, if they meet the requirements of the foregoing sentence, may be immediately executed at one or multiple price levels in the System without regard to Protected Quotations at away Trading Centers consistent with Regulation NMS (i.e., may trade through such quotations and will not be rejected or cancelled if it will lock, cross, or be marketable against an away Trading Center).

An ISO may include a time-in-force of IOC or RHO and the operation of an ISO will differ depending on the time-in-force selected. An ISO that includes a time-in-force of IOC will immediately trade with contra-side interest on the PEARL Equities Book up to its full size and limit price and any unexecuted quantity will be immediately cancelled. An ISO that includes a time-in-force of RHO, if marketable on arrival, will also immediately trade with contra-side interest on the PEARL Equities Book up to its full size and limit price. However, any unexecuted quantity of a RHO ISO will be displayed at its limit price on the PEARL Equities Book and may lock or cross a Protected Quotation that was displayed at the time of arrival of the RHO ISO.³³

A User entering an ISO with a time-in-force of IOC represents that such User has simultaneously routed one or more additional Limit Orders marked "ISO," if necessary, to away Trading Centers to execute against the full displayed size of any Protected Quotation for the

Orders with a time-in-force of Day or RHO both expire at the end of Regular Trading Hours. Because the Exchange will not initially offer a time-in-force of Day, it proposes to handle ISOs with a time-in-force of RHO the same as Day ISOs are handled on other equity exchanges.

security with a price that is *superior to* the ISO's limit price. A User entering an ISO with a time-in-force of RHO makes the same representation but further represents that it simultaneously routed one or more additional Limit Orders marked "ISO," if necessary, to away Trading Centers to execute against the full displayed size of any Protected Quotation for the security with a price that is *equal* to its limit price.

Proposed Exchange Rule 2614(d)(2) specifies that the Exchange will rely on the marking of an order as an ISO order when handling such order, and thus, it is the entering Equity Member's responsibility, not the Exchange's responsibility, to comply with the requirements of Regulation NMS relating to ISOs.

Re-Pricing Mechanisms. Like other equity exchanges, the System proposes to offer repricing mechanisms to Users of PEARL Equities to comply with Rule 610(d) of Regulation NMS and Rule 201 of Regulation SHO. These re-pricing mechanisms are Display Price Sliding, Non-Display Order Price Sliding, and Short Sale Price Sliding. Under Display Price Sliding and Short Sale Price Sliding, Users will be able to select between either single price sliding or multiple price sliding. The Exchange will offer Display Price Sliding (including multiple Display Price Sliding) and Non-Displayed Order Price Sliding (including multiple Non-Displayed Order Price Sliding) to comply with locked/crossed market and trade through restriction of Regulation NMS. The Exchange will offer Short Sale Price Sliding to comply with the tick provisions of Rule 201 of Regulation SHO.

Each of the Exchange's proposed re-pricing mechanisms is identical to functionality on other equity exchanges. However, as mentioned above, the text of each of the proposed rules may differ from the descriptions of similar functionality in the rules of the other equity exchanges only to the extent to provide additional specificity and/or to conform the proposed structure of the PEARL Equities rule set. The Exchange's re-pricing mechanisms will be

described under proposed Exchange Rule 2614(g).

Display Price Sliding. Display Price Sliding is designed to prevent the display of a quotation that would lock or cross an away Trading Center in violation of Rule 610(d) of Regulation NMS.³⁴ Proposed Exchange Rule 2614(g)(1)(A) provides that an order to buy (sell) designated as Displayed that, if displayed at its limit price on the PEARL Equities Book upon entry, would create a violation of Rule 610(d) of Regulation NMS by locking or crossing the PBO (PBB) of an away Trading Center will be assigned a working price equal to the PBO (PBB) and a displayed price one (1) minimum price variation below (above) the current PBO (PBB). A User may elect to have the System only apply the Display Price Sliding Process to the extent a display-eligible order to buy (sell) at the time of entry would create a violation of Rule 610(d) of Regulation NMS by locking the PBO (PBB) of an away Trading Center. For Users that select this order handling, any order to buy (sell) will be cancelled if, upon entry, such order would create a violation of Rule 610(d) of Regulation NMS by crossing the PBO (PBB) of an away Trading Center.

Proposed Exchange Rule 2614(g)(1)(B) provides that an order subject to the Display Price Sliding Process will retain its original limit price irrespective of the working and displayed price assigned to the order. In the event the PBBO changes such that an order to buy (sell) subject to the Display Price Sliding Process would no longer lock or cross the PBO (PBB) of an away Trading Center, the order will receive a new timestamp and will be assigned a working and displayed price at the most aggressive permissible price. All orders that are assigned new

Display Price Sliding would operate identically to Display Price Sliding on the Cboe Equity Exchanges. See BYX and BZX Rules 11.9(g)(1) and EDGA and EDGX Rules 11.6(l)(1)(B). The only difference is that the proposed text describing the operation of Display Price Sliding in proposed Exchange Rule 2614(g)(1) is written to provide additional specificity regarding its operation by, among other things, adding directional references to describe how orders subject to Display Price Sliding are to be handled.

working and displayed prices pursuant to the Display Price Sliding Process will retain their priority as compared to other orders subject to the Display Price Sliding Process based upon the time such orders were initially received by the Exchange. Following the initial ranking and display of an order subject to the Display Price Sliding Process, an order will only be assigned a new working and displayed price to the extent it achieves a more aggressive price, provided, however, that the Exchange will assign an order a working price equal to the displayed price of the order in the event such order's displayed price is locked or crossed by a Protected Quotation of an away Trading Center. Such event will not result in a change in priority for the order at its displayed price.

Proposed Exchange Rule 2614(g)(1)(C) provides that the working and displayed prices of an order subject to the Display Price Sliding Process may be adjusted once or multiple times depending upon the instructions of a User and changes to the prevailing PBBO. Unless otherwise instructed by the User, the System will only adjust the working and displayed prices of an order upon entry and then the displayed price one additional time following a change to the prevailing PBBO. The working and displayed prices of orders subject to the optional multiple price sliding process will be adjusted, as permissible, based on changes to the prevailing PBBO.

Proposed Exchange Rule 2614(g)(1)(D) provides that any display-eligible order to buy (sell) designated as Post Only that locks or crosses the PBO (PBB) displayed by the Exchange upon entry will be executed as set forth in Exchange Rule 2614(c)(2) or cancelled. Depending on User instructions, a display-eligible order to buy (sell) designated as Post Only that locks or crosses the PBO (PBB) displayed by an away Trading Center upon entry will be subject to the Display Price Sliding Process. In the event the PBBO changes such that an order designated as Post Only subject to the Display Price Sliding Process will be assigned a working price at which it could remove displayed liquidity from the PEARL Equities Book, the order will be executed as

set forth in proposed Exchange Rule 2614(c)(2) or cancelled.

Finally, Proposed Exchange Rule 2614(g)(1)(E) provides that orders to buy (sell) designated as Post Only will be permitted to post and be displayed opposite the working price of orders to sell (buy) subject to the Display Price Sliding Process. In the event an order subject to the Display Price Sliding Process is ranked on the PEARL Equities Book with a working price equal to an opposite side order displayed by the Exchange, it will be subject to processing as set forth in proposed Exchange Rule 2617(a)(4).

Non-Displayed Price Sliding. Non-Displayed Price Sliding is designed to avoid potentially trading through Protected Quotations of an away Trading Center in violation of Rule Regulation NMS. 35 Proposed Exchange Rule 2614(g)(2) provides a non-displayed, non-routable order to buy (sell) that, upon entry, would cross the PBO (PBB) of an away Trading Center will be assigned a working price by the System equal to the PBO (PBB). In the event the PBO (PBB) changes such that the working price of a non-displayed, non-routable order to buy (sell) resting on the PEARL Equities Book would again cross the PBO (PBB) of an external market, the working price of the non-displayed order to buy (sell) will be adjusted by the System to be equal to the updated PBO (PBB) and will receive new timestamp. In the event a non-displayed, non-routable order to buy (sell) has been re-priced by the System pursuant to proposed Exchange Rule 2614(g)(2), such non-displayed order to buy (sell) will not be re-priced by the System unless it again crosses the PBO (PBB) of an away Trading Center or it achieves a more

Non-Displayed Price Sliding would operate identically to Non-Displayed Price Sliding on the Cboe Equity Exchanges. See BYX and BZX Rules 11.9(g)(4) and EDGA and EDGX Rules 11.6(l)(3). The only difference is that the proposed text describing the operation of Non-Displayed Price Sliding in proposed Exchange Rule 2614(g)(2) is written to provide additional specificity regarding its operation by, among other things, adding directional references to describe how orders subject to Non-Displayed Price Sliding are to be handled.

aggressive price, due to an update to the PBO (PBB) of an away Trading Center.³⁶ Unlike under Display Price Sliding, non-displayed, non-routable buy (sell) orders will be re-priced not only upon entry, but each time the price of the order crosses the PBO (PBB) of an away Trading Center. This proposed multiple price sliding functionality under Non-Displayed Price Sliding would be mandatory, and not optional behavior.

Short Sale Price Sliding Process. Short Sale Price Sliding is designed to comply with Rule 201 of Regulation SHO by re-pricing short sale orders to a price above the NBB.³⁷

Proposed Exchange Rule 2614(g)(3)(A) provides that a short sale order that, at the time of entry, could not be executed or displayed at its limit price due to a short sale price test restriction under Rule 201 of Regulation SHO ("Short Sale Period") will be assigned a working and displayed price by the System equal to one (1) minimum price variation above the current NBB ("Permitted Price"). Unless otherwise instructed by the User, the System will only adjust the working and displayed price of a short sale order upon entry. To reflect declines in the NBB during a Short Sale Period, a User may elect that the System continue to adjust the working and displayed price of a displayed short sale order to the Permitted Price down to the order's original limit price.

Proposed Exchange Rule 2614(g)(3)(B) provides that in the event the NBB changes during a Short Sale Period such that the working price of a non-displayed short sale order would

Repricing non-displayed orders subject to Non-Displayed Price Sliding to a more aggressive price is consistent with standard functionality and the proposed Display Price Sliding process. This specificity is not included in the rules of the Cboe Equity Exchanges but is in IEX rules. See IEX Rule 11.190(h)(2).

Short Sale Price Sliding would operate identically to Short Sale Price Sliding on the Cboe Equity Exchanges. See BYX and BZX Rules 11.9(g)(5) and EDGA and EDGX Rules 11.6(l)(2). The only difference is that the proposed text describing the operation of Short Sale Price Sliding in proposed Exchange Rule 2614(g)(3) is written to provide additional specificity regarding its operation.

lock or cross the NBB, the order will be assigned a working price by the System equal to the Permitted Price and receive a new timestamp. To reflect changes in the NBB during a Short Sale Period, the System will continue to adjust the working price of a non-displayed short sale order subject to the order's limit price.

Proposed Exchange Rule 2614(g)(3)(C) provides that during a Short Sale Period, a short sale order will be executed and displayed without regard to price if, at the time of initial display of the short sale order, the order was at a price above the then current NBB. Short sale orders that are entered into the Exchange prior to the Short Sale Period but are not displayed will be adjusted to a Permitted Price.³⁸ Proposed Exchange Rule 2614(g)(3)(D) provides that short sale orders marked "short exempt" will not be subject to the Short Sale Price Sliding Process.

Proposed Exchange Rule 2614(g)(3)(E) provides that during a Short Sale Period, a short sale order will be subject to the Short Sale Price Sliding Process, even if such order is also eligible for the Display Price Sliding Process.

Order Types. The proposed System will make available to Equities Members the following three order types: Limit Orders, Market Orders, and Midpoint Peg Orders. A description of the order types available on the System will be described under proposed Exchange Rule 2614(a). Proposed Exchange Rule 2614 provides that order, instruction, and parameter combinations which are disallowed by the Exchange or incompatible by their terms, will be rejected, ignored, or overridden by the Exchange, as determined by the Exchange to facilitate the most orderly handling of User instructions. For example, a Limit Order that includes a time-in-force of IOC and a Post Only instruction will be rejected.

The characteristics and functionality of each of these order types is identical or

^{38 &}lt;u>See NYSE Arca Rule 7.16(f)(6).</u>

substantially similar to what is currently approved for the other equity exchanges. However, as mentioned above, the text of each of the proposed rules may differ from the descriptions of similar functionality in the rules of the other equity exchanges only to the extent to provide additional specificity and to conform the proposed structure of the PEARL Equities rule set.

Limit Orders. Proposed Exchange Rule 2614(a)(1)³⁹ provides that Limit Orders are orders to buy or sell a stated amount of a security at a specified price or better. A "marketable" Limit Order to buy (sell) will trade with all orders to sell (buy) priced at or below (above) the PBO (PBB) for the security. Once no longer marketable, the Limit Order will be ranked on the PEARL Equities Book pursuant to proposed Exchange Rule 2616, described below.

Proposed Exchange Rule 2614(a)(1) will set forth which order type modifiers are compatible with Limit Orders. First, an incoming Limit Order may be designated as ISO. A Limit Order may also be displayed or non-displayed. A Limit Order will be displayed on the PEARL Equities Book unless the User elects that the Limit Order be non-displayed. A Limit Order may be entered as an odd lot, round lot, or mixed lot and include a time-in-force of IOC or RHO. A Limit Order with a time-in-force of RHO is eligible to participate in the Opening Process described under proposed Exchange Rule 2615. A Limit Order is eligible to participate in the Regular Trading Session.

A Limit Order may be designated as Post Only or Do Not Route. Further, a Limit Order that is designated as ISO and includes a time-in-force of RHO may also be designated as Post Only. Unless designated as Post Only or Do Not Route, a marketable Limit Order to buy (sell)

The description of Limit Orders under proposed Exchange Rule 2614(a)(1) is based on EDGA and EDGX Rules 11.8(b).

The Exchange does not propose to offer reserve quantity functionality for Limit Orders at this time. Reserve functionality is commonly understood to allow a Limit Order to have both a displayed and non-displayed quantity. See, e.g., EDGA and EDGX Rules 11.6(m).

will be eligible to be routed away to prices equal to or higher (lower) than the PBO (PBB) pursuant to proposed Exchange Rule 2717(b) only after trading with orders to sell (buy) on the PEARL Equities Book at each price point.

Proposed Rule 2614(a)(1) will also describe default behavior for re-pricing Limit Orders to comply with Rule 610 of Regulation NMS,⁴¹ Rule 201 of Regulation SHO,⁴² and the LULD Plan.⁴³ Each of these re-pricing options are described in detail further below.

To comply with Rule 610 of Regulation NMS, a non-routable Limit Order to buy (sell) that, if displayed at its limit price on the PEARL Equities Book upon entry, would lock or cross the PBO (PBB) of an away Trading Center will be re-priced pursuant to the Display Price Sliding instruction, unless the User affirmatively elects to have the order immediately cancelled. A non-routable Limit Order to buy (sell) with a limit price that would cross the PBO (PBB) of an away Trading Center upon entry will not execute at a price that is higher (lower) than the PBO (PBB).

To avoid potentially trading through the PBBO of an away Trading Center, a non-displayed Limit Order to buy (sell) that, if posted to the PEARL Equities Book, would cross the PBO (PBB) of an away Trading Center will be re-priced pursuant to the Non-Displayed Order Price Sliding Process.⁴⁴

To comply with Rule 201 of Regulation SHO, when a Short Sale Period⁴⁵ is in effect, a

⁴¹ 17 CFR 242.610.

⁴² 17 CFR 242.201.

See supra note 5.

Unlike the Cboe Equity Exchanges, PEARL Equities does not proposes to provide Users with the option to automatically cancel a non-displayed order that is to be repriced pursuant to the Non-Displayed Price Sliding Process. <u>See</u> EDGA and EDGX Rules 11.8(b)(12).

A Short Sale Period is the time during which a displayable short sale order, at the time of entry, could not be executed or displayed at its limit price due to a short sale price test

Limit Order to sell that is designated as short and cannot be executed or displayed on the PEARL Equities Book at its limit price pursuant to Rule 201 of Regulation SHO will be re-priced to a Permitted Price pursuant to the Short Sale Price Sliding Process, unless the User affirmatively elects to have the order immediately cancelled. During a Short Sale Period, as defined in Exchange Rule 2614(g)(3)(A), the System will immediately cancel any portion of an incoming Limit Order designated as ISO and short that includes a time-in-force instruction RHO that cannot be executed or displayed at its limit price at the time of entry pursuant to Rule 201 of Regulation SHO.⁴⁶

To comply with the LULD Plan, a Limit Order to buy (sell) that is priced above (below) the Upper (Lower) Price Band shall be re-priced pursuant to proposed Exchange Rule 2622(e) (described below), unless the User affirmatively elects to have the order immediately cancelled.

The Exchange also proposes to offer Limit Order Price Protection which will provide for the cancellation of Limit Orders priced too far away from a specified reference price at the time the order first becomes eligible to trade.⁴⁷ A Limit Order entered before Regular Trading Hours that becomes eligible to trade during Regular Trading Hours will be subject to Limit Order Price Protection at the time Regular Trading Hours begins.⁴⁸

A Limit Order to buy (sell) will be rejected if it is priced at or above (below) a specified dollar value and percentage away from the following: (1) the PBO for Limit Orders to buy, the PBB for Limit Orders to sell; (2) if the PBO or PBB is unavailable, the consolidated last sale

restriction under Rule 201 of Regulation SHO. 17 CFR 201. <u>See also proposed Exchange Rule 2614(g)(3)(A)</u>.

See EDGA and EDGX Rule 11.8(c)(6).

The Exchange's proposed Limit Order Price Protection is based on NYSE Rule 7.31(a)(2)(B) and Nasdaq Rule 4757(c).

Further, a Limit Order in a security that is subject to a trading halt will become first eligible to trade when the halt is lifted and continuous trading has resumed.

price disseminated during the Regular Trading Hours on trade date; (3) if the PBO, PBB, and a consolidated last sale price are unavailable, the prior day's Official Closing Price identified as such by the primary listing exchange, adjusted to account for events such as corporate actions and news events. This differs from Limit Order Price Protection offered by Nasdaq, ⁴⁹ which only utilizes the PBBO as a reference price, and the NYSE, ⁵⁰ which only calculates reference prices based on the corresponding "numerical guideline" percentages set forth in NYSE Rule 7.10(c)(1), Clearly Erroneous Executions. The Exchange believes this difference is reasonable because utilizing a waterfall of reference prices should result in specified percentages that are more reflective of the current trading environment for the security and provide an alternative reference price when the NBBO and/or last sale price are unavailable.

Also unlike Limit Order Price Protection offered by NYSE and Nasdaq, Equity Members will be able to customize the specified dollar and percentages on a per session basis. If an Equity Member does not provide PEARL Equities specified dollar values or percentages for their order(s), default specified dollar and percentages established by the Exchange will be applied. The default specified dollar and percentages will be posted to the Exchange's website and the Exchange will announce any changes to those dollar and percentages via a Regulatory Circular. The Exchange believes this difference is also reasonable because it provides Equity Members with greater flexibility in establishing protections that better reflect their risk profile.

Limit Order Price Protection thresholds for buy (sell) orders that are not entered at a permissible MPV for the security, as defined in proposed Exchange Rule 2612, will be rounded down (up) to the nearest price at the applicable MPV.

⁴⁹ Nasdaq Rule 4757(c).

⁵⁰ NYSE Rule 7.31(a)(2)(B).

Market Orders. Proposed Rule 2614(a)(2)⁵¹ provides that a Market Order is an order to buy (sell) a stated amount of a security that is to be executed at the PBO (PBB) or better upon entry. A Market Order shall not trade through a Protected Quotation. The System will only execute a Market Order upon entry and, if eligible, route the Market Order to an away Trading Center. The System will never post a Market Order to the PEARL Equities Book, unlike as is done by other national securities exchanges.⁵²

A Market Order may be entered as an odd, round, or mixed lot. A Market Order may only include a time-in-force of IOC. A Market Order with a time-in-force of RHO will be rejected. A Market Order is not eligible to participate in the Opening Process under proposed Exchange Rule 2615 described below. A Market Order is eligible to participate in the Regular Trading Session.

A Market Order may also be designated as Do Not Route. For a Market Order that is not designated as Do Not Route, any portion of that Market Order that cannot be executed in accordance with Rule 2617(a)(4) upon entry will be eligible to be routed away pursuant to Rule 2617(b). Any returned quantity of a routed Market Order will be immediately cancelled. A Market Order that is designated as Post Only will be rejected. A Market Order that is designated as Do Not Route will be cancelled if, when reaching the Exchange, it cannot be executed on the System in accordance with Rule 2617(a)(4). Equity Members may also elect that their Market Order to buy (sell) be cancelled if the PBO (PBB) an away Trading Center is not available upon entry.

The description of Market Orders under proposed Exchange Rule 2614(a)(2) is based on EDGA and EDGX Rules 11.8(a).

See, e.g., EDGA and EDGX Rules 11.8(a)(4) (providing for the posting of Market Orders when the NBO (NBB) is greater (less) than the Upper (Lower) Price Band or when an Short Sale Circuit Breaker is in effect). See also NYSE Rule 7.31(a)(1).

The System will cancel a non-routable Market Order that cannot be executed at a price that complies with Rule 201 of Regulation SHO and the Limit-Up Limit-Down Plan. During a Short Sale Period, a short sale Market Order designated as Do Not Route that cannot be executed at a Permitted Price or better upon entry will be cancelled. This may occur when there are no orders to buy priced above the NBB resting on the PEARL Equities Book against which the incoming Market Order to sell could execute against in compliance with Rule 201 of Regulation SHO.

Further, any portion of a Market Order to buy (sell) will be cancelled if it cannot be executed because at the time it is received by the System the NBO (NBB) is greater (less) than the Upper (Lower) Price Band in accordance with the LULD Plan. In such case, a Market Order to buy (sell) cannot execute against the NBO (NBB) because the NBO (NBB) is outside of the applicable Price Band and, therefore, not available for execution.

Midpoint Peg Orders. Proposed Rule 2614(a)(3)⁵³ provides that a Midpoint Peg Order is a non-displayed Limit Order that is assigned a working price pegged to the midpoint of the PBBO. A Midpoint Peg Order to buy (sell) with a limit price that is equal to or higher (lower) than the midpoint of the PBBO will be assigned a working price at the midpoint of the PBBO and may execute at the midpoint of the PBBO or better subject to its limit price. A Midpoint Peg Order to buy (sell) with a limit price that is lower (higher) than the midpoint of the PBBO will be assigned a working price equal to its limit price and may execute at its limit price or better.

An Aggressing Midpoint Peg Order to buy (sell) will trade with resting orders to sell (buy) with a working price at or below (above) the midpoint of the PBBO at the working price of

The description of Midpoint Peg Orders under proposed Exchange Rule 2614(a)(3) is based on EDGA Rule 11.8(d), EDGX Rule 11.8(d), NYSE Rule 7.31(d)(3), and NYSE Arca Rule 7.31-E(d)(3).

the resting orders.⁵⁴ Resting Midpoint Peg Orders to buy (sell) will trade at the midpoint of the PBBO against all Aggressing Orders to sell (buy) priced at or below (above) the midpoint of the PBBO.⁵⁵

A Midpoint Peg Order will be accepted but will not be eligible for execution when the PBB or PBO is not available, the PBBO is crossed, and, if instructed by the User, when the PBBO is locked. A Midpoint Peg Order that is eligible for execution when the PBBO is locked will be executable at the locking price. A Midpoint Peg Order will become eligible for execution and receive a new timestamp when the PBB and/or PBO both become available, or the PBBO unlocks or uncrosses and a new midpoint of the PBBO is established. In such case, pursuant to proposed Exchange Rule 2616, all such Midpoint Peg Orders will retain their priority as compared to each other based upon the time priority of such orders immediately prior to being deemed not eligible for execution as set forth above. 57

A Midpoint Peg Order may include a time-in-force of IOC or RHO. A Midpoint Peg Order with a time-in-force of RHO is eligible to participate in the Opening Process under proposed Exchange Rule 2615 described above. A Midpoint Peg Order is eligible to participate in the Regular Trading Session. A Midpoint Peg Order may be entered as an odd lot, round lot, or mixed lot. Midpoint Peg Orders are not eligible for routing pursuant to Exchange Rule 2617(b). A Midpoint Peg Order may be designated as Post Only.

Cancel/Replace Messages. Like other equity exchanges, the Exchange will allow a User

^{54 &}lt;u>See NYSE Rule 7.31(d)(3)(C).</u>

⁵⁵ Id.

^{56 &}lt;u>See</u> IEX Rule 11.190(h)(3)(C)(i) (stating that in the event the market becomes locked, the Exchange shall consider the midpoint price to be equal to the locking price).

Describing when a Midpoint Peg Orders would not be eligible for execution is based on NYSE Rule 7.31(d)(3) and NYSE Arca Rule 7.31-E(d)(3).

to cancel or replace their existing order resting on the PEARL Equities Book. However, orders may only be cancelled or replaced if the order has a time-in-force term other than IOC and if the order has not yet been executed in full. If an order has been routed to another Trading Center, the order will be placed in a "Pending" state until the routing process is completed. Executions that are completed when the order is in the "Pending" state will be processed normally. Further, only the price, sell long, sell short, or short exempt indicator, and size terms of the order may be changed by a Replace Message. If a User desires to change any other terms of an existing order the existing order must be cancelled and a new order must be entered. No cancellation or replacement of an order will be effective until such message has been received and processed by the System. The Exchange's proposed cancel/replace functionality will be described under proposed Exchange Rule 2614(e).

Self-Trade Protection Modifiers. Like PEARL Options and other equity exchanges, the Exchange will allow Equity Members to use STP modifiers. Any order designated with an STP modifier will be prevented from executing against a contra-side order also designated with an STP modifier and originating from the same MPID, Exchange Member identifier, or trade group identifier (any such identifier, a "Unique Identifier"). The Exchange proposes to offer the following four (4) STP modifiers to Equity Members: Cancel Newest, Cancel Oldest, Decrement and Cancel, and Cancel Both. The STP modifier on the order with the most recent time stamp controls the interaction between two orders marked with STP modifiers. The Exchange's proposed STP modifiers will be described under proposed Exchange Rule 2614(f).

Cancel Newest. An order marked with the Cancel Newest modifier will not execute against a contra-side order marked with any STP modifier originating from the same Unique Identifier. The order with the most recent time stamp marked with the Cancel Newest modifier will be cancelled back to the originating User(s). The contra-side order with the older timestamp

marked with an STP modifier will remain on the PEARL Equities Book.

Cancel Oldest. An order marked with the Cancel Oldest modifier will not execute against a contra-side order marked with any STP modifier originating from the same Unique Identifier. The order with the older time stamp marked with the STP modifier will be cancelled back to the originating User(s). The contra-side order with the most recent timestamp marked with the STP modifier will remain on the PEARL Equities Book.

Decrement and Cancel. An order marked with the Decrement and Cancel modifier will not execute against contra-side interest marked with any STP modifier originating from the same Unique Identifier. If both orders are equivalent in size, both orders will be cancelled back to the originating User(s). If both orders are not equivalent in size, the equivalent size will be cancelled back to the originating User(s) and the larger order will be decremented by the size of the smaller order, with the balance remaining on the PEARL Equities Book.

Cancel Both. An order marked with the Cancel Both modifier will not execute against contra-side interest marked with any STP modifier originating from the same Unique Identifier. The entire size of both orders will be cancelled back to the originating User(s).

Opening Procedures. The Exchange will open trading in Equities Securities at the start of Regular Trading Hours and following a halt by matching buy and sell orders at the midpoint of the NBBO, as described below. The Exchange's opening process will be described under proposed Exchange Rule 2615,⁵⁸ which provides that prior to the beginning of Regular Trading Hours,⁵⁹ Users who wish to participate in the Opening Process may enter orders to buy or sell that are designated as RHO. Orders cancelled before the Opening Process will not participate in

Proposed Exchange Rule 2615 is based on BZX Rule 11.24, BYX Rule 11.23, and EDGA and EDGX Rules 11.7.

According to proposed Exchange Rule 2600(a), Users may begin to enter orders starting at 7:30 a.m. Eastern Time.

the Opening Process.

Only orders that include a time-in-force of RHO may participate in the Opening Process. Orders designated as Post Only, ISOs, and orders that include a time-in-force other than RHO are not eligible to participate in the Opening Process. As described above, because Market Orders may only include a time-in-force of IOC, they are not eligible to participate in the Opening Process. Meanwhile, Limit Orders and Midpoint Peg orders that include a time-in-force of RHO are eligible to participate in the Opening Process. Like PEARL Options, all STP modifiers, as defined in proposed Exchange Rule 2614(f), will be honored during the Opening Process.

Proposed Exchange Rule 2615(b) provides that during the Opening Process, the Exchange attempts to match eligible buy and sell orders at the midpoint of the NBBO, the calculation of which is described below. All orders eligible to trade at the midpoint will be processed in time sequence, beginning with the order with the oldest timestamp. The Opening Process will conclude when no remaining orders, if any, can be matched at the midpoint of the NBBO. At the conclusion of the Opening Process, the unexecuted portion of orders that were eligible to participate in the Opening Process will be placed on the PEARL Equities Book in time sequence, cancelled, executed, or routed to away Trading Centers in accordance with the terms of the order.

Proposed Exchange Rule 2615(c) will describe how the Exchange calculates the midpoint of the NBBO. When the primary listing exchange is the NYSE or NYSE American, the Opening Process will be priced at the midpoint of the: (i) first NBBO subsequent to the first reported trade

See Exchange Rule 503 (not stating that self-trade prevention modifiers are ignored during the opening process). The Cboe Equity Exchanges ignore self-trade protection modifiers during their opening and re-opening processes. See BZX Rule 11.24(b), BYX Rules 11.23(b), and EDGA and EDGX Rules 11.7(b).

and first two-sided quotation on the primary listing exchange after 9:30:00 a.m. Eastern Time; or (ii) then prevailing NBBO when the first two-sided quotation is published by the primary listing exchange after 9:30:00 a.m. Eastern Time, but before 9:45:00 a.m. Eastern Time if no first trade is reported by the primary listing exchange within one second of publication of the first two-sided quotation by the primary listing exchange. For any other primary listing exchange, such as Nasdaq, Arca, and BZX, the Opening Process will be priced at the midpoint of the first NBBO subsequent to the first two-sided quotation published by the primary listing exchange after 9:30:00 a.m. Eastern Time.

If the conditions to establish the price of the Opening described above do not occur by 9:45:00 a.m. Eastern Time, the Exchange may conduct a Contingent Open and match all orders eligible to participate in the Opening Process at the midpoint of the then prevailing NBBO. 61 The Exchange believes matching orders at the midpoint of the NBBO as part of the Contingent Open provides consistent order handling to Users that wish to participate in the PEARL Equities Opening Process by executing their eligible orders at the midpoint of the NBBO, regardless of whether the opening process occurs at or near 9:30 a.m. Eastern Time, or later as part of a Contingent Open. Those Users that do not wish to participate in the Contingent Open are free to cancel their orders at any time and to resubmit those orders after the Contingent Open occurs and continuous trading begins.

If the midpoint of the NBBO is not available for the Contingent Open, all orders will be handled in time sequence, beginning with the order with the oldest timestamp, and be placed on

The Cboe Equity Exchanges do not attempt to match orders at the midpoint to the NBBO in such a situation. They handle orders in time sequence, beginning with the order with the oldest timestamp, and place orders on the book, and such orders are routed, cancelled, or executed in accordance with the terms of the order. See BZX Rule 11.24(d), BYX Rule 11.23(d), EDGA and EDGX Rules 11.7(d).

the PEARL Equities Book, cancelled, executed, or routed to away Trading Centers in accordance with the terms of the order. Users not seeking an execution at the midpoint of the NBBO during the Contingent Open may cancel their orders before 9:45 a.m. and re-enter those orders after the Contingent Open occurs.

While an Equity Security is subject to a halt, suspension, or pause in trading, the Exchange will accept orders for queuing prior to the resumption of trading in the security for participation in the Re-Opening Process. The Re-Opening Process following a halt will occur in the same manner as the Opening Process with the following two exceptions. First, ISOs, orders that include a time-in-force of IOC and orders designated as Post Only will be cancelled or rejected, as applicable. Second, the Re-Opening Process will occur at the midpoint of the: (i) first NBBO subsequent to the first reported trade and first two-sided quotation on the primary listing exchange following the resumption of trading after a halt, suspension, or pause; or (ii) NBBO when the first two-sided quotation is published by the primary listing exchange following the resumption of trading after a halt, suspension, or pause if no first trade is reported by the listing exchange within one second of publication of the first two-sided quotation by the listing exchange.

Where neither of the above conditions required to establish the price of the Re-Opening Process have occurred, the Equity Security may be opened for trading at the discretion of the Exchange. For example, the Exchange would exercise this discretion where the primary listing exchange lifted the halt but has not disseminated a reported trade or two-sided quotation and other non-primary listing exchanges have begun trading the security. In such case, all orders will be handled in time sequence, beginning with the order with the oldest timestamp, and be placed on the PEARL Equities Book, cancelled, executed, or routed to away Trading Centers in accordance with the terms of the order.

Order Priority. After the opening process, trades on PEARL Equities will occur when a buy order and a sell order are matched for execution on the PEARL Equities Book. All non-marketable orders resting on the PEARL Equities Book will be ranked and maintained based on price/time priority in the following manner: (1) price; (2) priority category; (3) time; and (4) ranking restrictions applicable to an order or modifier condition. As such, the System will execute trading interest within a priority category in the System in price/time priority, meaning it will execute all trading interest at the best price level within a priority category in time sequence before executing trading interest within the next priority category. Once all trading interest at that price is exhausted, the System will execute trading interest in the same fashion at the next best price level. Proposed Exchange Rule 2616 will describe the priority of orders resting on the PEARL Equities Book and is consistent with other equity exchanges that employ a price/time priority model, such as the Cboe Equity Exchanges and NYSE Arca. 62

Proposed Exchange Rule 2616(a)(1) provides that all orders will be ranked based on the working price of an order. Orders to buy will be ranked from highest working price to lowest working price. Orders to sell will be ranked from lowest working price to highest working price. If the working price of an order changes, the price priority of the order will also change.

In general, displayed orders at their displayed prices have priority over non-displayed orders at that same price. Proposed Exchange Rule 2616(a)(1)(A) provides the priority categories and proposed Exchange Rule 2616(a)(2)(A) specifies that within each priority category, where orders to buy (sell) are entered into the Trading System and resting in the PEARL Equities Book at the same working price, the order clearly established as the first entered into the Trading System at such particular price shall have precedence at that price, up to

^{62 &}lt;u>See BZX and BYX Rules 11.12 and EDGA and EDGX Rules 11.9. See also NYSE Arca Rule 7.36-E.</u>

the number of shares specified in the order. Equally priced orders within each priority category will be ranked in time priority with displayed Limit Orders for which their working price is displayed having first priority. Non-marketable Limit Orders for which their working price is non-displayed have second priority. ⁶³ Proposed Exchange Rule 2616(a)(2)(B) provides that for purposes of order priority, ISOs will be treated like Limit Orders.

Proposed Exchange Rule 2616(a)(3) provides that within each priority category, orders will be ranked based on time with each order being assigned a timestamp equal to the time the order is first placed on the PEARL Equities Book. An order is assigned a timestamp based on its original entry time, which is the time when an order is first placed in the PEARL Equities Book.

Proposed Exchange Rule 2616(a)(3)(A)(i) provides that an order that is fully routed to an away Trading Center on arrival will not be assigned a timestamp time unless and until any unexecuted portion of the order returns to the PEARL Equities Book. Proposed Exchange Rule 2616(a)(3)(A)(ii) provides that for an order that is partially routed to an away Trading Center on arrival, the portion that is not routed will be assigned a timestamp. If any unexecuted portion of the order returns to the PEARL Equities Book and joins any remaining resting portion of the original order, the returned portion of the order will be assigned the same timestamp as the resting portion of the order.⁶⁴ If the resting portion of the original order has already executed and any unexecuted portion of the order returns to the PEARL Equities Book, the returned portion of the order will be assigned a new timestamp. Proposed Exchange Rule 2616(a)(3)(B) provides that an order will be assigned a new timestamp any time the working price of an order

This second priority category would include the non-displayed working price of an order with a different displayed price due to the order having been re-priced pursuant to the Display Price Sliding Process under proposed Exchange Rule 2614(g)(1). This second priority category would also include Midpoint Peg Orders at their working price.

^{64 &}lt;u>See NYSE Arca Rule 7.36-E(f)(1)(B).</u>

changes.

Proposed Exchange Rule 2616(a)(4) provides that when Users elect that their orders not execute against an order with the same Unique Identifier by using an STP modifier described above, the Trading System will not permit such orders to execute against one another, regardless of priority ranking.

Proposed Exchange Rule 2616(a)(5) describes the priority treatment where a User cancels or replaces an order resting on the PEARL Equities Book. Proposed Exchange Rule 2616(a)(5) provides that the order will retain its timestamp and retain its priority only where the modification involves a decrease in the size of the order or a change in position from (A) sell to sell short; (B) sell to sell short exempt; (C) sell short to sell; (D) sell short to sell short exempt; (E) sell short exempt to sell; and (F) sell short exempt to sell short. Any other modification to an order, including an increase in the size of the order and/or price change, will result in such order losing time priority as compared to other orders in the PEARL Equities Book and the timestamp for such order being revised to reflect the time of the modification.

Proposed Exchange Rule 2616(a)(6) provides that the remainder of an order that is partially executed against an incoming order or Aggressing Order will retain its timestamp.

Lastly, proposed Exchange Rule 2616(b) sets forth the information that will be collected and made available to quotation vendors for dissemination pursuant to the requirements of Rule 602 of Regulation NMS,⁶⁵ which will include the best-ranked order(s) to buy and the best-ranked order(s) to sell that are displayed on the PEARL Equities Book and the aggregate displayed size of such orders. Proposed Exchange Rule 2616(b) further provides that PEARL Equities will transmit for display to the appropriate network processor for each equity security: (1) the highest

Proposed Exchange Rule 2616(c) is based on Nasdaq Rule 4756(b)(2)

price to buy wherein the aggregate size of all displayed buy interest in the Trading System greater than or equal to that price is one round lot or greater; (2) the aggregate size of all displayed buy interest in the Trading System greater than or equal to the price in (1) above, rounded down to the nearest round lot; (3) the lowest price to sell wherein the aggregate size of all displayed sell interest in the Trading System less than or equal to that price is one round lot or greater; and (4) the aggregate size of all displayed sell interest in the Trading System less than or equal to the price in paragraph (3) above, rounded down to the nearest round lot.

Order Execution. The System will utilize technology currently used by the Exchange's options trading system for purposes of order execution in Equity Securities. The order execution process for equity securities is based on functionality currently approved for use on the Cboe Equities Exchanges, NYSE, NYSE Arca, and NASDAQ. As discussed above, the System will allow Equity Members to enter Market Orders, Limit Orders, and Midpoint Peg Orders to buy and sell Equity Securities on PEARL Equities. The orders will be designated for display or non-display in the System.

Proposed Exchange Rule 2617(a) provides that any order falling within the below parameters shall be referred to as executable. Like on other equity exchanges, an order will be cancelled back to the User if, based on market conditions, User instructions, applicable Exchange Rules and/or the Exchange Act and the rules and regulations thereunder, such order is not executable, cannot be routed to another Trading Center and cannot be posted to the PEARL Equities Book. 66

Proposed Exchange Rule 2617(a) will further provide that the System will comply with

⁶⁶ See BYX and BZX Rules 11.13(a) and EDGA and EDGX Rules 11.10(a).

all applicable securities laws and regulations, including Regulation NMS,⁶⁷ Regulation SHO,⁶⁸ and the LULD Plan.⁶⁹ Proposed Exchange Rule 2617(a)(4)(A) and (B) describe the process for matching incoming and Aggressing Orders for execution against contra-side orders resting on the PEARL Equities Book.⁷⁰ An Aggressing Order and an incoming order to buy (sell) will be automatically executed to the extent that it is priced at an amount that equals or exceeds (is less than) any order to sell (buy) in the PEARL Equities Book and is executable. Such order to buy (sell) will be matched for execution against sell (buy) orders resting on the PEARL Equities Book according to the price-time priority ranking of the resting orders.

Proposed Exchange Rule 2617(a)(4)(C) provides that certain orders, based on their operation and User instructions, are permitted to post and rest on the PEARL Equities Book at prices that lock contra-side liquidity, provided, however, that the System will never display a locked market. Proposed Exchange Rule 2617(a)(4)(C) further provides that if an Aggressing Order or an incoming order to buy (sell) will execute upon entry against an order to sell (buy) at the same price as such displayed order to buy (sell), the Aggressing Order or incoming order to buy (sell) will be cancelled or posted to the PEARL Equities Book and ranked in accordance with Exchange Rule 2616.

Proposed Exchange Rule 2617(a)(4)(D) governs the price at which an order is executable when it is posted non-displayed on the PEARL Equities Book and there is a contra-side

⁶⁷ 17 CFR 242.600, <u>et seq</u>.

^{68 17} CFR 242.200, <u>et seq</u>.

See supra note 5.

Proposed Exchange Rule 2617(a)(4)(A) and (B) are based on NYSE Rule 7.37(a), BZX and BYX Rules 11.13(a)(4)(A) and (B), and EDGA and EDGX Rules 11.10(a)(4)(A) and (B).

Proposed Exchange Rule 2617(a)(4)(C) is based on BZX and BYX Rules 11.13(a)(4)(C), and EDGA and EDGX Rules 11.10(a)(4)(C).

displayed order at a price which results in an internally locked book. ⁷² Specifically, for securities priced equal to or greater than \$1.00 per share, in the case where a non-displayed order to sell (buy) is posted on the PEARL Equities Book at a price that locks a displayed order to buy (sell) pursuant to proposed Exchange Rule 2617(a)(4)(C) described above, an Aggressing Order or an incoming order to buy (sell) described in proposed Exchange Rules 2617(a)(4)(A) and (B) described above is a Market Order or a Limit Order priced more aggressively than the order to buy (sell) displayed on the PEARL Equities Book will execute against the non-displayed order to sell (buy) resting on the PEARL Equities Book at one-half minimum price variation greater (less) than the price of the resting displayed order to buy (sell). Proposed Exchange Rule 2617(a)(4)(D) will not be applicable for bids or offers under \$1.00 per share.

For example, assume the PBBO was \$16.10 by \$16.11 resulting in a midpoint of \$16.105. An order to buy at \$16.11 is resting non-displayed on the PEARL Equities Book. A Limit Order to sell at \$16.11 designated as Post Only is subsequently entered. Assume that the order to sell designated as Post Only will not remove any liquidity upon entry pursuant to the Exchange's proposed economic best interest functionality under proposed Exchange Rule 2614(c)(2), and will post to the PEARL Equities Book and be displayed at \$16.11. The display of this order will, in turn, make the resting non-displayed bid not executable at \$16.11. If an incoming order to sell at \$16.10 is entered into the PEARL Equities Book, the resting non-displayed order to buy originally priced at \$16.11 will execute against the incoming order to sell at \$16.105 per share, thus providing a half-penny of price improvement as compared to the order's limit price of \$16.11.

Proposed Exchange Rule 2617(a)(4)(D) is based on BZX <u>and</u> BYX Rules 11.13(a)(4)(D), <u>and</u> EDGA <u>and</u> EDGX Rules 11.10(a)(4)(D). <u>See also</u> Securities Exchange Act Release No. 82087 (November 15, 2017), 82 FR 55472 (November 21, 2017) (SR-BatsEDGA-2017-29) (describing the operation of this same functionality on EDGA).

Also consider the following example where the execution occurs at a sub-penny price that is not at the midpoint of the PBBO. Assume the PBBO is \$16.08 by \$16.10 resulting in a midpoint of \$16.09. An order to sell at \$16.08 is resting non-displayed on the PEARL Equities Book. A Limit Order to buy at \$16.08 designated as Post Only is subsequently entered. Assume that the order to buy designated as Post Only will not remove any liquidity upon entry pursuant to the Exchange's economic best interest functionality under proposed Exchange Rule 2614(c)(2), and will post to the PEARL Equities Book and be displayed at \$16.08. The display of this order will, in turn, make the resting non-displayed order to sell not executable at \$16.08. If an incoming order to buy is entered into the PEARL Equities Book at a price greater than \$16.08, the resting non-displayed order to sell originally priced at \$16.08 will execute against the incoming order to buy at \$16.085 per share, thus providing a half-penny of price improvement as compared to the order's limit price of \$16.08.

Routing. PEARL Equities routing functionality is described in proposed Exchange Rule 2617(b). PEARL Equities will support orders that are designated to be routed to the PBBO as well as orders that will execute only within PEARL Equities. Routable orders that are designated to execute at the PBBO will be routed to other equity markets to be executed when PEARL Equities is not at the PBBO consistent with Rules 610(d) and 611 of Regulation NMS. The System will ensure that an order will not be executed at a price that trades through another equities Trading Center. An order that is designated as routable by a User will be routed in compliance with the applicable trade through restrictions. As described above, any order entered with a price that will lock or cross a Protected Quotation that is not eligible for routing will be

Proposed Exchange Rule 2617(b) is based various portions of BZX <u>and BYX Rule 11.13(b)</u>, EDGA <u>and EDGX Rule 11.11</u>, <u>and NYSE Rule 7.36(f)(1)(B)</u>.

⁷⁴ 17 CFR 242.610(d), 611.

subject to the Display Price Sliding process under proposed Exchange Rule 2614(g), unless the User elected that the order be cancelled.

In addition, an order marked "short" when a short sale price test restriction pursuant to Rule 201 of Regulation SHO is in effect is not eligible for routing by the Exchange. An order that is ineligible for routing due to a short sale price test restriction that includes a time-in-force of IOC will be cancelled upon entry, while a non-routable short sale order with a time-in-force of RHO will be subject to the Short Sale Price Sliding process under proposed Exchange Rule 2614(g)(3). The Exchange will handle routable orders in connection with the Limit-Up Limit-Down Plan as described in proposed Exchange Rule 2622, described below.

As the Exchange currently does for options, PEARL Equities will route orders in Equity Securities via one or more routing brokers that are not affiliated with the Exchange.⁷⁵ This routing process will be described under proposed Exchange Rule 2617(b)(1), which is identical to current Exchange Rule 529 that is applicable to options. For each routing broker used by the Exchange, an agreement will be in place between the Exchange and the routing broker that will, among other things, restrict the use of any confidential and proprietary information that the routing broker receives to legitimate business purposes necessary for routing orders at the direction of the Exchange.⁷⁶

The function of the routing broker will be to route orders in Equity Securities trading on PEARL Equities to other equity Trading Centers pursuant to PEARL Equities rules on behalf of PEARL Equities ("Routing Services"). Use of Routing Services to route orders to other market centers is optional. Parties that do not desire to use the Routing Services provided by the

⁷⁵ <u>See</u> Exchange Rule 529.

The Exchange's routing logic will not provide any advantage to Users when routing orders to away Trading Centers as compared to other routing methods.

Exchange must designate their orders as not available for routing.

The System will designate routable Market Orders and marketable Limit Orders as IOC and will cause such orders to be routed for execution to one or more Trading Centers for potential execution, per the entering User's instructions, in compliance with Rule 611 under Regulation NMS, Regulation SHO, and the Limit-Up Limit-Down Plan. After the System receives responses to Market Orders that were routed away, to the extent an order is not executed in full through the routing process, the System will cancel any unexecuted portion back to the User.

For marketable Limit Orders, after the System receives responses to orders that were routed away, to the extent an order is not executed in full through the routing process, the System will process the balance of such order in accordance with the parameters set by the User when the order was originally entered. As such, the System will either: (i) cancel the unfilled balance of the order back to the User; (ii) process the unfilled balance of an order as an order designated as Do Not Route subject to the price sliding processes described in proposed Exchange Rules 2614(g) and 2622(e); or (iii) by executing against the PEARL Equities Book and/or re-routing orders to other Trading Centers until the original incoming order is executed in its entirety or its limit price is reached. If the order's limit price is reached, the order will be posted in the PEARL Equities Book, subject to the price sliding processes set forth proposed Exchange Rules 2614(g) and 2622(e). Proposed Exchange Rule 2617(b)(4)(C) would specify that to the extent the System is unable to access a Protected Quotation and there are no other accessible Protected Quotations at the NBBO, the System will treat the order as non-routable, provided, however, that this provision will not apply to Protected Quotations published by a Trading Center against

which the Exchange has declared self-help pursuant to proposed Exchange Rule 2617(d).⁷⁷

To start, the Trading System provides a single routing option named "Order Protection". Order Protection is a routing option under which an order checks the Trading System for available shares and then is routed to attempt to execute against Protected Quotations at away Trading Centers. For purposes of clarity and should additional routing options be offered in the future, ⁷⁸ proposed Exchange Rule 2617(b)(5)(A) specifies that all routable orders will be defaulted to the Order Protection routing option.

Proposed Exchange Rule 2617(b)(5) provides that routing options may be combined with all available order types and times-in-force instructions, with the exception of order types and times-in-force instructions whose terms are inconsistent with the terms of a particular routing option. For example, a routing option would be incompatible with a designation that the order also include a Post Only or Do Not Route instruction and an order that includes such a combination will be rejected. The Trading System will consider the quotations only of accessible Trading Centers. The term "Trading System routing table" will refer to the proprietary process for determining the specific trading venues to which the Trading System routes orders and the order in which it routes them. The Exchange reserves the right to maintain a different Trading System routing table for different routing options and to modify the Trading System routing table at any time without notice.

Proposed Exchange Rule 2617(b)(6) sets forth the priority of routed orders and provides that orders routed by the Trading System to other Trading Centers are not ranked and maintained

Proposed Exchange Rule 2617(b)(4)(C) is based on BZX and BYX Rule 11.13(b)(2)(E) with the only difference being that BZX and BYX will cancel the order in the scenario covered by the rule while the Exchange proposed to treat the order as non-routable.

The Exchange will file a proposed rule change with the Commission pursuant to Section 19(b) of the Exchange Act prior to offering additional routing options.

in the PEARL Equities Book pursuant to proposed Exchange Rule 2616, and therefore are not available for execution against incoming orders and Aggressing Orders pursuant to proposed Exchange Rule 2617(a), described above. Once routed by the Trading System, an order becomes subject to the rules and procedures of the destination Trading Center. The request to cancel an order routed to another Trading Center will not be processed unless and until all or a portion of the order returns unexecuted. For an order that is partially routed to another Trading Center on arrival, the portion that is not routed is assigned a timestamp. If any unexecuted portion of the order returns to the PEARL Equities Book and joins any remaining resting portion of the original order, the returned portion of the order is assigned the same timestamp as the resting portion of the order. 79 If the resting portion of the original order has already executed and any unexecuted portion of the order returns to the Exchange Book, the returned portion of the order is assigned a new timestamp. Following the routing process described above, unless the terms of the order direct otherwise, any unfilled portion of the order shall be ranked in the PEARL Equities Book in accordance with the terms of such order under proposed Exchange Rule 2616 and such order shall be eligible for execution under proposed Exchange Rule 2617.

Risk Settings and Trade Risk Metrics. The Exchange also proposes to offer to all Users of PEARL Equities the ability to establish certain risk control parameters that are intended to assist Users in managing their market risk. The proposed risk controls are set forth under proposed Exchange Rule 2618(a) and are based on those of other equity exchanges. ⁸⁰ The proposed risk controls are designed to offer Users protection from entering orders outside of certain size and price parameters, as well as selected order type and modifier combinations. The

⁷⁹ See NYSE Rule 7.36(f)(1)(B).

See Interpretation and Policy .01 to BYX and BZX Rules 11.13, and Interpretation and Policy .01 to EDGA and EDGX Rules 11.10. See also IEX Rule 11.190(f).

proposed risk controls are also designed to offer Users protection from the risk of duplicative executions.

In addition to the proposed risk settings described above, the Exchange proposes to offer risk functionality that permits Users to block new orders, to cancel all open orders, or to both block new orders and cancel all open orders. Furthermore, the Exchange proposes to offer risk functionality that automatically cancels a User's orders to the extent the User loses its connection to PEARL Equities.

Like other equity exchanges, the Exchange proposes to also offer Purge Ports, which will be a dedicated port that permits a User to simultaneously cancel all or a subset of its orders across multiple logical ports by requesting the Exchange to effect such cancellation. A User initiating such a request may also request that the Exchange block all or a subset of its new inbound orders across multiple logical ports. The block will remain in effect until the earlier of the time at which the User requests the Exchange remove the block or the end of the current trading day.

In particular, the risk control parameters will be useful to Equities Market Makers, who are required to continuously quote in the Equity Securities to which they are assigned. Though the proposed risk controls will be most useful to Equities Market Makers, the Exchange proposes to offer the functionality to all participant types.

In addition to the optional risk control parameters described above, the Exchange proposes to prevent all incoming orders, including those marked ISO, from executing at a price outside the Trading Collar price range.⁸¹ The Trading Collar functionality will not apply to orders eligible for execution during the Opening Process proposed under Exchange Rule 2615.

The Exchange will apply the proposed Trading Collar price ranges during continuous trading including times when the market for a security is crossed.

The Trading Collar functionality will be described in proposed Exchange Rule 2618(b). Like other equity exchanges, ⁸² the Trading Collar will prevent buy orders from trading or routing at prices above the collar and prevents sell orders from trading or routing at prices below the collar. The Trading Collar price range will be calculated using the greater of numerical guidelines for clearly erroneous executions under proposed Exchange Rule 2621 or a specified dollar value established by the Exchange. One difference from other equity exchanges, for Market Orders only, the Exchange proposes to allow Users to select a dollar value lower than the Exchange specified percentages and dollar values on an order by order basis. In such case, the dollar value selected by the User will override the Exchange's default percentage and dollar values.

Allowing Users to select a dollar value lower than the Exchange specified percentages and dollar values for their Market Orders provides Users with the ability to augment their risk settings to levels that are commensurate with their risk appetite.

Executions will be permitted at prices within the Trading Collar price range, inclusive of the boundaries. Upon entry, any portion of an order to buy (sell) that will execute, post, or route at a price above (below) the Trading Collar Price will be cancelled.

The Trading Collar price range will be calculated based on a Trading Collar Reference Price. The Exchange proposes a sequence of prices to determine the Trading Collar Reference Price to be used if a certain reference price is unavailable. The Exchange will first utilize the consolidated last sale price disseminated during the Regular Trading Hours on trade date as the Trading Collar Reference Price. If not available, the prior day's Official Closing Price identified as such by the primary listing exchange, adjusted to account for events such as corporate actions and news events will be used. If neither are available to use as the Trading Collar Reference

⁸²

Price, the Exchange will suspend the Trading Collar function, in the interest of maintaining a fair and orderly market in the impacted security.

The Exchange will calculate the Trading Collar price range for a security by applying the Numerical Guideline and reference price to the Trading Collar Reference Price. The result is added to the Trading Collar Reference Price to determine the Trading Collar Price for buy orders, while the result is subtracted from the Trading Collar Reference Price to determine the Trading Collar Price for sell orders. The Trading Collar Price for an order to buy (sell) that is not in the minimum price variation ("MPV") for the security, as defined in Exchange Rule 2616, will be rounded down (up) to the nearest price at the applicable MPV. The appropriate Trading Collar Price is applied to all orders upon entry. Unlike IEX, the Trading Collar Price is not enforced throughout the life of the order and will not be updated once the order is resting on the PEARL Equities Book.

As stated above, the Trading Collar price range will be calculated using the greater of numerical guidelines for clearly erroneous executions under proposed Exchange Rule 2621 or a specified default dollar value established by the Exchange. The Numerical Guideline to be used in the Trading Collar Price calculation are set forth in the following table.

Trading Collar Reference Price	Regular Trading Hours Numerical
	Guidelines
Greater than \$0.00 up to and including	10%
\$25.00	
Greater than \$25.00 up to and including	5%
\$50.00	
Greater than \$50.00	3%

The Exchange proposes to utilize dollar values in addition to the above percentages to ensure that the Trading Collars do not necessarily constrict the Trading Collars for low priced securities. The Exchange does not propose to specify its default dollar values in proposed Exchange Rule 2621, but rather to post these values on its website. ⁸³ The Exchange believes not including the specified dollar values in its Rules will enable it to modify these values in response to changing market conditions, but in no event will the Exchange adjust these dollar values intraday. In all circumstances, the Exchange will announce in advance any changes to the specified dollar value via a Regulatory Circular to be distributed to all Equity Members and via its website. As noted above, Users who find the Exchange's specified dollar values as too great can select a dollar value lower for their Market Orders on an order-by-order basis.

Clearly Erroneous Executions. The Exchange proposes to adopt Exchange Rule 2621 regarding clearly erroneous executions, which will be identical in all material respects to the standardized rules of other equity exchanges governing clearly erroneous executions.⁸⁴

LULD Plan and Trading Halts.

Market-Wide Circuit Breakers. The Exchange proposes to adopt Rule 2622, paragraphs (a) through (d) of which provides for the market-wide circuit breaker pilot program and be identical to that of other equity exchanges. ⁸⁵ Proposed Exchange Rule 2622(a) - (d) will operate on a pilot basis set to expire at the close of business on October 18, 2020 and will be identical in all material respects to the standardized market-wide circuit breaker rules of other equity

The Exchange notes that the Cboe Equity Exchanges post their dollar values on their website, rather than their rules. See page 9 of the Cboe US Equities/Options Web Port Controls Specification available at https://cdn.batstrading.com/resources/membership/bats_web_portal_port_controls_specification.pdf.

^{84 &}lt;u>See IEX Rule 11.270, Clearly Erroneous Executions.</u>

See IEX Rule 11.280, BYX and BZX Rules 11.18, and EDGA and EDGX Rules 11.16.

exchanges. If the pilot is not either extended or approved permanently at the end of the pilot period, the Exchange shall amend proposed Exchange Rule 2622 to be consistent with similar rules of other equity exchanges.

LULD Plan Compliance. Proposed Exchange Rule 2622(e) sets forth the Exchange's mechanism for complying with the LULD Plan and is identical in all material respects to the rules of other equities exchanges. ⁸⁶ In sum, proposed Exchange Rule 2622(e) states that the Exchange is a Participant in the LULD Plan⁸⁷ and requires that Equity Members comply with the LULD Plan's provisions.

Proposed Exchange Rule 2622(e) also describes the Exchange's order handling procedures to comply with the LULD Plan. In sum, depending on a User's instructions, the System will re-price and/or cancel buy (sell) interest that is priced or could be executed above (below) the Upper (Lower) Price Band. When re-pricing resting orders because such orders are above (below) the Upper (Lower) Price Band, the Exchange will provide new timestamps to such orders. The Exchange will also provide new timestamps to resting orders at the less aggressive price to which such orders are re-priced. Like other equity exchanges, any resting interest that is re-priced pursuant to proposed Exchange Rule 2622(e) will maintain priority ahead of interest that was originally less aggressively priced, regardless of the original timestamps for such orders.

The System will only execute Market Orders or orders that include a time-in-force of

See BYX and BZX Rule 11.18(e), and EDGA and EDGX Rule 11.16(e). See also IEX Rule 11.280.

See supra note 5. The Exchange intends to become a Participant in the LULD Plan prior to launching PEARL Equities.

As proposed, only limit priced interest with a time-in-force of RHO may rest on the PEARL Equities Book.

IOC at or within the LULD Price Bands. The Exchange proposes to re-price limit-priced interest that is priced outside of the LULD Price Bands as follows: limit-priced interest to buy (sell) that is priced above (below) the Upper (Lower) Price Band will be re-priced to the Upper (Lower) Price Band. The System will re-price resting limit-priced interest to buy (sell) to the Upper (Lower) Price Band if Price Bands move such that the price of resting limit-priced interest to buy (sell) would be above (below) the Upper (Lower) Price Band. If the Price Bands move again and a User has opted into the Exchange's optional multiple price sliding process, as described in proposed Exchange Rule 2614(g)(1)(C), the System shall re-price such limit-priced interest to the most aggressive permissible price to the order's limit price. Otherwise, the order will not be re-priced again. All other displayed and non-displayed limit interest repriced pursuant to proposed Exchange Rule 2622(e) will remain at its new price unless the Price Bands move such that the price of resting limit-priced interest to buy (sell) would again be above (below) the Upper (Lower) Price Band. Limit-priced interest priced above (below) the Upper (Lower) Price Band will be cancelled if the User elected that the order not be re-priced pursuant to the above described process.

The Exchange will not route buy (sell) interest at a price above (below) the Upper (Lower) Price Band. During a Short Sale Period, as defined in proposed Exchange Rule 2614(g)(3)(A), short sale orders not marked short exempt priced below the Lower Price Band shall be repriced to the higher of the Lower Price Band or the Permitted Price, as defined in proposed Exchange Rule 2614(g)(3)(A).

At the end of the Trading Pause (as defined in the LULD Plan), the Exchange will reopen the security in a manner similar to its opening procedures set forth in proposed Exchange Rule 2615, described above. On the occurrence of any trading halt pursuant to proposed marketwide circuit breaker mechanism or LULD Plan, all outstanding orders in the System will remain on the PEARL Equities Book, unless the User has designated that its orders be cancelled.

Proprietary Market Data. The Exchange will offer two standard proprietary market data products for PEARL Equites, the Top of Market feed and the Depth of Market feed. Each of these proprietary market data products are described in proposed Exchange Rule 2625.

Proposed Exchange Rule 2625(a) provides that the Depth of Market feed is a data feed that contains the displayed price and size of each order in an Equity Security entered in the Trading System, as well as order execution information, order cancellations, order modifications, order identification numbers, and administrative messages. Proposed Exchange Rule 2625(b) provides that the Top of Market Feed is a data feed that contains the price and aggregate size of displayed top of book quotations, order execution information, and administrative messages for Equity Securities entered into the Trading System. 90

The Exchange will also offer historical data for PEARL Equities upon request. As such, proposed Exchange Rule 2625(c) provides that Historical Data is a data product that offers historical equity security data for orders entered into the System upon request. 91

Retail Order Attribution Program. As described above, the Exchange proposes to allow Users to attach an "Attributable" instruction to their displayed orders so that their MPID is included with their order on the Exchange's proprietary market data feeds. The Exchange also proposes to offer another form of attribution to Equity Members that qualify as Retail Member Organizations ("RMOs") (defined below). In sum, under the proposed Retail Order Attribution

The description of the Depth of Market feed under proposed Exchange Rule 2625(a) is based on EDGA Rule 13.8(a), EDGX Rule 13.8(a), and IEX Rule 11.330(a)(3).

The description of the Top of Market feed under proposed Exchange Rule 2625(b) is based on EDGA Rule 13.8(c), EDGX Rule 13.8(c), and IEX Rule 11.330(a)(1).

The description of Historical Data under proposed Exchange Rule 2625(b) is based on BYX Rule 11.22(h), BZX Rule 11.22(h), and IEX Rule 11.330(a)(5).

Program ("Program"), RMOs will be able to designate that their Retail Orders (defined below) be identified as "Retail", rather than by their MPID, on the Exchange's proprietary data feeds. ⁹² Proposed Exchange Rule 2626(f) describes the Retail Order Attribution and provides that RMOs may designate that their Retail Orders be identified as Retail on an order-by-order basis.

Proposed Exchange Rule 2626(a) sets forth definitions applicable to the Program. Retail Member Organization or RMO is be defined as "an Equity Member (or a division thereof) that has been approved by the Exchange under this Rule to submit Retail Orders." A "Retail Order" is defined as an agency or riskless principal order that meets the criteria of FINRA Rule 5320.03 that originates from a natural person and is submitted to the Exchange by a Retail Member Organization, provided that no change is made to the terms of the order with respect to price or side of market and the order does not originate from a trading algorithm or any other computerized methodology.

Proposed Exchange Rule 2626(b) through (d) sets forth the qualification and application process for Equity Members to become RMOs and participate in the Program, how an Equity Member's RMO status may be revoked, and the process to appeal a denial or revocation of RMO status.

Proposed Exchange Rule 2626(b) sets forth the RMO qualification and application process. To qualify as an RMO, an Equity Member must conduct a retail business or route retail orders on behalf of another broker-dealer. For purposes of this Exchange Rule, conducting a retail business shall include carrying retail customer accounts on a fully disclosed basis.

The Exchange's proposed Retail Order Attribution Program is substantially similar to EDGX Rule 11.21, with the only differences being that (1) proposed Exchange Rule 2622(e) will not provide for dedicated ports for Retail Orders, (2) Exchange Rule 2626(e) will be marked "Reserved" and not account for dedicated retail order ports as is done on EDGX, and (3) Exchange Rule 2626(f) will not account for Retail Priority Orders, as this functionality would not be offered by PEARL Equites.

To become a Retail Member Organization, a Member must submit: (A) an application form; (B) supporting documentation, which may include sample marketing literature, website screenshots, other publicly disclosed materials describing the Equity Member's retail order flow, and any other documentation and information requested by the Exchange in order to confirm that the applicant's order flow will meet the requirements of the Retail Order definition; and (C) an attestation, in a form prescribed by the Exchange, that substantially all orders submitted as Retail Orders will qualify as such under this Exchange Rule.

After an applicant submits the application form, supporting documentation, and attestation, the Exchange shall notify the applicant of its decision in writing. A disapproved applicant may: (A) request an appeal of such disapproval by the Exchange as provided in proposed Exchange Rule 2626(d), described below; and/or (B) reapply for RMO status 90 days after the disapproval notice is issued by the Exchange. An RMO may voluntarily withdraw from such status at any time by giving written notice to the Exchange.

An RMO must have written policies and procedures reasonably designed to assure that it will only designate orders as Retail Orders if all requirements of a Retail Order are met. Such written policies and procedures must require the Equity Member to: (i) exercise due diligence before entering a Retail Order to assure that entry as a Retail Order is in compliance with the requirements of this Exchange Rule, and (ii) monitor whether orders entered as Retail Orders meet the applicable requirements. If an RMO does not itself conduct a retail business but routes Retail Orders on behalf of another broker-dealer, the RMO's supervisory procedures must be reasonably designed to assure that the orders it receives from such other broker-dealer that are designated as Retail Orders meet the definition of a Retail Order. The RMO must: (i) obtain an annual written representation, in a form acceptable to the Exchange, from each other broker-dealer that sends the RMO orders to be designated as Retail Orders that entry of such orders as

Retail Orders will be in compliance with the requirements of this Exchange Rule; and (ii) monitor whether Retail Order flow routed on behalf of such other broker-dealers meets the applicable requirements.

Proposed Exchange Rule 2626(c) states that if an RMO designates orders submitted to the Exchange as Retail Orders and the Exchange determines, in its sole discretion, that such orders fail to meet any of the requirements set forth in proposed Exchange Rule 2626(a) described above, the Exchange may disqualify an Equity Member from its status as an RMO. The Exchange shall determine if and when an Equity Member is disqualified from its status as an RMO. When disqualification determinations are made, the Exchange shall provide a written disqualification notice to the Equity Member.

Exchange Rule 2626(d) provides for an appeal process for RMOs that are disqualified or denied RMO status. An RMO that is disqualified under proposed Exchange Rule 2626(c) may appeal the disqualification, and/or reapply for RMO status 90 days after the date of the disqualification notice from the Exchange. If an Equity Member disputes the Exchange's decision to disapprove its RMO application or disqualify it as an RMO, the Equity Member ("appellant") may request, within five business days after notice of the decision is issued by the Exchange, that the Retail Attribution Panel (the "Panel") review the decision to determine if it was correct. The Panel will consist of the Exchange's Chief Regulatory Officer ("CRO"), or a designee of the CRO, and two officers of the Exchange designated by the Chief Information Officer ("CIO"). The Panel will review the facts and render a decision within the time frame prescribed by the Exchange and may overturn or modify an action taken by the Exchange under proposed Exchange Rule 2626. A determination by the Panel shall constitute final action by the Exchange.

Miscellaneous Rules based on other Equity Exchanges. The Exchange also proposes

to adopt the following rules, which are identical in all material respects to those of other equities exchanges: Rule 2619, Trade Reporting and Execution, ⁹³ Rule 2620, Clearance and Settlement, Anonymity, ⁹⁴ Rule 2623, Short Sales, ⁹⁵ and Rule 2624, Locking or Crossing Quotations in NMS Stocks. ⁹⁶

Conduct and Operational Rules for Equity Members

The Exchange proposes to adopt rules that are identical in all material respects to the approved rules of other equity exchanges, ⁹⁷ including rules covering similar subject matter as existing Exchange Rules and, the Exchange's affiliate, Miami International Securities Exchange, LLC ("MIAX") applicable to options. ⁹⁸ Thus, the Exchange proposes to adopt rules regarding: Rules of Fair Practice (Chapter XXI), Books, Records, and Reports (Chapter XXII), Supervision (Chapter XXIII), Margin (Chapter XXIV), Chapter XXVII (Trading Practice Rules), and other miscellaneous provisions (Chapter XXVIII). At times, certain proposed Rules for PEARL Equities cross reference an existing Exchange Rule applicable to options where the subject

See BYX and BZX Rules 11.14, and EDGA and EDGX Rules 11.12.

See BYX and BZX Rules 11.15, and EDGA and EDGX Rules 11.13. See also IEX Rule 11.250.

See BYX and BZX Rules 11.19. See also IEX Rule 11.290.

See BYX and BZX Rules 11.20. See also IEX Rule 11.310.

See, e.g., IEX Chapter 3 (Rules of Fair Practice), Rule 4.200 (Margin), Chapter 5 (Supervision), Chapter 6 (Miscellaneous Provisions), and Chapter 10 (Trading Practice Rules). The Exchange will request an exemption from the rule filing requirements of Section 19(b) of the Exchange Act for those rules of another self-regulatory organization ("SRO") that it proposes to incorporate by reference and to the extent such rules are effected solely by virtue of a change to any of those rules.

Under the proposed rules for PEARL Equities, the Exchange incorporated by reference an existing Exchange rule applicable options where that rule did not solely incorporate a rule of the Exchange's affiliate, MIAX, by reference, but also included substantive requirements. In the case where an existing Exchange Rule applicable to options incorporated by reference a MIAX Rule, the Exchange proposed a rule for equities that directly incorporated the same MIAX rule by reference.

matter is either identical or substantially similar. In other cases, the Exchange proposes to adopt a standalone Rule for PEARL Equities where an existing Exchange Rule for options contained terminology specific for options trading.

The Exchange notes that certain requirements that will be applicable to Equity Members are contained in other sections of the Exchange's existing Rules. For example, the Exchange has included rules regarding equity participation into proposed Exchange Rule 2000, but also proposed to include references to applicable registration requirements that are already contained in Chapter II of the Exchange's existing Rules.

Unlisted Trading Privileges

The Exchange proposes to adopt Chapter XXIX regarding securities traded pursuant to unlisted trading privileges and setting standards for certain equity derivative securities that are identical to the rules of equity exchanges. Proposed Exchange Rule 2900, Unlisted Trading Privileges, provide that the Exchange may extend unlisted trading privileges ("UTP") to any NMS Stock that is listed on another national securities exchange or with respect to which UTP may otherwise be extended in accordance with Section 12(f) of the Exchange Act and any such security shall be subject to all Exchange rules applicable to trading on the Exchange, unless otherwise noted.

Any UTP security that is a UTP Exchange Traded Product, as defined in proposed Exchange Rule 1901, will be subject to the additional following requirements set forth in proposed Exchange Rule 2900 and based on the rules of other equity exchanges.

Proposed Exchange Rule 2900(b)(1) provides that the Exchange will distribute an information circular prior to the commencement of trading in each such UTP Exchange Traded

See, e.g., proposed MEMX Rule 14.1. See also BYX, EDGA, and EDGX Rules 14.1.

Product that generally includes the same information as is contained in the information circular provided by the listing exchange, including (a) the special risks of trading the new Exchange Traded Product, (b) the Exchange Rules that will apply to the new Exchange Traded Product, and (c) information about the dissemination of value of the underlying assets or indices.

Proposed Exchange Rule 2900(b)(2) sets forth requirements regarding the product's description and applies only to UTP Exchange Traded Products that are the subject of an order by the Commission exempting such series from certain prospectus delivery requirements under Section 24(d) of the Investment Company Act of 1940 and are not otherwise subject to prospectus delivery requirements under the Securities Act of 1933.

The Exchange will inform Equity Members of the application of the provisions of proposed Exchange Rule 2900(b)(2)(B) to UTP Exchange Traded Products by means of an information circular. Proposed Exchange Rule 2900(b)(2)(B) requires that Equity Members provide each purchaser of UTP Exchange Traded Products a written description of the terms and characteristics of those securities, in a form approved by the Exchange or prepared by the openended management company issuing such securities, not later than the time a confirmation of the first transaction in such securities is delivered to such purchaser. In addition, Equity Members will include a written description with any sales material relating to UTP Exchange Traded Products that is provided to customers or the public. Any other written materials provided by an Equity Member to customers or the public making specific reference to the UTP Exchange Traded Products as an investment vehicle must include a statement substantially in the following form:

"A circular describing the terms and characteristics of [the UTP Exchange Traded Products] has been prepared by the [open-ended management investment company name] and is available from your broker. It is recommended that you obtain and review such circular before

purchasing [the UTP Exchange Traded Products]."

An Equity Member carrying an omnibus account for a non-Member is required to inform such non-Member that execution of an order to purchase UTP Exchange Traded Products for such omnibus account will be deemed to constitute an agreement by the non-Member to make such written description available to its customers on the same terms as are directly applicable to the Equity Member under this Rule.

Proposed Exchange Rule 2900(b)(2)(C) provides that upon request of a customer, an Equity Member will also provide a prospectus for the particular UTP Exchange Traded Product.

Proposed Exchange Rule 2900(b)(3) governs trading halts and provides that the Exchange will halt trading in a UTP Exchange Traded Product as provided for in proposed Exchange Rule 2622. Nothing in proposed Exchange Rule 2900(b)(3) is intended to limit the power of the Exchange under the Rules or procedures of the Exchange with respect to the Exchange's ability to suspend trading in any securities if such suspension is necessary for the protection of investors or in the public interest.

Proposed Exchange Rule 2900(b)(4) sets forth restriction on Equity Members acting as Equities Market Makers on the Exchange in a UTP Exchange Traded Product that derives its value from one or more currencies, commodities, or derivatives based on one or more currencies or commodities, or is based on a basket or index composed of currencies or commodities (collectively, "Reference Assets"):

First, Equities Market Makers must file with the Exchange, in a manner prescribed by the Exchange, and keep current a list identifying all accounts for trading the underlying physical asset or commodity, related futures or options on futures, or any other related derivatives (collectively with Reference Assets, "Related Instruments"), which the Equity Member acting as a registered Equites Market Maker on the Exchange may have or over which it may exercise

investment discretion. No Equities Market Maker will be permitted to trade in the underlying physical asset or commodity, related futures or options on futures, or any other related derivatives, in an account in which an Equity Member acting as a registered Equities Market Maker on the Exchange, directly or indirectly, controls trading activities, or has a direct interest in the profits or losses thereof, which has not been reported to the Exchange as required by proposed Exchange Rule 2900.

Second, an Equities Market Maker on the Exchange will, in a manner prescribed by the Exchange, be required to file with the Exchange and keep current a list identifying any accounts ("Related Instrument Trading Accounts") for which Related Instruments are traded: (i) in which the Equities Market Maker holds an interest; (ii) over which it has investment discretion; or (iii) in which it shares in the profits and/or losses. An Equities Market Maker on the Exchange will not be permitted to have an interest in, exercise investment discretion over, or share in the profits and/or losses of a Related Instrument Trading Account that has not been reported to the Exchange as required by proposed Exchange Rule 2900.

Third, in addition to the existing obligations under Exchange rules regarding the production of books and records under proposed Chapter XXII described above, an Equities Market Maker on the Exchange will be required to, upon request by the Exchange, make available to the Exchange any books, records, or other information pertaining to any Related Instrument Trading Account or to the account of any registered or non-registered employee affiliated with the Equities Market Maker on the Exchange for which Related Instruments are traded.

Lastly, proposed Exchange Rule 2900(b)(4) provides that an Equities Market Maker on the Exchange will not use any material nonpublic information in connection with trading a Related Instrument.

Proposed Exchange Rule 2900(b)(5) provides that the Exchange will enter into comprehensive surveillance sharing agreements with markets that trade components of the index or portfolio on which the UTP Exchange Traded Product is based to the same extent as the listing exchange's rules require the listing exchange to enter into comprehensive surveillance sharing agreements with such markets.

Dues, Fees, Assessments, and Other Charges

The Exchange proposes to adopt rules with regard to fees it may charge that are identical or substantially similar to the rules of the Cboe Equity Exchanges and IEX. Proposed Exchange Rule 3000(a) will set forth the Exchange's general ability to prescribe dues, fees, assessments and other charges.

Proposed Exchange Rule 3000(b) describes the manner in which the Exchange will assess fees related to Section 31 of the Exchange Act to Member transactions on PEARL Equities. Proposed Exchange Rule 3000(c) provides that the Exchange will provide Equity Members notice of all relevant dues, fees, assessment and other charges and that such notice will be made via the Exchange's website or other reasonable method. Proposed Exchange Rule 3000(d) provides that to the extent the Exchange is charged a fee by a third party that results directly from an Equity Member cross-connecting its trading hardware to the Exchange's System from another Trading Center's system that is located in the same data center as the Exchange, the Exchange will pass that fee on, in full, to the Equity Member. ¹⁰¹

Proposed Exchange Rule 3001 provides that any revenues received by the Exchange from fees derived from its regulatory function or regulatory fines related to PEARL Equities will not

See Chapter 15 of IEX Rules and Chapter 15 of the Rules of each of the Cboe Equity Exchanges. The Exchange will file a separate proposed rule change with the Commission to establish its fee structure.

Proposed Exchange Rule 3000(d) is based on IEX Rule 15.110(d).

be used for non-regulatory purposes or distributed to the stockholder, but rather, shall be applied to fund the legal and regulatory operations of the Exchange (including surveillance and enforcement activities), or, as the case may be, shall be used to pay restitution and disgorgement of funds intended for customers (except in the event of liquidation of the Exchange, in which case Miami International Holdings, Inc. will be entitled to the distribution of the remaining assets of the Exchange). ¹⁰²

Proposed Exchange Rule 3002(a) provides that each Equity Member, and all applicants for registration as such, shall be required to provide a clearing account number for an account at the National Securities Clearing Corporation ("NSCC") for purposes of permitting the Exchange to debit any undisputed or final fees, fines, charges and/or other monetary sanctions or other monies due and owing to the Exchange or other charges pursuant to Exchange Rule 3000, including the Exchange Fee Schedule thereto; Regulatory Transaction Fees pursuant to Exchange Rules 3000(b); dues, assessments and other charges pursuant to Exchange Rules 1202 and 1203 to the extent the Exchange were to determine to charge such fees; and fines, sanctions and other charges pursuant to Chapters IX, X, and XI of the Exchange Rulebook which are due and owing to the Exchange. ¹⁰³

Proposed Exchange Rule 3002(b) provides that all disputes concerning fees, dues or charges assessed by the Exchange must be submitted to the Exchange in writing and must be accompanied by supporting documentation. All disputes related to fees, dues or other charges must be submitted to the Exchange no later than sixty (60) days after the date of the monthly invoice. All Exchange invoices are due in full on a timely basis and payable in accordance with

Proposed Exchange Rule 3001 is based on Rule 15.2 of each of the Cboe Equity Exchanges.

Proposed Exchange Rule 3002 is based on IEX Rule 15.120.

proposed Exchange Rule 3002(a). Any disputed amount resolved in the Member's favor will be subsequently credited to the clearing account number for an account at the NSCC.

National Market System Plans

The Exchange will operate as a full and equal participant in the national market system for equity trading established under Section 11A of the Exchange Act, just as its options market participates today. The Exchange is currently a member of the National Market System Plan for the Selection and Reservation of Securities Symbols. The Exchange will also become a member of the following national market systems plans applicable to the trading of equity securities:

- The National Market System Plan to Address Extraordinary Market Volatility;
- The Joint Self-Regulatory Organization Plan Governing the Collection,
 Consolidation and Dissemination of Quotation and Transaction Information for
 Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privileges
 Basis ("NASDAQ/UTP Plan," "UTP Plan");
- The Second Restatement of the Consolidated Tape Association ("CTA") Plan and the Restated Consolidated Quotation ("CQ") Plan ("CTA/CQ Plans"); and
- The National Market System Plan Establishing Procedures Under Rule 605 of Regulation NMS.

The Exchange expects to participate in those plans on the same terms currently applicable to current members of those plans, and it expects little or no plan impact due to the proposed operation of PEARL Equities is similar to several other existing equity exchanges.

Regulation

The Exchange will leverage many of the structures it established to operate as a national securities exchange in compliance with Section 6 of the Exchange Act. As described in more detail below, there will be three elements of that regulation: (1) the Exchange will join the

existing equities industry agreements and establish new agreements, as necessary, pursuant to Section 17(d) of the Exchange Act, as it has with respect to its options market, (2) the Exchange's Regulatory Services Agreement ("RSA") with FINRA will govern many aspects of the regulation and discipline of Members that participate in equities trading, just as it does for options market regulation, and (3) the Exchange will authorize Equity Members to trade on PEARL Equities and conduct surveillance of equity trading as it does today for options.

Section 17(d) of the Exchange Act and the related Exchange Act rules permit SROs to allocate certain regulatory responsibility to avoid duplicative oversight and regulation. Under Exchange Act Rule 17d-1, the Commission designates one SRO to be the Designated Examining Authority, or DEA, for each broker-dealer that is a member of more than one SRO. The DEA is responsible for the financial aspects of that broker-dealer's regulatory oversight. Because Members also must be members of at least one other SRO, the Exchange will generally not be designated as the DEA for any of its Members.

Rule 17d-2 of the Exchange Act permits SROs to file with the Commission plans under which the SROs allocate among each other the responsibility to receive regulatory reports from, and examine and enforce compliance with specified provisions of the Exchange Act and rules thereunder and SRO rules by, firms that are members of more than one SRO ("common members"). If such plan is declared effective by the Commission, an SRO that is a party to the plan is relieved of regulatory responsibility as to any common member for whom responsibility is allocated under the plan to another SRO. The Exchange will establish 17d-2 Plans for Allocation of Regulatory Responsibilities, including, subject to Commission approval, (i) a plan with FINRA pursuant to which the Exchange and FINRA will agree to allocate to FINRA, with respect to common members, regulatory responsibility for overseeing and enforcing certain applicable laws, rules, and regulations of PEARL Equities, (ii) joining the multi-party plan with

FINRA and other national securities exchanges for the surveillance, investigation, and enforcement of common insider trading rules, and (iii) joining the multi-party plan with FINRA and other national securities exchanges for the allocation of regulatory responsibilities with respect to certain Regulation NMS Rules. In addition, the Exchange will (i) expand its existing RSA with FINRA, pursuant to which FINRA performs various regulatory services on behalf of the Exchange, subject to the Exchange's ultimate responsibility, including the review of membership applications and the conduct of investigations, disciplinary and hearing services, (ii) join the Intermarket Surveillance Group ("ISG"), and (iii) submit a Minor Rule Violation Plan to the Commission under Rule 19d-1(c)(2) of the Exchange Act.

FINRA also currently surveils options trading on behalf of the Exchange pursuant to an existing RSA designed to detect violations of Exchange rules and applicable federal securities laws. This existing RSA will be expanded to provide for FINRA to also surveil equities trading on PEARL Equities on behalf of the Exchange and the Exchange will remain responsible for FINRA's performance under this RSA. The Exchange represents that these procedures are adequate to properly monitor Exchange trading of equity securities and to deter and detect violations of Exchange rules and applicable federal securities laws. The surveillances referred to above generally focus on detecting securities trading outside their normal patterns, which could be indicative of manipulative or other violative activity. When such situations are detected, surveillance analysis follows and investigations are opened, where appropriate, to review the behavior of all relevant parties for all relevant trading violations.

Pursuant to proposed Exchange Rule 2900(b)(5), with respect to securities traded under proposed Chapter 14 of the Exchange Rules pursuant to unlisted trading privileges, the Exchange shall enter into a comprehensive surveillance sharing agreement with markets trading components of the index or portfolio on which shares of an exchange-traded product is based to

the same extent as the listing exchange's rules require the listing exchange to enter into a comprehensive surveillance sharing agreement with such markets. FINRA, on behalf of the Exchange, may obtain information, and will communicate information as needed, regarding trading in the shares of the exchange-traded products, as well as in the underlying exchange-traded securities and instruments with other markets and other entities that are members of ISG. In addition, the Exchange may obtain information regarding trading in such shares and underlying securities and instruments from markets and other entities that are members of ISG or with which the Exchange has in place a comprehensive surveillance sharing agreement. In addition, FINRA, on behalf of the Exchange, is able to access, as needed, trade information for certain fixed income securities held by the Fund reported to FINRA's Trade Reporting and Compliance Engine ("TRACE").

2. <u>Statutory Basis</u>

The Exchange believes that its proposed rule change is consistent with Section 6(b) of the Act¹⁰⁴ and 11A of the Act¹⁰⁵ in general, and furthers the objectives of Sections 6(b)(5)¹⁰⁶ and 11A(a)(1) of the Act¹⁰⁷ in particular, in that it is designed to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest; and are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

¹⁵ U.S.C. 78f(b).

¹⁵ U.S.C. 78k-1.

¹⁵ U.S.C. 78f(b)(5).

¹⁵ U.S.C. 78k-1(a)(1).

As described above, the fundamental premise of the proposal is that the Exchange will operate its equity market in a manner similar to that of other equity exchanges, with a suite of order types and deterministic functionality leveraging the Exchange's existing robust and resilient technology platform. The Exchange believes PEARL Equities will benefit individual investors, equity trading firms, and the equities market generally by providing much needed competition to the existing three dominant exchange groups. The entry of an innovative, cost competitive market such as PEARL Equities will promote competition, spurring existing exchanges to improve their own executions systems and reduce trading costs.

The Exchange proposes to offer a suite of conventional order types and order type modifiers that are designed to provide for an efficient, robust, and transparent order matching process. The basis for a majority of the rules of PEARL Equities are the approved rules of other equity exchanges, which have already been found consistent with the Exchange Act. Therefore, the Exchange does not believe that any of the proposed order types and order type functionality raise any new or novel issues that have not been previously considered by the Commission.

In few instances where the Exchange proposed functionality that differs from that of other equities exchanges, it has done so either to improve upon an existing process, such as in the case of the proposed Opening Process¹⁰⁸ and proposed risk controls,¹⁰⁹ or to adopt functionality to address and maintain a fair and orderly market, such as re-pricing of odd lot sized orders.¹¹⁰

Specifically, the Exchange believes proposed Exchange Rules 2611(b) describing how the Exchange will re-price an odd-lot order removes impediments to and perfect the mechanism of a free and open market and a national market system by reducing the potential for an odd lot

See proposed Exchange Rule 2615.

See proposed Exchange Rules 2614(a)(1)(I) and 2618.

See proposed Exchange Rule 2611.

order to appear on the Exchange's proprietary data feeds as though it is locking or crossing the PBBO. The proposed re-pricing of odd lot orders is also similar to that of other equity exchanges. 111

The Exchange further believes that the functionality that it proposes to offer is consistent with Section 6(b)(5) of the Act¹¹² because the System is designed to be efficient and its operation transparent, thereby facilitating transactions in securities, removing impediments to and perfecting the mechanisms of a free and open national market system. As noted above, the Exchange's proposed rules, order type functionality, and order matching process are designed to comply with all applicable regulatory requirements, including Regulation NMS, Regulation SHO, and the LULD Plan.

The Exchange believes that the rules of PEARL Equities as well as the proposed method of monitoring for compliance with and enforcing such rules is also consistent with the Exchange Act, particularly Sections 6(b)(1), 6(b)(5) and 6(b)(6) of the Act, which require, in part, that an exchange have the capacity to enforce compliance with, and provide appropriate discipline for, violations of the rules of the Commission and of the exchange. The Exchange has proposed to adopt rules necessary to regulate Equity Members that are nearly identical to the approved rules of other equities exchanges. The Exchange proposes to regulate activity on PEARL Equities in the same way it regulates activity on its options market, specifically through various Exchange specific functions, an RSA with FINRA, as well as participation in industry plans, including

Proposed Exchange Rule 2611 would differ from NYSE Rule 7.38, NYSE Arca Rule 7.38-E, NYSE American Rule 7.38E, and NYSE National Rule 7.38 by re-pricing the odd lot order to buy (sell) to the PBB (PBO) of the Exchange when the PBB (PBO) of the Exchange was previously locked or crossed by an away Trading Center.

¹¹² 15 U.S.C. 78(f)(5).

^{113 15} U.S.C. 78f(b)(1), 78f(b)(5) and 78f(b)(6).

plans pursuant to Rule 17d-2 under the Exchange Act.

B. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange operates in an intensely competitive global marketplace for transaction services. Relying on its array of services and benefits, the Exchange competes for the privilege of providing market services to broker-dealers. The Exchange's ability to compete in this environment is based in large part on the quality of its trading systems, the overall quality of its market and its attractiveness to the largest number of investors, as measured by speed, likelihood and cost of executions, as well as spreads, fairness, and transparency.

Consolidation amongst U.S. equities exchanges has led to nearly all being owned and operated by three primary exchange groups, ¹¹⁴ thereby diminishing the competitive landscape among equities exchanges. This proposal will enhance competition by allowing the Exchange to leverage its existing robust technology platform to provide a resilient, deterministic, and transparent execution platform for equity securities. The proposed rule change will insert an additional, much needed, competitive dynamic to existing equities landscape by allowing the Exchange to compete with existing equity exchanges on order types, order type functionality, risk controls, and order matching processes.

The proposed rule change will reduce overall trading costs and increase price

Currently, 12 of the 14 registered U.S. equity exchanges are owned by three groups: Cboe Holdings, Inc. operates four equities exchanges, BYX, BZX, EDGA, and EDGX; the Intercontinental Exchange Group, Inc. ("ICE") operates five equities exchanges, NYSE, NYSE American, NYSE Arca, NYSE National, and NYSE Chicago; and Nasdaq, Inc. operates three equities exchanges, Nasdaq, Nasdaq Phlx, and Nasdaq BX. IEX and the Long Term Stock Exchange, Inc. ("LTSE") are the only two independently operated equities exchanges. The LTSE has yet to commence operations.

competition, both pro-competitive developments, and will promote further initiative and innovation among market centers and market participants.

C. <u>Self-Regulatory Organization's Statement on Comments on the Proposed Rule</u>
<u>Change Received from Members, Participants, or Others</u>

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action
Within 45 days of the date of publication of this notice in the Federal Register or within
such longer period (i) as the Commission may designate up to 90 days of such date if it finds
such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which
the Exchange consents, the Commission shall: (a) by order approve or disapprove such proposed
rule change, or (b) institute proceedings to determine whether the proposed rule change should
be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act.

Comments may be submitted by any of the following methods:

Electronic comments:

	Use the Commission's Internet comment form (http://www.sec.gov/rules/sro.shtml);
	or
	Send an e-mail to rule-comments@sec.gov. Please include File Number SR-
	PEARL-2020-03 on the subject line.
ъ	

Paper comments:

□ Send paper comments in triplicate to Vanessa Countryman, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-PEARL-2020-03. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (http://www.sec.gov/rules/sro.shtml).

Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-PEARL-2020-03 and should be submitted on or before [insert date 21 days from publication in the <u>Federal Register</u>]. For the Commission, by the Division of Trading and Markets, pursuant to delegated authority. 115

Vanessa Countryman Secretary

¹¹⁵

EXHIBIT 5

New text is underlined. Deleted text is in [brackets].

MIAX PEARL, LLC Rules

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CHAPTER I. DEFINITIONS

Rule 100. Definitions

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Associated Person or Person Associated with a Member

The term "associated person" or "person associated with a Member" means any partner, officer, director, or branch manager of a Member (or any person occupying a similar status or performing similar functions), any person directly or indirectly controlling, controlled by, or under common control with a Member, or any employee of a Member, except that any person associated with a Member whose functions are solely clerical or ministerial shall not be included in the meaning of such term for purposes of these Rules.

Authorized Trader

The term "authorized trader" or "AT" means a person who may submit orders (or who supervises a routing engine that may automatically submit orders) to the Exchange's trading facilities on behalf of his or her Member or Sponsored Participant.

Bid

The term "bid" means a limit order to buy one or more options contracts.

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Book

The term "Book" means the electronic book of buy and sell orders and quotes maintained by the System.

Broker

The term "broker" shall have the same meaning as in Section 3(a)(4) of the Exchange Act.

By-Laws

The term "By-Laws" means the By-Laws of the Exchange, as the same may be amended from time to time.

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Covered

The term "covered" in respect of a short position in a call option contract means that the writer's obligation is secured by a "specific deposit" or an "escrow deposit" meeting the conditions of Rule 610(f) or 610(h), respectively, of the Rules of the Clearing Corporation, or the writer holds in the same account as the short position, on a share-for-share basis, a long position either in the underlying security or in an option contract of the same class of options where the exercise price of the option contract in such long position is equal to or less than the exercise price of the option contract in such short position. The term "covered" in respect of a short position in a put option contract means that the writer holds in the same account as the short position, on a share-for-share basis, a long position in an option contract of the same type and class of

options where the exercise price of the option contract in such long position is equal to or greater than the exercise price of the option contract in such short position.

Dealer

The term "dealer" shall have the same meaning as in Section 3(a)(5) of the Exchange Act.

Designated Examining Authority

The term "designated examining authority" means a self-regulatory organization, other than the Exchange, designated by the Commission under Section 17(d) of the Exchange Act to enforce compliance by Equity Members with Exchange Rules.

Discretion

The term "discretion" means the authority of a broker or dealer to determine for a customer the type of option, the class or series of options, the number of contracts, or whether options are to be bought or sold.

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Individual Option

The term "**individual option**" means an option contract that is either a put or a call, covering a specific underlying security and having a specific exercise price and expiration date.

Limit Price

The term "limit price" means the highest (lowest) specified price at which a Limit Order to buy (sell) is eligible to trade.

Long Position

The term "**long position**" means a person's interest as the holder of one or more units of trading of a given option contract.

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System

The term "System" means the automated trading system used by the Exchange for the trading of securities.

Timestamp

The term "timestamp" means the effective time sequence assigned to an order for purposes of determining its priority ranking.

Trading Center

The term "**Trading Center**" shall have the same meaning as in Rule 600(b)(82) of Regulation NMS.

Trading Permit

The term "**Trading Permit**" means a permit issued by the Exchange that confers the ability to transact on the Exchange.

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CHAPTER XVIII. INDEX OPTIONS

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CHAPTER XIX. GENERAL PROVISIONS – PEARL EQUITIES

Rule 1900. Applicability

- (a) The Rules contained in Chapters XIX to XXX herein are the Exchange Rules applicable to the trading of Equity Securities, the handling of orders for Equity Securities, and the conduct of accounts and other matters relating to the trading of Equity Securities on PEARL Equities.
- (b) Except to the extent that specific Rules relating to equities trading govern or unless the context otherwise requires, the provisions of the Exchange Rules shall be applicable to Equity Members and to the trading of Equity Securities on PEARL Equities and, for purposes of their application with respect to Equity Members and equities trading, shall be interpreted in light of the nature of equities trading and the PEARL Equities market, and the fact that Equities Securities on PEARL Equities shall be traded electronically through the System. To the extent that the provisions of the Rules relating to equities trading contained in Chapters XIX to XXX are inconsistent with any other provisions of the Exchange Rules, the Rules relating to equities trading shall control.
- (c) For marketing and other purposes, the Exchange's equities market facility may be referred to as "PEARL Equities."

Rule 1901. Definitions

With respect to the Chapters XIX to XXX below, relating to the trading of equity securities on the Exchange, the following terms shall have the meanings specified in this Exchange Rule. A term defined elsewhere in the Exchange Rules shall have the same meaning with respect to this Exchange Rule 1901, unless otherwise defined below.

Aggressing Order

The term "Aggressing Order" is an order to buy (sell) that is or becomes marketable against sell (buy) interest on the PEARL Equities Book. A resting order may become an Aggressing Order if its working price changes, if the PBBO or NBBO is updated, because of changes to other orders on the PEARL Equities Book, or when processing inbound messages.

Displayed Price

The term "displayed price" means the price at which a Limit Order is displayed, which may be different from the limit price or working price of the order.

Equities Order Entry Firm

The term "Equities Order Entry Firm", "Order Entry Firm", or "OEF", shall mean those Equity Members representing orders as agent on PEARL Equities and those non-Equity Market Maker Members conducting proprietary trading.

Equities Market Maker

The term "Equities Market Maker" shall mean an Equity Member that acts as a Market Maker in Equity Securities, pursuant to Chapter XXVI.

Equity Member

The term "Equity Member" is a Member authorized by the Exchange to transact business on PEARL

Equities.

Equity Securities

The term "**Equity Securities**" shall include any equity security defined as such pursuant to Rule 3a11-1 under the Exchange Act.

NBB, NBO and NBBO

With respect to the trading of Equity Securities, the term "NBB" shall mean the national best bid, the term "NBO" shall mean the national best bid and offer.

PEARL Equities

The term "PEARL Equities" shall mean PEARL Equities, a facility of MIAX PEARL, LLC.

PEARL Equities Book

The term "**PEARL Equities Book**" shall mean the electronic book of orders in Equity Securities maintained by the System.

Protected NBB, Protected NBO and Protected NBBO

With respect to the trading of Equity Securities, the term "**Protected NBB**" or "**PBB**" shall mean the national best bid that is a Protected Quotation, the term "**Protected NBO**" or "**PBO**" shall mean the national best offer that is a Protected Quotation, and the term "**Protected NBO**" or "**PBBO**" shall mean the national best bid and offer that is a Protected Quotation.

Protected Bid, Protected Offer and Protected Quotation

With respect to the trading of Equity Securities, the term "**Protected Bid**" or "**Protected Offer**" shall mean a bid or offer in a stock that is (i) displayed by an automated trading center; (ii) disseminated pursuant to an effective national market system plan; and (iii) an automated quotation that is the best bid or best offer of a national securities exchange or association. The term "**Protected Quotation**" shall mean a quotation that is a Protected Bid or Protected Offer.

Qualified Clearing Agency

The term "Qualified Clearing Agency" means a clearing agency registered with the Commission pursuant to Section 17A of the Exchange Act that is deemed qualified by the Exchange.

Registered Broker or Dealer

The term "**registered broker or dealer**" means any registered broker or dealer, as defined in Section 3(a)(48) of the Exchange Act, that is registered with the Commission under the Exchange Act.

Regular Trading Hours

The term "**Regular Trading Hours**" means the time between 9:30 a.m. and 4:00 p.m. Eastern Time.

Regular Trading Session

The term "**Regular Trading Session**" shall mean the time between the completion of the Opening Process or Contingent Open as defined in Exchange Rule 2615 and 4:00 p.m. Eastern Time.

<u>User</u>

The term "User" shall mean any Member or Sponsored Participant who is authorized to obtain access to the System pursuant to Exchange Rule 2602.

UTP Exchange Traded Products

The term "UTP Exchange Traded Products" refers to derivative securities products that are not listed on the Exchange but that trade on the Exchange pursuant to unlisted trading privileges, including the following: Equity Linked Notes, Investment Company Units, Index-Linked Exchangeable Notes, Equity Gold Shares, Equity Index-Linked Securities, Currency-Linked Securities, Fixed-Income Index-Linked Securities, Futures-Linked Securities, Multifactor-Index-Linked Securities, Trust Certificates, Currency and Index Warrants, Portfolio Depository Receipts, Trust Issued Receipts, Commodity-Based Trust Shares, Currency Trust Shares, Commodity Index Trust Shares, Commodity Futures Trust Shares, Partnership Units, Paired Trust Shares, Trust Units, Managed Fund Shares, and Managed Trust Securities.

UTP Security

The term "UTP Security" shall mean an Equity Security that is listed on a national securities exchange other than on the Exchange and that trades on PEARL Equities pursuant to unlisted trading privileges.

Working price

The term "working price" means the price at which an order is eligible to trade at any given time, which may be different from the limit price or display price of the order.

CHAPTER XX. PARTICIPATION ON PEARL EQUITIES

Rule 2000. Equity Participation

- (a) These Rules establish a new category of Exchange Member participation called "Equity Member." Only Equity Members may transact business on PEARL Equities via the System. Equity Members may trade Equity Securities for their own proprietary accounts or, if authorized to do so under applicable law and SEC rules and regulations, may conduct business on behalf of customers.
- (b) A prospective Equity Member must:
 - (1) complete an Equity Member Application in a form prescribed by the Exchange;
 - (2) provide such other information as required by the Exchange;
- (3) be an existing member or become a Member of the Exchange, pursuant to Chapter II (Access), and continue to abide by the requirements of the Chapter II Exchange Rules with respect to participation in PEARL Equities; and
- (4) enter into an Equity Member Agreement in a form specified by the Exchange, agree to abide by the same as it has been or shall be from time to time amended, and pledge to abide by the Exchange Rules as amended from time to time, and by all circulars, notices, directives or decisions adopted pursuant to or made in accordance with Exchange Rules.
- (c) Upon completion of the Equity Member application, the Exchange, or person(s) designated by the Exchange ("designee") shall consider whether to approve the application, unless there is just cause for delay. In its consideration process, the Exchange may conduct an investigation as it deems appropriate and may take such steps as it deems necessary to confirm the information provided by the applicant. Within thirty (30) days after the Exchange or its designee has completed its consideration of an application, it shall provide written notice of the action of the Exchange, and if disapproved, specify the grounds for such

disapproval.

- (d) These Rules place no limit on the number of qualifying entities that may become Equity Members. However, based on system constraints or capacity restrictions, approval of qualifying applications for Equity Members may, in limited circumstances, be temporarily deferred. To the extent that the Board places limitations on otherwise qualified applicants to act as Equity Members, such limits shall be objectively determined and submitted to the Commission for approval pursuant to a rule change filing under Section 19(b) of the Exchange Act.
- (e) Equity Member status cannot be leased or transferred except in the event of a change in control or corporate reorganization involving an Equity Member. In such case, Equity Member status may be transferred to a qualified affiliate or successor upon written notice to the Exchange or its designee.
- (f) Every Equity Member shall file with the Exchange and keep current an address where notices may be served.

Rule 2001. Requirements for Equities Participation

- (a) Equity Members may be corporations, partnerships, limited liability companies or sole proprietorships organized under the laws of a jurisdiction of the United States, or such other jurisdiction as the Exchange may approve.
- (b) Equity Members must be Clearing Members or establish a clearing arrangement with a Clearing Member.
- (c) Equity Members must have demonstrated ability to adhere to all applicable Exchange, SEC, Qualified Clearing Agency and Federal Reserve Board policies, rules and regulations related to the trading of equities, including those concerning record-keeping, reporting, finance and trading procedures and be able to satisfactorily demonstrate reasonably adequate systems capability and capacity.
- (d) All associated persons of Equity Members must be supervised in accordance with Chapter XXIII.
- (e) Every Equity Member shall have as the principal purpose of being an Equity Member the conduct of a securities business. Such a purpose shall be deemed to exist if and so long as:
- (1) the Equity Member has qualified and acts in respect of its business on PEARL Equities as either an OEF or an Equities Market Maker, or both; and
- (2) all transactions effected by the Equity Member are in compliance with Section 11(a) of the Exchange Act and the rules and regulations adopted thereunder.
- (f) Every Equity Member shall at all times maintain membership in another registered exchange that is not registered solely under Section 6(g) of the Exchange Act, or in FINRA. Equity Members that transact business with public customers shall at all times be members of FINRA. If such other registered exchange has not been designated by the Commission, pursuant to Rule 17d-1 under the Exchange Act, to examine Members for compliance with financial responsibility rules, then such applicant must have and maintain a membership in FINRA.

Rule 2002. Persons Associated with Equity Members

Persons associated with Equity Members shall be bound by the Exchange Rules and the Rules of the Qualified Clearing Agency. The Exchange may discipline, suspend or terminate the registration with the Exchange of any person associated with an Equity Member for violation of the Rules of the Exchange.

Rule 2003. Good Standing for Equity Members

- (a) To remain in good standing, all Equity Members must:
- (1) continue to satisfy the qualification requirements specified by the Exchange, as amended from time to time by the Exchange;
 - (2) comply with the Exchange Rules; and
- (3) pay on a timely basis such participation, transaction and other fees as the Exchange and/or PEARL Equities shall prescribe.
- (b) The good standing of an Equity Member may be suspended, terminated or otherwise withdrawn, as provided in Chapter IX (Summary Suspension), if any of the conditions of Exchange Rules 2000 or 2002 are not met or the Equity Member violates any of its agreements with the Exchange and/or PEARL Equities or any of the provisions of the Exchange Rules.
- (c) Unless an Equity Member is in good standing, the Equity Member shall have no rights or privileges of equity participation except as otherwise provided by law or Rules, shall not hold himself or itself out for any purpose as an Equity Member, and shall not deal with the Exchange and/or PEARL Equities on any basis except as a non-Member.

CHAPTER XXI. RULES OF FAIR PRACTICE

Rule 2100. Business Conduct of Members

An Equity Member, in the conduct of its business, shall observe high standards of commercial honor and just and equitable principles of trade.

Rule 2101. Violations Prohibited

Equity Members and persons associate with Equity Members shall comply with MIAX Rule 300, Adherence to Law, as if such rule were part of the PEARL Equities' Rules.

Rule 2102. Use of Fraudulent Devices

No Equity Member shall effect any transaction in, or induce the purchase or sale of, any security by means of any manipulative, deceptive or other fraudulent device or contrivance.

Rule 2103. False Statements

No Equity Member or applicant for membership as an Equity Member, or person associated with an Equity Member or applicant, shall make any false statements or misrepresentations in any application, report or other communication to the Exchange. No Equity Member or person associated with an Equity Member

shall make any false statement or misrepresentation to any Exchange committee, officer, the Board or any designated examining authority in connection with any matter within the jurisdiction of the Exchange.

Rule 2104. Communications with the Public

Equity Members and persons associated with an Equity Member shall comply with FINRA Rule 2210 (except FINRA Rule 2210(c)) as if such Rule were part of the Exchange's Rules. The Exchange and FINRA are parties to an agreement pursuant to which FINRA has agreed to perform certain functions on behalf of the Exchange. Therefore, Equity Members are complying with Exchange Rule 2104 by complying with FINRA Rule 2210 as written. In addition, functions performed by FINRA, FINRA departments, and FINRA staff under Exchange Rule 2104 are being performed by FINRA on the Exchange's behalf.

Rule 2105. Know Your Customer

<u>Equity Members shall comply with FINRA Rule 2090 as if such rule were part of the PEARL Equities'</u> Rules.

Rule 2106. Fair Dealing with Customers

All Equity Members have a fundamental responsibility for fair dealing with their customers. Practices which do not represent fair dealing include, but are not limited to, the following:

- (a) Recommending speculative securities to customers without knowledge of or an attempt to obtain information concerning the customers' other securities holdings, their financial situation and other necessary data. This prohibition has particular application to high pressure telephonic sales campaigns;
- (b) Excessive activity in customer accounts (churning or overtrading) in relation to the objectives and financial situation of the customer;
- (c) Establishment of fictitious accounts in order to execute transactions which otherwise would be prohibited or which are contrary to the Equity Member's policies;
- (d) Causing the execution of transactions which are unauthorized by customers or the sending of confirmations in order to cause customers to accept transactions not actually agreed upon;
- (e) Unauthorized use or borrowing of customer funds or securities; and
- (f) Recommending the purchase of securities or the continuing purchase of securities in amounts which are inconsistent with the reasonable expectation that the customer has the financial ability to meet such a commitment.

Rule 2107. Suitability

- (a) Equity Members and associated persons of an Equity Member shall comply with FINRA Rule 2111 as if such Rule were part of the Exchange's Rules.
- (b) For purposes of this Exchange Rule:
 - (1) References to FINRA Rules 2111 and 4512 shall be construed as references to Exchange

Rules 2107 and 2201, respectively;

- (2) References to "FINRA's rules" shall be construed as references to "Exchange Rules"; and
- (3) References to FINRA Rule 2214 shall be disregarded, and no comparable Exchange Rule shall apply to activities of Equity Members in connection with investment analysis tools.

Rule 2108. The Prompt Receipt and Delivery of Securities

- (a) Purchases. No Equity Member may accept a customer's purchase order for any security until it has first ascertained that the customer placing the order or its agent agrees to receive securities against payment in an amount equal to any execution, even though such an execution may represent the purchase of only a part of a larger order.
- (b) Sales. No Equity Member shall execute a sale order for any customer or for its own account in any security unless such sale complies with the applicable provisions of the Exchange Act, including Regulation SHO.

Rule 2109. Charges for Services Performed

Charges, if any, for services performed, including, but not limited to, miscellaneous services such as collection of monies due for principal, dividends, or interest; exchange or transfer of securities; appraisals, safe-keeping or custody of securities, and other services shall be reasonable and not unfairly discriminatory among customers.

Rule 2110. Use of Information Obtained in a Fiduciary Capacity

An Equity Member who, in the capacity of paying agent, transfer agent, trustee, or any other similar capacity has received information as to the ownership of securities, shall not make use of such information for the purpose of soliciting purchases, sales, or exchanges except at the request, and on behalf, of the issuer.

Rule 2111. Publication of Transactions and Quotations

No Equity Member shall publish or circulate, or cause to be published or circulated, any notice, circular, advertisement, newspaper article, investment service, or communication of any kind which purports to report any transaction as a purchase or sale of any security unless such Equity Member believes that such transaction was a bona fide purchase or sale of such security; or which purports to quote the bid price or asked price for any security, unless such Equity Member believes that such quotation represents a bona fide bid for, or offer of, such security.

Rule 2112. Offers at Stated Prices

No Equity Member shall make an offer to buy from or sell to any person any security at a stated price unless such Equity Member is prepared to purchase or sell, as the case may be, at such price and under such conditions as are stated at the time of such offer to buy or sell.

Rule 2113. Payments Involving Publications that Influence the Market Price of a Security

(a) Except as provided in paragraph (b), no Equity Member shall directly or indirectly, give, permit to

be given, or offer to give anything of value to any person for the purpose of influencing or rewarding the action of such person in connection with the publication or circulation in any electronic or other public media, including any investment service or similar publication, website, newspaper, magazine or other periodical, radio, or television program of any matter that has, or is intended to have, an effect upon the market price of any security.

- (b) The prohibitions in paragraph (a) shall not apply to compensation paid to a person in connection with the publication or circulation of:
 - (1) a communication that is clearly distinguishable as paid advertising;
- (2) a communication that discloses the receipt of compensation and the amount thereof in accordance with Section 17(b) of the Securities Act; or
 - (3) a research report, as that term is defined in FINRA Rule 2241.

Rule 2114. Customer Confirmations

An Equity Member, at or before the completion of each transaction with a customer, shall give or send to such customer such written notification or confirmation of the transaction as is required by Rule 10b-10 of the Exchange Act.

Rule 2115. Disclosure of Control Relationship with Issuer

An Equity Member controlled by, controlling, or under common control with, the issuer of any security, shall disclose to a customer the existence of such control before entering into any contract with or for such customer for the purchase or sale of such security, and if such disclosure is not made in writing, it shall be supplemented by the giving or sending of a written disclosure to the customer at or before completion of the transaction.

Rule 2116. Discretionary Accounts

- (a) Excessive Transactions. No Equity Member shall effect any purchase or sale transactions with, or for, any customer's account in respect of which such Equity Member is vested with any discretionary power if such transactions are excessive in size or frequency in view of the financial resources and character of such account.
- (b) Authorization and Acceptance of Account. No Equity Member or Registered Representative shall exercise any discretionary power in a customer's account unless such customer has given prior written authorization and the account has been accepted by the Equity Member, as evidenced in writing by a person duly designated by the Equity Member, in accordance with Exchange Rule 2300.
- (c) Approval and Review of Transactions. The Equity Member or person duly designated shall approve promptly in writing each discretionary order entered and shall review all discretionary accounts at frequent intervals in order to detect and prevent transactions which are excessive in size or frequency in view of the financial resources and character of the account.
- (d) **Exceptions**. This Exchange Rule shall not apply to:

- (1) discretion as to the price at which or the time when an order given by a customer for the purchase or sale of a definite amount of a specified security shall be executed, except that the authority to exercise time and price discretion will be considered to be in effect only until the end of the business day on which the customer granted such discretion, absent a specific, written contrary indication signed and dated by the customer. This limitation shall not apply to time and price discretion exercised in an institutional account, as defined in Exchange Rule 2705. Any exercise of time and price discretion must be reflected on the order ticket;
- (2) bulk exchanges at net asset value of money market mutual funds ("funds") utilizing negative response letters provided:
 - (A) The bulk exchange is limited to situations involving mergers and acquisitions of funds, changes of clearing members and exchanges of funds used in sweep accounts:
 - (B) The negative response letter contains a tabular comparison of the nature and amount of the fees charged by each fund;
 - (C) The negative response letter contains a comparative description of the investment objectives of each fund and a prospectus of the fund to be purchased; and
 - (D) The negative response feature will not be activated until at least 30 days after the date on which the letter was mailed.

Rule 2117. Improper Use of Customer's Securities or Funds; Prohibition Against Guarantees and Sharing in Accounts

- (a) Improper Use. No Equity Member or person associated with an Equity Member shall make improper use of a customer's securities or funds.
- (b) **Prohibition Against Guarantees**. No Equity Member or person associated with an Equity Member shall guarantee a customer against loss in connection with any securities transaction or in any securities account of such customer.

(c) Sharing in Accounts; Extent Permissible.

- (1) (A) Except as provided in paragraph (c)(2), no Equity Member or person associated with an Equity Member shall share directly or indirectly in the profits or losses in any account of a customer carried by the Equity Member or any other Equity Member; provided, however, that an Equity Member or person associated with an Equity Member may share in the profits or losses in such an account if:
 - (i) such person associated with an Equity Member obtains prior written authorization from the Equity Member employing the associated person;
 - (ii) such Equity Member or person associated with an Equity Member obtains prior written authorization from the customer; and
 - (iii) such Equity Member or person associated with an Equity Member shares in the profits or losses in any account of such customer only in direct proportion to the financial contributions made to such account by either the Equity Member or person associated with an Equity

Member.

- (B) Exempt from the direct proportionate share limitation of paragraph (c)(1)(A)(iii) are accounts of the immediate family of such Equity Member or person associated with an Equity Member. For purposes of this Exchange Rule, the term "immediate family" shall include parents, mother-in-law or father-in-law, husband or wife, children, or any relative to whose support the Equity Member or person associated with an Equity Member otherwise contributes directly or indirectly.
- (2) Notwithstanding the prohibition of paragraph (c)(1), an Equity Member or person associated with an Equity Member that is acting as an investment adviser may receive compensation based on a share in profits or gains in an account if:
 - (A) such person associated with an Equity Member seeking such compensation obtains prior written authorization from the Equity Member employing the associated person;
 - (B) such Equity Member or person associated with an Equity Member seeking such compensation obtains prior written authorization from the customer; and
 - (C) all of the conditions in Rule 205-3 of the Investment Advisers Act (as the same may be amended from time to time) are satisfied.

Rule 2118. Influencing or Rewarding Employees of Others

- (a) No Equity Member or person associated with an Equity Member shall, directly or indirectly, give or permit to be given anything of value, including gratuities, in excess of one hundred dollars per individual per year to any person, principal, proprietor, employee, agent or representative of another person where such payment or gratuity is in relation to the business of the employer, of the recipient of the payment, or gratuity. A gift of any kind is considered a gratuity.
- (b) This Exchange Rule shall not apply to contracts of employment with or to compensation for services rendered by persons enumerated in paragraph (a) provided that there is in existence prior to the time of employment or before the services are rendered, a written agreement between the member and the person who is to be employed to perform such services. Such agreement shall include the nature of the proposed employment, the amount of the proposed compensation, and the written consent of such person's employer or principal.
- (c) A separate record of all payments or gratuities in any amount known to the Equity Member, the employment agreement referred to in paragraph (b) and any employment compensation paid as a result thereof shall be retained by the Equity Member for the period specified by Exchange Act Rule 17a-4.

Rule 2119. Telemarketing

Equity Members shall comply with MIAX Rule 1325, Telemarketing, as if such rule were part of the PEARL Equities' Rules.

CHAPTER XXII. BOOKS, RECORDS, AND REPORTS

Rule 2200. General Requirements

Equity Members and persons associate with Equity Members shall comply with FINRA Rule 4511 as if such rule were part of the PEARL Equities' Rules. For purposes of this Exchange Rule, references to "FINRA rules" shall be construed to as references to "Exchange Rules" and references to "FINRA books and records" shall be construed as references to "Exchange books and records".

Rule 2201. Customer Account Information

- (a) Equity Members and persons associated with an Equity Member shall comply with FINRA Rule 4512 as if such rule were part of the Exchange's Rules
- (b) For purposes of this Exchange Rule:
- (1) References to NASD Rule 2510 (or any successor FINRA rule) shall be construed as references to Exchange Rule 2115;
- (2) References to Rules 2070, 2090, and 4512 shall be construed as references to Exchange Rules 2806, 2105, and 2201;
- (3) References to "a prior FINRA rule" shall be construed as references to "a FINRA Rule in effect prior to the effectiveness of FINRA Rule 4512";
- (4) The Exchange and FINRA are parties to a Regulatory Contract pursuant to which FINRA has agreed to perform certain functions on behalf of the Exchange. Therefore, Equity Members are complying with Exchange Rule 2201 by complying with FINRA Rule 4512 as written, including, for example, providing information required by FINRA staff. In addition, functions performed by FINRA, FINRA departments, and FINRA staff under Exchange Rule 2201 are being performed by FINRA on behalf of the Exchange.

Rule 2202. Furnishing of Records

Every Equity Member shall furnish to the Exchange, upon request and in a time and manner required by the Exchange, current copies of any financial information filed with the Commission, as well as any records, files, or financial information pertaining to transactions executed on or through the Exchange. Further, the Exchange shall be allowed access, at any time, to the books and records of the Equity Member in order to obtain or verify information related to transactions executed on or through the Exchange or activities relating to the Exchange.

- (a) Equity Member's Response Time to Exchange Requests. Consistent with the responsibility of the Exchange and the Commission to provide for timely regulatory investigations, the Exchange has adopted the following general time parameters within which Equity Members are required to respond to Exchange requests for trading data:
 - (1) 1st Request 10 business days
 - (2) 2nd Request 5 business days
 - (3) 3rd Request 5 business days

The third request letter will be sent to the Equity Member's compliance officer and/or senior officer.

Notwithstanding the parameters listed above, the Exchange reserves the right, in its sole discretion, to require information to be provided more quickly than described above.

.01 Regulatory Data Submission Requirement. Equity Members shall submit to the Exchange such Exchange-related order, market and transaction data as the Exchange by Regulatory Circular may specify, in such form and on such schedule as the Exchange may require.

Rule 2203. Record of Written Complaints

Equity Members and persons associated with an Equity Member shall comply with FINRA Rule 4513 as if such rule were part of the PEARL Equities' Rules.

Rule 2204. Disclosure of Financial Condition

<u>Equity Members shall comply with MIAX Rule 1313, Statement of Financial Condition to Customers, as if such rule were part of the PEARL Equities' Rules.</u>

CHAPTER XXIII. SUPERVISION

Rule 2300. Supervision

Each Equity Member shall establish and maintain a system to supervise the activities of each associated person that is reasonably designed to achieve compliance with applicable securities laws and regulations, and with applicable Exchange Rules. Final responsibility for proper supervision shall rest with the Equity Member. An Equity Member's supervisory system shall comply with FINRA Rule 3110 as if such FINRA rule were part of the PEARL Equities' Rules.

Rule 2301. Supervisory Control System

Each Equity Member shall designate and specifically identify to the Exchange one or more principals who shall establish, maintain, and enforce a system of supervisory control policies and procedures that must comply with FINRA Rule 3120 as if such FINRA rule were part of the PEARL Equities' Rules.

Rule 2302. Annual Certification of Compliance and Supervisory Processes

- (a) Equity Members and persons associated with an Equity Member shall comply with FINRA Rule 3130 as if such Rule were part of the PEARL Equities' Rule.
- (b) For purposes of this Exchange Rule:
 - (1) references to "FINRA Rules" shall be construed as references to "Exchange Rules," and
 - (2) references to "MSRB rules" shall be deleted.

Rule 2303. Prevention of the Misuse of Material, Non-Public Information

Equity Members shall comply with MIAX Rule 303, Prevention of the Misuse of Material Non-Public Information, as if such rule were part of the PEARL Equities' Rules.

Rule 2304. Anti-Money Laundering Compliance Program

Equity Members shall comply with MIAX Rule 315, Anti-Money Compliance Program, as if such rule were part of the PEARL Equities' Rules.

Rule 2305. Transactions for or by Associated Persons.

Equity Members and persons associated with an Equity Member shall comply with FINRA Rule 3210 as if such Rule were part of PEARL Equities' Rules.

CHAPTER XXIV. MARGIN

Rule 2400. Prohibitions and Exemptions

- (a) An Equity Member shall not effect a securities transaction through PEARL Equities facilities in a manner contrary to the regulations of the Board of Governors of the Federal Reserve System.
- (b) The margin which must be maintained in margin accounts of customers shall be as follows:
 - (1) 25% of the current market value of all securities "long" in the account; plus
- (2) \$2.50 per share or 100% of the current market value, whichever amount is greater, of each stock "short" in the account selling at less than \$5.00 per share; plus
- (3) \$5.00 per share or 30% of the current market value, whichever amount is greater, of each stock "short" in the account selling at \$5.00 per share or above; plus
- (4) 5% of the principal amount or 30% of the current market value, whichever amount is greater, of each bond "short in the account.

Rule 2401. Day Trading Margin

- (a) The term "day trading" means the purchasing and selling of the same security on the same day. A "day trader" is any customer whose trading shows a pattern of day trading.
- (b) Whenever day trading occurs in a customer's margin account the margin to be maintained shall be the margin on the "long" or "short" transaction, whichever occurred first, as required pursuant to Exchange Rule 2400(b). When day trading occurs in the account of a day trader, the margin to be maintained shall be the margin on the "long" or "short" transaction, whichever occurred first, as required for initial margin by Regulation T of the Board of Governors of the Federal Reserve System, or as required pursuant to Exchange Rule 2400(b), whichever amount is greater.
- (c) No Equity Member shall permit a public customer to make a practice, directly or indirectly, of effecting transactions in a cash account where the cost of securities purchased is met by the sale of the same securities. No Equity Member shall permit a public customer to make a practice of selling securities with them in a cash account which are to be received against payment from another registered broker or dealer where such securities were purchased and are not yet paid for.

CHAPTER XXV. SUSPENSION, DISCIPLINE, ARBITRATION

Rule 2500. Applicability

The provisions in Chapter IX (Summary Suspension), Chapter X (Discipline), and Chapter XI (Hearings, Review and Arbitration) of the Exchange Rules shall be applicable to Equity Members and trading on PEARL Equities.

CHAPTER XXVI. TRADING RULES

Rule 2600. Hours of Trading and Trading Days

- (a) Orders may be entered into the System from 7:30 a.m. until 4:00 p.m. Eastern Time (or such earlier time as may be designated by the Exchange on a day when PEARL Equities closes early). Orders entered between 7:30 a.m. and 9:30 a.m. Eastern Time are not eligible for execution until the start of Regular Trading Hours. The Exchange will not accept the following orders prior to 9:30 a.m. Eastern Time: orders designated as Post Only with a time-in-force of RHO, ISOs, and all orders with a time-in-force of IOC.
- (b) The Chief Executive Officer of the Exchange shall have the power to halt, suspend trading in any and all Equities Securities traded on PEARL Equities, to close some or all PEARL Equities facilities, and to determine the duration of any such halt, suspension, or closing, when he deems such action necessary for the maintenance of fair and orderly markets, the protection of investors, or otherwise in the public interest including special circumstances such as (1) actual or threatened physical danger, severe climatic conditions, civil unrest, terrorism, acts of war, or loss or interruption of facilities utilized by the Exchange, (2) a request by a governmental agency or official, or (3) a period of mourning or recognition for a person or event. No such action shall continue longer than a period of two days, or as soon thereafter as a quorum of Directors can be assembled, unless the Board approves the continuation of such suspension.

Rule 2601. Securities Eligible for Trading

The Exchange shall designate securities for trading. Any class of securities listed or admitted to unlisted trading privileges on PEARL Equities pursuant to Chapter XXIX of these Rules shall be eligible to become designated for trading on PEARL Equities. All securities designated for trading are eligible for odd-lot, round-lot and mixed-lot executions, unless otherwise indicated by the Exchange or limited pursuant to these Rules.

Rule 2602. Access to and Conduct on PEARL Equities

- (a) Access to PEARL Equities. Unless otherwise provided in the Rules, no one but an Equity Member or person associated with an Equity Member shall effect a transaction in an Equity Security on PEARL Equities.
- (1) The provisions of Rule 210, Sponsored Access to the Exchange, shall be applicable to Equity Members trading on PEARL Equities.
- (b) **PEARL Equities Conduct**. Equity Members and persons employed by or associated with any Equity Member, while using the facilities of PEARL Equities, shall not engage in conduct: (1) inconsistent with the maintenance of a fair and orderly market; (2) apt to impair public confidence in the operations of the Exchange; or (3) inconsistent with the ordinary and efficient conduct of business. Activities that shall violate the provisions of this paragraph (b) include, but are not limited to, the following:

- (1) failure of an Equities Market Maker to provide quotations in accordance with Exchange Rule 2606 (Equity Market Maker Obligations):
- (2) failure of an Equity Market Maker to bid or offer within the ranges specified by Exchange Rule 2606 (Equity Market Maker Obligations):
- (3) failure of an Equities Member to supervise a person employed by or associated with such Member adequately to ensure that person's compliance with this paragraph (b):
- (4) failure to maintain adequate procedures and controls that permit the Equity Member to effectively monitor and supervise the entry of orders by users to prevent the prohibited practices set forth in this paragraph (b);
 - (5) failure to abide by a determination of the Exchange;
- (6) effecting transactions that are manipulative as provided in Exchange Rule 2700 (Market Manipulation) or any other rule of the Exchange; and
 - (7) refusal to provide information requested by the Exchange.
- (c) Subject to the Rules, the Exchange will provide access to the System to Equity Members in good standing that wish to conduct business on PEARL Equities.
- (d) Pursuant to the Rules and the arrangements referred to in this Exchange Rule 2602, the Exchange may:
- (1) suspend an Equity Member's access to the System following a warning which may be made in writing or verbally (and subsequently confirmed in writing); or
 - (2) terminate an Equity Member's access to the System by notice in writing.

Rule 2603. Input of Accurate Information

Equity Members shall input accurate information into the System, including, but not limited to, whether the Equity Member acted in a Principal, Agent, or Riskless Principal capacity for each order entered.

Rule 2604. Authorized Traders

- (a) An Equity Member shall maintain a list of ATs who may obtain access to the System on behalf of the Equity Member or the Equity Member's Sponsored Participants. The Equity Member shall update the list of ATs as necessary. Equity Members must provide the list of ATs to the Exchange upon request.
- (b) An Equity Member must have reasonable procedures to ensure that all ATs comply with all Exchange Rules and all other procedures related to the System.
- (c) An Equity Member must suspend or withdraw a person's status as an AT if the Exchange has determined that the person has caused the Member to fail to comply with the Rules of the Exchange and the Exchange has directed the Equity Member to suspend or withdraw the person's status as an AT.

- (d) An Equity Member must have reasonable procedures to ensure that the ATs maintain the physical security of the equipment for accessing the facilities of the Exchange to prevent the improper use or access to the systems, including unauthorized entry of information into the systems.
- (e) To be eligible for registration as an AT of an Equity Member a person must successfully complete the General Securities Representative Examination (Series 7), the Securities Traders Qualification Examination (Series 57), or an equivalent foreign examination module approved by the Exchange, as defined in Interpretation and Policy .09 to Exchange Rule 3100, and any other training and/or certification programs as may be required by the Exchange.

Rule 2605. Registration as Equities Market Maker

- (a) Quotations and quotation sizes may be entered into PEARL Equities only by an Equity Member registered as an Equities Market Maker or other entity approved by the Exchange to function in a market-making capacity.
- (b) An Equities Market Maker may become registered in an issue by entering a registration request via an Exchange approved electronic interface with PEARL Equities systems or by contacting Exchange operations. Registration shall become effective on the day the registration request is entered, unless otherwise provided by the Exchange.
- (c) An Equities Market Maker's registration in an issue shall be terminated by the Exchange if the market maker fails to enter quotations in the issue within five (5) business days after the market maker's registration in the issue becomes effective.

Rule 2606. Equities Market Maker Obligations

An Equity Member registered as an Equities Market Maker shall engage in a course of dealings for its own account to assist in the maintenance, insofar as reasonably practicable, of fair and orderly markets in accordance with this Exchange Rule.

(a) Quotation Requirements and Obligations

- (1) Two-Sided Quote Obligations. For each Equity Security in which an Equity Member is registered as an Equities Market Maker, the Equity Member shall be willing to buy and sell such security for its own account on a continuous basis during Regular Trading Hours and shall enter and maintain a two-sided trading interest ("Two-Sided Obligation") that is identified to the Exchange as the interest meeting the obligation and is displayed in the Exchange's quotation at all times. Interest eligible to be considered as part of an Equities Market Maker's Two-Sided Obligation shall have a displayed quotation size of at least one normal unit of trading (or a larger multiple thereof); provided, however, that an Equities Market Maker may augment its Two-Sided Obligation size to display limit orders priced at the same price as the Two-Sided Obligation. Unless otherwise designated, a "normal unit of trading" shall be 100 shares. After an execution against its Two-Sided Obligation, an Equities Market Maker must ensure that additional trading interest exists in the Exchange to satisfy its Two-Sided Obligation either by immediately entering new interest to comply with this obligation to maintain continuous two-sided quotations or identify to the Exchange current resting interest that satisfies the Two-Sided Obligation.
 - (2) **Pricing Obligations**. For NMS stocks (as defined in Rule 600 under Regulation NMS) an

Equities Market Maker shall adhere to the pricing obligations established by this Exchange Rule during Regular Trading Hours; provided, however, that such pricing obligations (i) shall not commence during any trading day until after the first regular way transaction on the primary listing market in the security, as reported by the responsible single plan processor, and (ii) shall be suspended during a trading halt, suspension, or pause, and shall not re-commence until after the first regular way transaction on the primary listing market in the security following such halt, suspension, or pause, as reported by the responsible single plan processor.

- (3) **Bid Quotations**. At the time of entry of bid interest satisfying the Two-Sided Obligation, the price of the bid interest shall be not more than the Designated Percentage lower than the then current NBB, or if no NBB, not more than the Designated Percentage lower than the last reported sale from the responsible single plan processor. In the event that the NBB (or if no NBB, the last reported sale) increases to a level that would cause the bid interest of the Two-Sided Obligation to be more than the Defined Limit lower than the NBB (or if no NBB, the last reported sale), or if the bid is executed or cancelled, the Equities Market Maker shall enter new bid interest at a price not more than the Designated Percentage lower than the then current NBB (or if no NBB, the last reported sale), or identify to the Exchange current resting interest that satisfies the Two-Sided Obligation.
- Obligation, the price of the offer interest shall be not more than the Designated Percentage higher than the then current NBO, or if no NBO, not more than the Designated Percentage higher than the last reported sale received from the responsible single plan processor. In the event that the NBO (or if no NBO, the last reported sale) decreases to a level that would cause the offer interest of the Two-Sided Obligation to be more than the Defined Limit higher than the NBO (or if no NBO, the last reported sale), or if the offer is executed or cancelled, the Equities Market Maker shall enter new offer interest at a price not more than the Designated Percentage higher than the then current NBO (or if no NBO, the last reported sale), or identify to the Exchange current resting interest that satisfies the Two-Sided Obligation.
- (5) The NBBO shall be determined by the Exchange in accordance with its procedures for determining protected quotations under Rule 600 under Regulation NMS.
- (6) For purposes of this Exchange Rule, the "Designated Percentage" shall be 8% for Tier 1 NMS Stocks under the Limit Up-Limit Down Plan, 28% for Tier 2 NMS Stocks under the Limit Up-Limit Down Plan with a price equal to or greater than \$1.00, and 30% for Tier 2 NMS Stocks under the Limit Up-Limit Down Plan with a price less than \$1.00, except that between 9:30 a.m. and 9:45 a.m. and between 3:35 p.m. and the close of trading, when Exchange Rule 2622(b) is not in effect, the Designated Percentage shall be 20% for Tier 1 NMS Stocks under the Limit Up-Limit Down Plan, 28% for Tier 2 NMS Stocks under the Limit Up-Limit Down Plan with a price equal to or greater than \$1.00, and 30% for Tier 2 NMS Stocks under the Limit Up-Limit Down Plan with a price less than \$1.00.
- (7) For purposes of this Exchange Rule, the term "Defined Limit" shall be 9.5% for Tier 1 NMS Stocks under the Limit Up-Limit Down Plan, 29.5% for Tier 2 NMS Stocks under the Limit Up-Limit Down Plan with a price equal to or greater than \$1.00, and 31.5% for Tier 2 NMS Stocks under the Limit Up-Limit Down Plan with a price less than \$1.00, except that between 9:30 a.m. and 9:45 a.m. and between 3:35 p.m. and the close of trading, when Exchange Rule 2622(b) is not in effect, the Defined Limit shall be 21.5% for Tier 1 NMS Stocks under the Limit Up-Limit Down Plan, 29.5% for Tier 2 NMS Stocks under the Limit Up-Limit Down Plan with a price equal to or greater than \$1.00, and 31.5% for Tier 2 NMS Stocks under the Limit Up-Limit Down Plan with a price less than \$1.00.

- (8) Nothing in this Exchange Rule shall preclude a Market Marker from quoting at price levels that are closer to the NBBO than the levels required by this Exchange Rule.
- (9) The minimum quotation increment for quotations of \$1.00 or above in all Equity Securities shall be \$0.01. The minimum quotation increment in the System for quotations below \$1.00 in Equity Securities shall be \$0.0001.
- (10) The individual Market Participant Identifier ("MPID") assigned to an Equities Market Maker to meet its Two-Sided Obligation pursuant to subparagraph (a)(1) of this Exchange Rule shall be referred to as the Equities Market Maker's "Primary MPID." Equities Market Makers may request the use of additional MPIDs that shall be referred to as "Supplemental MPIDs." An Equities Market Maker that ceases to meet the obligations appurtenant to its Primary MPID in any security shall not be permitted to use a Supplemental MPID for any purpose in that security.
- (11) Equities Market Makers that are permitted the use of Supplemental MPIDs pursuant to subparagraph (10) above of this Exchange Rule are subject to the same rules applicable to the Equities Market Maker's first quotation, with one exception: the continuous two-sided quote requirement and excused withdrawal procedures described in Exchange Rule 2607 do not apply to Equities Market Makers' Supplemental MPIDs. Supplemental MPIDs may be identified to the Exchange as interest to satisfy an Equities Market Maker's two-sided obligation, in which case in order to be satisfactory, the Supplemental MPID's interest must be no more than the Designated Percentage from the NBBO as described and defined in this Exchange Rule 2606(a).

(b) **Firm Quotations**

(1) All quotations and orders to buy and sell entered into the System by Equities Market Makers are firm and automatically executable for their displayed and non-displayed size in the System by all Users. A particular Equities Market Maker's quotations may be cancelled rather than executed if designated with a STP modifier which is the same as that of an active opposite side order and originating from the same group type as the Equities Market Maker's orders to buy or sell, as set forth in Exchange Rule 2614(f). Notwithstanding the foregoing, Equities Market Makers may not use STP modifiers to evade the firm quotation obligation.

(c) Impaired Ability to Enter or Update Quotations

- (1) In the event that an Equities Market Maker's ability to enter or update quotations is impaired, the Equities Market Maker shall immediately contact Exchange Market Operations to request the withdrawal of its quotations.
- (2) In the event that an Equities Market Maker's ability to enter or update quotations is impaired and the Equities Market Maker elects to remain in PEARL Equities, the Equities Market Maker shall execute an offer to buy or sell received from another Member at its quotations as disseminated through the Exchange.

Rule 2607. Withdrawal of Quotations

(a) Except as provided in paragraph (b) of this Exchange Rule, an Equities Market Maker that wishes to withdraw quotations in a security shall contact Exchange Regulation to obtain excused withdrawal status prior to withdrawing its quotations. Withdrawals of quotations shall be granted by Exchange Regulation

only upon satisfying one of the conditions specified in this Exchange Rule.

- (b) An Equities Market Maker that wishes to obtain excused withdrawal status based on an Equities Market Maker's systemic equipment problems, such as defects in an Equities Market Maker's software or hardware systems or connectivity problems associated with the circuits connecting Exchange systems with the Equities Market Maker's systems, shall contact the Help Desk. The Help Desk may grant excused withdrawal status based on systemic equipment problems for up to five (5) business days, unless extended by the Help Desk.
- (c) An Equities Market Maker that wishes to withdraw quotations shall contact Exchange Regulation to obtain excused withdrawal status prior to withdrawing its quotations. Excused withdrawal status based on illness, vacations or physical circumstances beyond the Equities Market Maker's control may be granted for up to five (5) business days, unless extended by Exchange Regulation. Excused withdrawal status based on investment activity or advice of legal counsel, accompanied by a representation that the condition necessitating the withdrawal of quotations is not permanent in nature, may, upon written request, be granted for not more than sixty (60) days. The withdrawal of quotations because of pending news, a sudden influx of orders or price changes, or to effect transactions with competitors shall not constitute acceptable reasons for granting excused withdrawal status.
- (d) Excused withdrawal status may be granted to an Equities Market Maker that fails to maintain a clearing arrangement with a registered clearing agency or with a Member of such an agency, thereby terminating its registration as an Equities Market Maker. Provided however, that if the Exchange finds that the Equities Market Maker's failure to maintain a clearing arrangement is voluntary, the withdrawal of quotations will be considered voluntary and unexcused pursuant to Exchange Rule 2607 and Chapter XXVI governing PEARL Equities. Equities Market Makers that fail to maintain a clearing relationship will have their Exchange system status set to "suspend" and be thereby prevented from entering, or executing against, any quotes/orders in the System.
- (e) The Exchange Appeals Committee shall have jurisdiction over proceedings brought by Equities Market Makers seeking review of the denial of an excused withdrawal pursuant to this Exchange Rule, or the conditions imposed on their re-entry.
- (f) An Equities Market Maker that wishes to reinstate its quotations in a security after an excused withdrawal pursuant to this Exchange Rule 2607 shall notify the Exchange of its intention to be reinstated.

Rule 2608. Voluntary Termination of Registration

(a) An Equities Market Maker may voluntarily terminate its registration in a security by withdrawing its two-sided quotation from the Exchange. An Equities Market Maker that voluntarily terminates its registration in a security may not re-register as an Equities Market Maker in that security for one (1) business day. Withdrawal from participation as an Equities Market Maker in PEARL Equities shall constitute termination of registration as an Equities Market Maker in that security for purposes of this Exchange Rule; provided, however, that an Equities Market Maker that fails to maintain a clearing arrangement with a registered clearing agency or with a Member of such an agency and is withdrawn from participation in the PEARL Equities and thereby terminates its registration as an Equities Market Maker may register as an Equities Market Maker at any time after a clearing arrangement has been reestablished unless the Exchange finds that the Equities Market Maker's failure to maintain a clearing arrangement is voluntary, in which case the withdrawal of quotations will be considered voluntary and unexcused.

- (b) Notwithstanding the above, an Equities Market Maker that accidentally withdraws as an Equities Market Maker may be reinstated if:
- (1) The Equities Market Maker notified Exchange Regulation of the accidental withdrawal as soon as practicable under the circumstances, but within at least one hour of such withdrawal, and immediately thereafter provided written notification of the withdrawal and reinstatement request; and
- (2) It is clear that the withdrawal was inadvertent and the Equities Market Maker was not attempting to avoid its market making obligations.
- (c) Factors that the Exchange will consider in granting a reinstatement under paragraph (b) of this Exchange Rule include, but are not limited to:
- (1) The number of accidental withdrawals by the Equities Market Maker in the past, as compared with Equities Market Makers making markets in a comparable number of stocks;
- (2) The similarity between the symbol of the stock that the Equities Market Maker intended to withdraw from and the symbol of the stock that the Equities Market Maker actually withdrew from;
 - (3) Market conditions at the time of the withdrawal;
- (4) Whether, given the market conditions at the time of the withdrawal, the withdrawal served to reduce the exposure of the Member's position in the security at the time of the withdrawal to market risk; and
 - (5) The timeliness with which the Equities Market Maker notified Regulation of the error.
- (d) For purposes of paragraph (a) of this Exchange Rule, an Equities Market Maker shall not be deemed to have voluntarily terminated its registration in a security by voluntarily withdrawing its two-sided quotation from the Exchange if the Equities Market Maker's two-sided quotation in the subject security is withdrawn by PEARL Equities' systems due to issuer corporate action related to a dividend, payment or distribution, or due to a trading halt, and one of the following conditions is satisfied:
- (1) The Equities Market Maker enters a new two-sided quotation prior to the close of the Regular Trading Session on the same day when PEARL Equities' systems withdrew such a quotation;
- (2) The Equities Market Maker enters a new two-sided quotation on the day when trading resumes following a trading halt, or, if the resumption of trading occurs when the market is not in regular session, the Equities Market Maker enters a new two-sided quotation prior to the opening of the next Regular Trading Hours; or
- (3) Upon request from the Equities Market Maker, Exchange Regulation authorizes the Equities Market Maker to enter a new two-sided quotation, provided that Exchange Regulation receives the Market Maker's request prior to the close of Regular Trading Hours on the next regular trading day after the day on which the Equities Market Maker became eligible to reenter a quotation pursuant to subparagraph (d)(1) or (d)(2) hereof and determines that the Equities Market Maker was not attempting to avoid its market making obligations by failing to re-enter such a quotation earlier.
- (e) The Exchange Appeals Committee shall have jurisdiction over proceedings brought by Equities

Market Makers seeking review of their denial of a reinstatement pursuant to paragraphs (b) or (d) of this Exchange Rule.

Rule 2609. Suspension and Termination of Quotations

The Exchange may, pursuant to the procedures set forth in Chapter IX, suspend, condition, limit, prohibit or terminate the authority of an Equities Market Maker or Equity Member to enter quotations in one or more authorized securities for violations of applicable requirements or prohibitions.

Rule 2610. Units of Trading

The unit of trading in stocks is one (1) share. 100 shares constitutes a "round lot," unless specified by the primary listing market to be fewer than 100 shares. Any amount less than a round lot shall constitute an "odd lot," and any amount greater than a round lot that is not a multiple of a round lot shall constitute a "mixed lot."

Rule 2611. Odd and Mixed Lots

- (a) Order Types. Exchange Rule 2614 specifies whether an order may not be entered as an odd lot or mixed lot.
- (b) **Ranking and Execution**. Round lot, mixed lot and odd lot sized orders are treated in the same manner on the Exchange, provided that:
- (1) The working and display price of a displayable odd lot order will be adjusted both on arrival and when resting on the PEARL Equities Book as follows:
 - (A) If the limit price of an odd lot order to buy (sell) is below (above) the PBO (PBB) of an away Trading Center, it will have a working and display price equal to the limit price.
 - (B) If the limit price of an odd lot order to buy (sell) is at or above (below) the PBO (PBB) of an away Trading Center, it will have a working price equal to the PBO (PBB). The display price will also be adjusted to one minimum price variation lower (higher) than the PBO (PBB).
 - (C) If the PBBO is locked or crossed and the limit price of an odd lot order to buy (sell) resting on the PEARL Equities Book is above (below) the PBO (PBB) of an away Trading Center, it will have a working and display price equal to the PBB (PBO) of the Exchange. The working and display price of such odd lot order will be adjusted again pursuant to paragraphs (A) and (B) should the PBBO unlock or uncross.
- (2) For an order that is partially routed to an away market on arrival, if any returned quantity of the order joins resting odd lot quantity of the original order and the returned and resting quantity, either alone or together with other odd lot sized orders, would be displayed as a new BBO, both the returned and resting quantity will be assigned a new timestamp in accordance Exchange Rules 2616 and 2617(b)(6).

Rule 2612. Minimum Price Variations

(a) Bids, offers, orders or indications of interests in securities traded on the Exchange shall not be made

in an increment smaller than:

- (1) \$0.01 if those bids, offers or indications of interests are priced equal to or greater than \$1.00 per share; or
- (2) \$0.0001 if those bids, offers or indications of interests are priced less than \$1.00 per share and the security is an NMS stock pursuant to Rule 600(b)(48) of Regulation NMS and is trading on the Exchange; or
- (3) Any other increment established by the Commission for any security which has been granted an exemption from the minimum price increments requirements of Rule 612(a) or 612(b) of Regulation NMS.

Rule 2613. Usage of Data Feeds

(a) The Exchange utilizes the following data feeds for the handling, execution and routing of orders in Equity Securities, as well as for surveillance necessary to monitor compliance with applicable securities laws and Exchange Rules:

Market Center	Primary Source	Secondary Source
Cboe BYX Exchange, Inc.	Direct Feed	CQS/UQDF
Cboe BZX Exchange, Inc.	<u>Direct Feed</u>	CQS/UQDF
Cboe EDGA Exchange, Inc.	Direct Feed	CQS/UQDF
Cboe EDGX Exchange, Inc.	<u>Direct Feed</u>	CQS/UQDF
FINRA ADF	CQS/UQDF	<u>n/a</u>
Investors Exchange LLC	CQS/UQDF	<u>n/a</u>
Long Term Exchange, Inc.	CQS/UQDF	n/a
The Nasdaq Stock Market LLC	Direct Feed	CQS/UQDF
Nasdaq BX, Inc.	<u>Direct Feed</u>	CQS/UQDF
Nasdaq PHLX LLC	<u>Direct Feed</u>	CQS/UQDF
New York Stock Exchange LLC	Direct Feed	CQS/UQDF
NYSE American LLC	<u>Direct Feed</u>	CQS/UQDF
NYSE ARCA, Inc.	Direct Feed	CQS/UQDF
NYSE Chicago, Inc.	CQS/UQDF	n/a
NYSE National, Inc.	CQS/UQDF	<u>n/a</u>

- (b) The Exchange may adjust its calculation of the PBBO and NBBO based on information about orders sent to other venues with Protected Quotations, execution reports received from those venues, and certain orders received by the Exchange.
- (c) SIP Trade and Administrative Data. The responsible single plan processor is the Primary Source of trade and administrative messages such as Limit-up Limit-Down Price Bands, Market-Wide Circuit Breaker decline and status messages, Regulation SHO state messages, halts and resumes, and last sale information.

Rule 2614. Orders and Order Instructions

Users may enter into the System the types of orders listed in this Exchange Rule 2614, subject to the limitations set forth in this Exchange Rule or elsewhere in these Rules. Order, instruction, and parameter combinations which are disallowed by the Exchange or incompatible by their terms, will be rejected, ignored, or overridden by the Exchange, as determined by the Exchange to facilitate the most orderly handling of User instructions.

(a) General Order Types

- (1) Limit Order. An order to buy or sell a stated amount of a security at a specified price or better. A "marketable" Limit Order to buy (sell) will trade with all orders to sell (buy) priced at or below (above) the PBO (PBB) for the security. Once no longer marketable, the Limit Order will be ranked on the PEARL Equities Book pursuant to Exchange Rule 2616. An incoming Limit Order may be designated as ISO.
 - (A) A Limit Order will be displayed on the PEARL Equities Book unless the User elects that the Limit Order be non-displayed. A Limit Order may be designated as Attributable.
 - (B) A Limit Order may include a time-in-force of IOC or RHO. A Limit Order with a time-in-force of RHO is eligible to participate in the Opening Process under Exchange Rule 2615. A Limit Order is eligible to participate in the Regular Trading Session.
 - (C) A Limit Order may be entered as an odd lot, round lot, or mixed lot.
 - (D) A Limit Order may be designated as Post Only or Do Not Route. Unless designated as Post Only or Do Not Route, a marketable Limit Order to buy (sell) will be eligible to be routed away to prices equal to or higher (lower) than the PBO (PBB) pursuant to Exchange Rule 2617(b) only after trading with orders to sell (buy) on the PEARL Equities Book at each price point.

(E) Re-Pricing to Comply with Rule 610 of Regulation NMS.

- (i) A non-routable Limit Order to buy (sell) that, if displayed at its limit price on the PEARL Equities Book upon entry, would lock or cross the PBO (PBB) of an away Trading Center will be re-priced pursuant to the Display Price Sliding Process, unless the User affirmatively elects to have the order immediately cancelled.
- (ii) A non-routable Limit Order to buy (sell) with a limit price that would cross the PBO (PBB) of an away Trading Center upon entry will not execute at a price that is

higher (lower) than the PBO (PBB).

(F) Re-Pricing to Comply with Rule 201 of Regulation SHO. During a Short Sale Period, as defined in Exchange Rule 2614(g)(3)(A), a Limit Order to sell that is designated as short and cannot be executed or displayed on the PEARL Equities Book at its limit price pursuant to Rule 201 of Regulation SHO will be re-priced to a Permitted Price, as defined in Exchange Rule 2614(g)(3)(A), pursuant to the Short Sale Price Sliding Process, unless the User affirmatively elects to have the order immediately cancelled.

During a Short Sale Period, as defined in Exchange Rule 2614(g)(3)(A), the System will immediately cancel any portion of an incoming Limit Order designated as ISO and short that includes a time-in-force instruction RHO that cannot be executed or displayed at its limit price at the time of entry pursuant to Rule 201 of Regulation SHO.

- (G) Re-Pricing of Non-Displayed Limit Orders. A non-displayed Limit Order to buy (sell) that, if posted to the PEARL Equities Book, would cross the PBO (PBB) of an away Trading Center will be re-priced pursuant to the Non-Displayed Order Price Sliding Process.
- (H) Limit Up-Limit Down. A Limit Order to buy (sell) that is priced above (below) the Upper (Lower) Price Band shall be re-priced pursuant to Exchange Rule 2622(e), unless the User affirmatively elects to have the order immediately cancelled.

(I) Limit Order Price Protection.

- (i) Acceptance of Orders. A Limit Order to buy (sell) will be rejected if it is priced at or above (below) the greater of a specified dollar and percentage away from the following:
 - (a) PBO for Limit Orders to buy, the PBB for Limit Orders to sell;
 - (b) if (a) is unavailable, consolidated last sale price disseminated during the Regular Trading Hours on trade date; or
 - (c) if neither (a) or (b) are available, the prior day's Official Closing Price identified as such by the primary listing exchange, adjusted to account for events such as corporate actions and news events.
- (ii) Specified Percentage Elections. Equity Members may customize the specified dollar and percentage values on a per session basis. If an Equity Member does not provide PEARL Equities specified dollar and percentage values for their order(s), default specified dollar and percentage values established by the Exchange will be applied. The default specified dollar and percentage values will be posted to the Exchange's website and the Exchange will announce in advance any changes to those dollar and percentage values via a Regulatory Circular.
- (iii) Applicability. Limit Order Price Protection will be applied when an order is first eligible to trade. A Limit Order entered before the Regular Trading Session that becomes eligible to trade in the Regular Trading Session will become subject to Limit Order Price Protection when the Regular Trading Session begins. Limit Order Price Protection

will not be applied if the prices listed under paragraphs (a)(1)(I)(i)(a), (b), or (c) of this Exchange Rule 2614 are unavailable.

- (iv) Limit Order Price Protection thresholds for an order to buy (sell) that is not in the minimum price variation ("MPV") for the security, as defined in Exchange Rule 2616, will be rounded down (up) to the nearest price at the applicable MPV.
- (2) Market Order. An order to buy (sell) a stated amount of a security that is to be executed at the PBO (PBB) or better. A Market Order shall not trade through a Protected Quotation.
 - (A) A Market Order may be entered as an odd lot, round lot, or mixed lot.
 - (B) A Market Order may only include a time-in-force of IOC. A Market Order that includes a time-in-force of RHO will be rejected. A Market Order is not eligible to participate in the Opening Process under Exchange Rule 2615. A Market Order is eligible to participate in the Regular Trading Session.
 - (C) A Market Order may be designated as Do Not Route. For a Market Order that is not designated as Do Not Route, any portion of that Market Order that cannot be executed in accordance with Exchange Rule 2617(a)(4) upon entry will be eligible to be routed away pursuant to Exchange Rule 2617(b). Any return quantity of a routed Market Order will be immediately cancelled. A Market Order that is designated as Post Only will be rejected.
 - (D) A Market Order that is designated as Do Not Route will be cancelled if, upon entry, it cannot be executed on the System in accordance with Exchange Rule 2617(a)(4). Equity Members may elect that their Market Order to buy (sell) be cancelled if, upon entry, the PBO (PBB) of an away Trading Center is not available.
 - (E) Short Sales. During a Short Sale Period, as defined in Exchange Rule 2614(g)(3)(A), a Market Order to sell that is marked short will be cancelled upon entry if it cannot be executed at a Permitted Price or better, as defined in Exchange Rule 2614(g)(3)(A).
 - (F) Limit Up-Limit Down. Any portion of a Market Order to buy (sell) will be cancelled upon entry if it cannot be executed because at the time it is received by the System the PBO (PBB) is greater (less) than the Upper (Lower) Price Band.
- (3) Midpoint Peg Order. A non-displayed Limit Order that is assigned a working price pegged to the midpoint of the PBBO. A Midpoint Peg Order receives a new timestamp each time its working price changes in response to changes to the midpoint of the PBBO.
 - (A) A Midpoint Peg Order to buy (sell) with a limit price that is equal to or higher (lower) than the midpoint of the PBBO will be assigned a working price at the midpoint of the PBBO and may execute at the midpoint of the PBBO or better subject to its limit price. A Midpoint Peg Order to buy (sell) with a limit price that is lower (higher) than the midpoint of the PBBO will be assigned a working price equal to its limit price and may execute at its limit price or better.
 - (B) An Aggressing Midpoint Peg Order to buy (sell) will trade with resting orders to sell (buy) with a working price at or below (above) the midpoint of the PBBO at the working price of the resting orders. Resting Midpoint Peg Orders to buy (sell) will trade at the midpoint of the PBBO

against all Aggressing Orders to sell (buy) priced at or below (above) the midpoint of the PBBO.

- (C) A Midpoint Peg Order will be accepted but will not be eligible for execution when the PBB and/or PBO is not available, the PBBO is crossed, and, if instructed by the User, when the PBBO is locked. A Midpoint Peg Order that is eligible for execution when the PBBO is locked will be executable at the locking price. A Midpoint Peg Order will become eligible for execution and receive a new timestamp when the PBB and/or PBO both become available, or the PBBO unlocks or uncrosses and a new midpoint of the PBBO is established. In such case, pursuant to Exchange Rule 2616, all such Midpoint Peg Orders will retain their priority as compared to each other based upon the time priority of such orders immediately prior to being deemed not eligible for execution as set forth in this subparagraph (C).
- (D) A Midpoint Peg Order may include a time-in-force of IOC or RHO. A Midpoint Peg Order with a time-in-force of RHO is eligible to participate in the Opening Process under Exchange Rule 2615. A Midpoint Peg Order is eligible to participate in the Regular Trading Session.
 - (E) A Midpoint Peg Order may be entered as an odd lot, round lot, or mixed lot.
- (F) Midpoint Peg Orders are not eligible for routing pursuant to Exchange Rule 2617(b). A Midpoint Peg Order may be designated as Post Only.
- (b) **Time-in-Force Instructions**. Orders must have one of the following time-in-force terms.
- (1) Immediate-or-Cancel ("IOC"). An order that is to be executed in whole or in part as soon as such order is received. The portion not executed immediately on the Exchange or another Trading Center is treated as cancelled and is not posted to the PEARL Equities Book. Limit Orders with a time-in-force of IOC that are not designated as "Do Not Route" and that cannot be executed in accordance with Rule 2613(a)(4) on the System when reaching the Exchange will be eligible for routing away pursuant to Exchange Rule 2617(b).
- (2) Regular Hours Only ("RHO"). An order that is designated for execution only during Regular Trading Hours, which includes the Opening Process for Equity Securities. An order with a time-in-force of RHO entered into the System before the opening of business on the Exchange as determined pursuant to Exchange Rule 2600 will be accepted but not eligible for execution until the start of Regular Trading Hours.

(c) Order Instructions

- (1) **Do Not Route**. An order designated as Do Not Route is a non-routable order that will be ranked and executed on the PEARL Equities Book pursuant to Exchange Rules 2616 and 2617(a)(4) or cancelled. Unless otherwise instructed by the User, an order designated as Do Not Route will be subject to the price sliding processes set forth in paragraph (g) of this Exchange Rule 2614 and paragraph (e) of Exchange Rule 2622 below.
- (2) **Post Only**. An order designated as Post Only is a non-routable order that will be ranked and executed on the PEARL Equities Book pursuant to Exchange Rules 2616 and 2617(a)(4).
 - (A) An order designated as Post Only will only remove liquidity from the PEARL Equities Book when:

- (i) the order is for a security priced below \$1.00; or
- (ii) the value of such execution when removing liquidity equals or exceeds the value of such execution if the order instead posted to the PEARL Equities Book and subsequently provided liquidity including the applicable fees charged or rebates provided. To determine at the time of a potential execution whether the value of such execution when removing liquidity equals or exceeds the value of such execution if the order instead posted to the PEARL Equities Book and subsequently provided liquidity, the Exchange will use the highest possible rebate paid and highest possible fee charged for such executions on the Exchange.
- (B) Unless otherwise instructed by the User, an order designated as Post Only will be subject to the price sliding processes set forth in paragraph (g) this Exchange Rule 2614 and Exchange Rule 2622(e) below.
- (3) **Displayed**. An instruction the User may attach to an order stating that the order is to be displayed by the System on the PEARL Equities Book. Unless the User elects otherwise, all orders eligible to be displayed on the PEARL Equities Book will be automatically defaulted by the System to Displayed.
- (4) **Non-Displayed**. An instruction the User may attach to an order stating that any part of the order is not to be displayed by the System on the PEARL Equities Book.
- (5) **Attributable**. An instruction to include the User's MPID with an order that is designated for display (price and size) on an Exchange proprietary data feed.
- (6) **Non-Attributable**. An instruction on an order that is designated for display (price and size) on an Exchange proprietary data feed to display that order on an anonymous basis.
- (d) Intermarket Sweep Orders. The System will accept incoming Intermarket Sweep Orders ("ISO") (as such term is defined in Rule 600(b)(31) of Regulation NMS). To be eligible for treatment as an ISO, the order must be: (A) a Limit Order under paragraph (a)(1) of this Exchange Rule 2614; (B) marked "ISO"; and (C) the User entering the order must simultaneously route one or more additional Limit Orders marked "ISO," as necessary, to away Trading Centers to execute against the full displayed size of any Protected Quotation for the security as set forth below. Such orders, if they meet the requirements of the foregoing sentence, may be immediately executed at one or multiple price levels in the System without regard to Protected Quotations at away Trading Centers consistent with Regulation NMS (i.e., may trade through such quotations and will not be rejected or cancelled if it would lock, cross, or be marketable against an away Trading Center). ISOs are not eligible for routing pursuant to Exchange Rule 2617(b).
 - (1) An ISO may include a time-in-force of IOC or RHO.
 - (A) An ISO that includes a time-in-force of IOC will immediately trade with contra-side interest on the PEARL Equities Book up to its full size and limit price and any unexecuted quantity will be immediately cancelled. A User entering a ISO with a time-in-force of IOC represents that such User has simultaneously routed one or more additional Limit Orders marked "ISO," if necessary, to away Trading Centers to execute against the full displayed size of any Protected Quotation for the security with a price that is superior to the limit price of the ISO entered in the System.

- (B) An ISO that includes a time-in-force of RHO, if marketable on arrival, will immediately trade with contra-side interest on the PEARL Equities Book up to its full size and limit price. Any unexecuted quantity of an ISO with a time-in-force of RHO will be displayed at its limit price on the PEARL Equities Book and may lock or cross a Protected Quotation of an away Trading Center that was displayed at the time of arrival of the RHO ISO. A User entering an ISO with a time-in-force of RHO represents that such User has simultaneously routed one or more additional Limit Orders marked "ISO," if necessary, to away Trading Centers to execute against the full displayed size of any Protected Quotation for the security with a price that is superior or equal to the limit price of the ISO entered in the System.
- (2) The Exchange relies on the marking of an order as ISO when handling such order, and thus, it is the entering Equity Member's responsibility, not the Exchange's responsibility, to comply with the requirements of Regulation NMS relating to ISOs.
- (e) Cancel/Replace Messages. A User may, by appropriate entry in the System, cancel or replace an existing order entered by the User, subject to the following limitations.
- (1) Orders may only be cancelled or replaced if the order has a time-in-force term other than IOC and if the order has not yet been executed.
- (2) If an order has been routed to another Trading Center, the order will be placed in a "Pending" state until the routing process is completed. Executions that are completed when the order is in the "Pending" state will be processed normally.
- (3) Only the price, sell long, sell short, or short exempt indicator, and size terms of the order may be changed by a Replace Message. If a User desires to change any other terms of an existing order the existing order must be cancelled and a new order must be entered.
- (4) Notwithstanding anything to the contrary in these Exchange Rules, no cancellation or replacement of an order will be effective until such message has been received and processed by the System.
- (f) Self-Trade Protection ("STP") Modifiers. Any order designated with an STP modifier will be prevented from executing against a contra-side order also designated with an STP modifier and originating from the same MPID, Exchange Member identifier, or trading group identifier (any such identifier, a "Unique Identifier"). The STP modifier on the order with the most recent timestamp controls the interaction between two orders marked with STP modifiers.
- (1) Cancel Newest. An order marked with the Cancel Newest modifier will not execute against a contra-side order marked with any STP modifier originating from the same Unique Identifier. The order with the most recent timestamp marked with the Cancel Newest modifier will be cancelled back to the originating User(s). The contra-side order with the older timestamp marked with an STP modifier will remain on the PEARL Equities Book.
- (2) Cancel Oldest. An order marked with the Cancel Oldest modifier will not execute against a contra-side order marked with any STP modifier originating from the same Unique Identifier. The order with the older timestamp marked with the STP modifier will be cancelled back to the originating User(s). The contra-side order with the most recent timestamp marked with the STP modifier will remain on the PEARL Equities Book.

- (3) **Decrement and Cancel**. An order marked with the Decrement and Cancel modifier will not execute against contra-side interest marked with any STP modifier originating from the same Unique Identifier. If both orders are equivalent in size, both orders will be cancelled back to the originating User(s). If both orders are not equivalent in size, the equivalent size will be cancelled back to the originating User(s) and the larger order will be decremented by the size of the smaller order, with the balance remaining on the PEARL Equities Book.
- (4) Cancel Both. An order marked with the Cancel Both modifier will not execute against contra-side interest marked with any STP modifier originating from the same Unique Identifier. The entire size of both orders will be cancelled back to the originating User(s).

(g) Re-Pricing Processes to Comply with Regulatory Requirements

The System will process orders, subject to a User's instructions, pursuant to the price sliding processes, as defined below.

(1) **Display Price Sliding Process**

- (A) An order to buy (sell) designated as Displayed that, if displayed at its limit price on the PEARL Equities Book upon entry, would create a violation of Rule 610(d) of Regulation NMS by locking or crossing the PBO (PBB) of an away Trading Center will be assigned a working price equal to the PBO (PBB) and a displayed price one (1) minimum price variation below (above) the current PBO (PBB). A User may elect to have the System only apply the Display Price Sliding Process to the extent a display-eligible order to buy (sell) at the time of entry would create a violation of Rule 610(d) of Regulation NMS by locking the PBO (PBB) of an away Trading Center. For Users that select this order handling, any order to buy (sell) will be cancelled if, upon entry, such order would create a violation of Rule 610(d) of Regulation NMS by crossing the PBO (PBB) of an away Trading Center.
- (B) An order subject to the Display Price Sliding Process will retain its original limit price irrespective of the working and displayed price assigned to the order. In the event the PBBO changes such that an order to buy (sell) subject to the Display Price Sliding Process would no longer lock or cross the PBO (PBB) of an away Trading Center, the order will receive a new timestamp and will be assigned a working and displayed price at the most aggressive permissible price. All orders that are assigned new working and displayed prices pursuant to the Display Price Sliding Process will retain their priority as compared to other orders subject to the Display Price Sliding Process based upon the time such orders were initially received by the Exchange. Following the initial ranking and display of an order subject to the Display Price Sliding Process, an order will only be assigned a new working and displayed price to the extent it achieves a more aggressive price, provided, however, that the Exchange will assign an order a working price equal to the displayed price of the order in the event such order's displayed price is locked or crossed by a Protected Quotation of an away Trading Center. Such event will not result in a change in priority for the order at its displayed price.
- (C) The working and displayed prices of an order subject to the Display Price Sliding Process may be adjusted once or multiple times depending upon the instructions of a User and changes to the prevailing PBBO. Unless otherwise instructed by the User, the System will only adjust the working and displayed prices of an order upon entry and then the displayed price one

additional time following a change to the prevailing PBBO. The working and displayed prices of orders subject to the optional multiple price sliding process will be adjusted, as permissible, based on changes to the prevailing PBBO.

- (D) Any display-eligible order to buy (sell) designated as Post Only that locks or crosses the PBO (PBB) displayed by the Exchange upon entry will be executed as set forth in Exchange Rule 2614(c)(2) or cancelled. Depending on User instructions, a display-eligible order to buy (sell) designated as Post Only that locks or crosses the PBO (PBB) displayed by an away Trading Center upon entry will be subject to the Display Price Sliding Process described in this paragraph (g)(1). In the event the PBBO changes such that an order designated as Post Only subject to the Display Price Sliding Process would be assigned a working price at which it could remove displayed liquidity from the PEARL Equities Book, the order will be executed as set forth in Exchange Rule 2614(c)(2) or cancelled.
- (E) Orders to buy (sell) designated as Post Only will be permitted to post and be displayed opposite the working price of orders to sell (buy) subject to the Display Price Sliding Process. In the event an order subject to the Display Price Sliding Process is ranked on the PEARL Equities Book with a working price equal to an opposite side order displayed by the Exchange, it will be subject to processing as set forth in Exchange Rule 2617(a)(4).

(2) Non-Displayed Price Sliding Process

To avoid potentially trading through Protected Quotations of an away Trading Center, a non-displayed, non-routable order to buy (sell) that, upon entry, would cross the PBO (PBB) of an away Trading Center will be assigned a working price by the System equal to the PBO (PBB). In the event the PBO (PBB) changes such that the working price of a non-displayed order to buy (sell) resting on the PEARL Equities Book would again cross the PBO (PBB) of an external market, the working price of the non-displayed order to buy (sell) will be adjusted by the System to be equal to the updated PBO (PBB) and will receive new timestamp. In the event a non-displayed order to buy (sell) has been re-priced by the System pursuant to this subparagraph (2), such non-displayed order to buy (sell) will not be re-priced by the System unless it again crosses the PBO (PBB) of an away Trading Center or it achieves a more aggressive price due to an update in the PBO (PBB) of an away Trading Center.

(3) Short Sale Price Sliding Process

- (A) A short sale order that, at the time of entry, could not be executed or displayed at its limit price due to a short sale price test restriction under Rule 201 of Regulation SHO ("Short Sale Period") will be assigned a working and displayed price by the System equal to one (1) minimum price variation above the current NBB ("Permitted Price"). Unless otherwise instructed by the User, the System will only adjust the working and displayed price of a short sale order upon entry. To reflect declines in the NBB during a Short Sale Period, a User may elect that the System continue to adjust the working and displayed price of a displayed short sale order to the Permitted Price down to the order's original limit price.
- (B) In the event the NBB changes during a Short Sale Period such that the working price of a non-displayed short sale order would lock or cross the NBB, the order will be assigned a working price by the System equal to the Permitted Price and receive a new timestamp. To reflect changes in the NBB during a Short Sale Period, the System will continue to adjust the working price

of a non-displayed short sale order subject to the order's limit price.

- (C) During a Short Sale Period, a short sale order will be executed and displayed without regard to price if, at the time of initial display of the short sale order, the order was at a price above the then current NBB. Short sale orders that are entered into the Exchange prior to the Short Sale Period but are not displayed will be adjusted to a Permitted Price.
- (D) Short sale orders marked "short exempt" will not be subject to the Short Sale Price Sliding Process.
- (E) Applicability of the Short Sale Price Sliding Process. During a Short Sale Period, a short sale order will be subject to the Short Sale Price Sliding Process, even if such order is also eligible for the Display Price Sliding Process.

Rule 2615. Opening Process for Equity Securities

- (a) Order Entry and Cancellation before the Opening Process. Prior to the beginning of Regular Trading Hours, Users who wish to participate in the Opening Process may enter orders to buy or sell that are designated as RHO. Orders cancelled before the Opening Process will not participate in the Opening Process.
- (1) Only orders that include a time-in-force of RHO may participate in the Opening Process. Orders designated as Post Only, ISOs, and orders that include a time-in-force other than RHO are not eligible to participate in the Opening Process.
- (2) All STP modifiers, as defined in Exchange Rule 2614(f), will be honored during the Opening Process.
- (3) PEARL Equities will open by attempting to execute all orders eligible for the Opening Process.
- (b) Performing the Opening Process. During the Opening Process, the Exchange attempts to match eligible buy and sell orders at the midpoint of the NBBO, as described in paragraph (c) below. All orders eligible to trade at the midpoint will be processed in time sequence, beginning with the order with the oldest timestamp. The Opening Process will conclude when no remaining orders, if any, can be matched at the midpoint of the NBBO. At the conclusion of the Opening Process, the unexecuted portion of orders that were eligible to participate in the Opening Process will be placed on the PEARL Equities Book in time sequence, cancelled, executed, or routed to away Trading Centers in accordance with the terms of the order.
- (c) **Determining the Price of the Opening Process**. The price of the Opening Process will be the midpoint of the NBBO, which will be determined as set forth below.
- (1) When the primary listing exchange is the NYSE or NYSE American, the Opening Process will be priced at the midpoint of the: (i) first NBBO subsequent to the first reported trade and first two-sided quotation on the primary listing exchange after 9:30:00 a.m. Eastern Time; or (ii) then prevailing NBBO when the first two-sided quotation is published by the primary listing exchange after 9:30:00 a.m. Eastern Time, but before 9:45:00 a.m. Eastern Time if no first trade is reported by the primary listing exchange within one second of publication of the first two-sided quotation by the primary listing exchange.

- (2) For any other primary listing exchange, the Opening Process will be priced at the midpoint of the first NBBO subsequent to the first two-sided quotation published by the primary listing exchange after 9:30:00 a.m. Eastern Time.
- (d) Contingent Open. If the conditions to establish the price of the Opening Process set forth under paragraph (c) above do not occur by 9:45:00 a.m. Eastern Time, the Exchange will match all orders eligible to participate in the Opening Process at the midpoint of the then prevailing NBBO. If the midpoint of the NBBO is not available, all orders will be handled in time sequence, beginning with the order with the oldest timestamp, and be placed on the PEARL Equities Book, cancelled, executed, or routed to away Trading Centers in accordance with the terms of the order.
- (e) **Re-Opening After a Halt**. While an Equity Security is subject to a halt, suspension, or pause in trading, the Exchange will accept orders for queuing prior to the resumption of trading in the security for participation in the Re-Opening Process.
- (1) The Re-Opening Process will occur in the same manner described in paragraphs (a) through (c) above, with the following exceptions:
 - (A) ISOs, orders that include a time-in-force of IOC and orders designated as Post Only will be cancelled or rejected, as applicable;
 - (B) the Re-Opening Process will occur at the midpoint of the: (i) first NBBO subsequent to the first reported trade and first two-sided quotation on the primary listing exchange following the resumption of trading after a halt, suspension, or pause; or (ii) NBBO when the first two-sided quotation is published by the primary listing exchange following the resumption of trading after a halt, suspension, or pause if no first trade is reported by the listing exchange within one second of publication of the first two-sided quotation by the listing exchange.
- (2) Where neither of the conditions required to establish the price of the Re-Opening Process in paragraph (e)(1)(B) above have occurred, the Equity Security may be opened for trading at the discretion of the Exchange. In such case, all orders will be handled in time sequence, beginning with the order with the oldest timestamp, and be placed on the PEARL Equities Book, cancelled, executed, or routed to away Trading Centers in accordance with the terms of the order.

Rule 2616. Priority of Orders

- (a) **Ranking.** All non-marketable orders are ranked and maintained in the PEARL Equities Book according to price-time priority in the following manner: (1) price; (2) priority category; (3) time; and (4) ranking restrictions applicable to an order or modifier condition:
- (1) **Price**. All orders are ranked based on the working price of an order. Orders to buy are ranked from highest working price to lowest working price. Orders to sell are ranked from lowest working price to highest working price. If the working price of an order changes, the price priority of the order changes.
- (2) **Priority Category.** Subject to the execution process described in Rule 2617(a), the following priority rules shall apply:
 - (A) Within each priority category, where orders to buy (sell) are entered into the System

and resting in the PEARL Equities Book at the same working price, the order clearly established as the first entered into the System at such particular price shall have precedence at that price, up to the number of shares specified in the order. The System shall rank equally priced trading interest within each priority category in time priority in the following order:

- (i) Displayed Limit Orders. Non-marketable Limit Orders for which their working price is displayed.
- (ii) Non-Displayed Orders. Non-marketable Limit Orders for which their working price is non-displayed.
- (B) For purposes of paragraph (A) above:
- (i) ISOs, as defined in Exchange Rule 2614(d) are treated as Limit Orders, as defined in Rule 2614(a)(1).
- (3) **Time**. Within each priority category, orders are ranked based on time priority.
- (A) An order is assigned a timestamp based on its original entry time, which is the time when an order is first placed in the PEARL Equities Book.
 - (i) An order that is fully routed to an away Trading Center on arrival is not assigned a timestamp time unless and until any unexecuted portion of the order returns to the PEARL Equities Book.
 - (ii) For an order that is partially routed to an away Trading Center on arrival, the portion that is not routed is assigned a timestamp. If any unexecuted portion of the order returns to the PEARL Equities Book and joins any remaining resting portion of the original order, the returned portion of the order is assigned the same timestamp as the resting portion of the order. If the resting portion of the original order has already executed and any unexecuted portion of the order returns to the PEARL Equities Book, the returned portion of the order is assigned a new timestamp.
 - (B) An order is assigned a new timestamp any time the working price of an order changes.
- (4) **Self-Trade Protection**. Pursuant to Exchange Rule 2614(f), Users may direct that orders entered into the System not execute against orders entered under the same Unique Identifier. In such a case, the System will not permit such orders to execute against one another, regardless of priority ranking.
- (5) Cancel/Replace Messages. In the event an order has been cancelled or replaced in accordance with Exchange Rule 2614(e) above, such order only retains its timestamp if such modification involves a decrease in the size of the order or a change in position from (A) sell to sell short; (B) sell to sell short exempt; (C) sell short to sell; (D) sell short to sell short exempt; (E) sell short exempt to sell; and (F) sell short exempt to sell short. Any other modification to an order, including an increase in the size of the order and/or price change, will result in such order losing time priority as compared to other orders in the PEARL Equities Book and the timestamp for such order being revised to reflect the time of the modification.
 - (6) In the event that an order is executed against an incoming order or Aggressing Order in

accordance with Exchange Rule 2617 for less than its full size, the unexecuted size of the order shall retain its timestamp and be ranked in accordance with paragraph (2) above.

- (b) **Dissemination.** The best-ranked order(s) to buy and the best-ranked order(s) to sell that are displayable in the PEARL Equities Book and the aggregate displayed size of such orders associated with such prices shall be collected and made available to quotation vendors for dissemination pursuant to the requirements of Rule 602 of Regulation NMS. Pursuant to Rule 602 of Regulation NMS under the Exchange Act, PEARL Equities will transmit for display to the appropriate network processor for each System Security:
- (1) the highest price to buy wherein the aggregate size of all displayed buy interest in the System greater than or equal to that price is one round lot or greater;
- (2) the aggregate size of all displayed buy interest in the System greater than or equal to the price in (1), rounded down to the nearest round lot;
- (3) the lowest price to sell wherein the aggregate size of all displayed sell interest in the System less than or equal to that price is one round lot or greater; and
- (4) the aggregate size of all displayed sell interest in the System less than or equal to the price in paragraph (3) above, rounded down to the nearest round lot.

Rule 2617. Order Execution and Routing

Subject to the restrictions under these Exchange Rules or the Exchange Act and the rules and regulations thereunder, orders shall be matched for execution and routed in accordance with this Exchange Rule 2617.

- (a) Execution Against PEARL Equities Book. For purposes of this Exchange Rule 2617 any order falling within the parameters of this paragraph shall be referred to as executable. An order will be cancelled back to the User if, based on market conditions, User instructions, applicable Exchange Rules and/or the Act and the rules and regulations thereunder, such order is not executable, cannot be routed to another Trading Center pursuant to paragraph (b) of this Exchange Rule 2617 below and cannot be posted to the PEARL Equities Book.
- (1) Compliance with Regulation SHO. For any execution of a short sale order to occur on the Exchange during a Short Sale Period, as defined in Exchange Rule 2614(g)(3)(A), the execution price must be better than the NBB, unless the sell short order was initially displayed by the System at a price above the then current NBB or is marked "short exempt" pursuant to Rule 200(g)(2) of Regulation SHO.

(2) Compliance with Regulation NMS and Trade-Through Protection.

- (A) Regular Trading Hours. For any execution to occur during Regular Trading Hours, the price of an order to buy (sell) must be equal to or lower (greater) than the PBO (PBB), unless the order is marked ISO or the execution falls within another exception set forth in Rule 611(b) of Regulation NMS.
- (3) Compliance with the Limit Up-Limit Down Plan. For any executions to occur during Regular Trading Hours, such executions must comply with the Limit-Up Limit Down Plan, as set forth in Rule 2622(e) below.

- (4) Execution against PEARL Equities Book. An incoming order or Aggressing Order shall first attempt to be matched for execution against orders in the PEARL Equities Book, as described below.
 - (A) **Buy Orders**. An Aggressing Order and an incoming order to buy will be automatically executed to the extent that it is priced at an amount that equals or exceeds any order to sell in the PEARL Equities Book and is executable. Such order to buy will be matched for execution against sell orders resting on the PEARL Equities Book according to the price-time priority ranking of the resting orders.
 - (B) Sell Order. An Aggressing Order and an incoming order to sell will be automatically executed to the extent that it is priced at an amount that equals or is less than any order to buy in the PEARL Equities Book and is executable. Such order to sell will be matched for execution against buy orders resting on the PEARL Equities Book according to the price-time priority ranking of the resting orders.
 - (C) Consistent with Exchange Rule 2614, based on User instructions, certain orders are permitted to post and rest on the PEARL Equities Book at prices that lock contra-side liquidity, provided, however, that the System will never display a locked market. Subject to sub-paragraph (D) below, if an Aggressing Order or an incoming order to buy (sell), pursuant to paragraph (A) or (B) above, would execute upon entry against a resting order to sell (buy) at the same price as a resting displayed order to buy (sell), the Aggressing Order or incoming order to buy (sell) will be cancelled or posted to the PEARL Equities Book and ranked in accordance with Exchange Rule 2616.
 - (D) For securities priced equal to or greater than \$1.00 per share, in the case where a non-displayed order to sell (buy) is posted on the PEARL Equities Book at a price that locks a displayed order to buy (sell) pursuant to sub-paragraph (C) above, an Aggressing Order or an incoming order to buy (sell) described in sub-paragraphs (A) and (B) above is a Market Order or a Limit Order priced more aggressively than the order to buy (sell) displayed on the PEARL Equities Book will execute against the non-displayed order to sell (buy) resting on the PEARL Equities Book at one-half minimum price variation greater (less) than the price of the resting displayed order to buy (sell). For bids or offers under \$1.00 per share, this sub-paragraph is inapplicable.
- (b) Routing to Away Trading Centers. Unless a User elects that the order be non-routable, if a Market Order or Marketable Limit Order has not been executed in its entirety pursuant to paragraph (a) above, the order shall be eligible for additional processing under one or more of the routing options listed under paragraph (b)(5) below.

(1) Order Routing to Other Trading Centers.

As it does for options orders under Exchange Rule 529(a), the Exchange may automatically route orders in Equity Securities to away Trading Centers under certain circumstances as described below and elsewhere in the rules ("Routing Services"). In connection with such services, the following shall apply:

(A) Routing Services will be provided in conjunction with one or more routing brokers that are not affiliated with the Exchange. For each routing broker used by the Exchange, an agreement will be in place between the Exchange and the routing broker that will, among other things, restrict the use of any confidential and proprietary information that the routing broker receives to legitimate business purposes necessary for routing orders at the direction of the

Exchange.

- (i) The Exchange shall establish and maintain procedures and internal controls reasonably designed to adequately restrict the flow of confidential and proprietary information between the Exchange and the routing broker, and any other entity, including any affiliate of the routing broker, and, if the routing broker or any of its affiliates engages in any other business activities other than providing routing services to the Exchange, between the segment of the routing broker or affiliate that provides the other business activities and the segment of the routing broker that provides the Routing Services.
- (ii) The Exchange may not use a routing broker for which the Exchange or any affiliate of the Exchange is the designated examining authority.
- (iii) The Exchange will provide its Routing Services in compliance with the provisions of the Exchange Act and the rules thereunder, including, but not limited to, the requirements in Section 6(b)(4) and (5) of the Exchange Act that the rules of a national securities exchange provide for the equitable allocation of reasonable dues, fees and other charges among its Members and other persons using its facilities, and not be designed to permit unfair discrimination between customers, issuers, brokers or dealers.
- (iv) For all Routing Services, the Exchange will determine the logic that provides when, how, and where orders are routed away to other Trading Centers.
- (v) The routing broker will receive routing instructions from the Exchange, to route orders to other Trading Centers and report such executions back to the Exchange. The routing broker cannot change the terms of an order or the routing instructions, nor does the routing broker have any discretion about where to route an order.
- (vi) Any bid or offer entered on the Exchange routed to another Trading Center through a routing broker that results in an execution shall be binding on the Member that entered such bid/offer.
- (2) Regulation SHO. An order marked "short" is not eligible for routing by the Exchange during a Short Sale Period, as defined in Exchange Rule 2614(g)(3)(A). An order that is ineligible for routing during a Short Sale Period that includes a time-in-force of IOC will be cancelled upon entry. If an order is ineligible for routing during a Short Sale Period and such order is a Limit Order, the Exchange will post the unfilled balance of the Limit Order to the PEARL Equities Book, subject to the Short Sale Price Sliding Process as defined in Exchange Rule 2614(g)(3)(A), unless the User has elected that the order be cancelled.
- (3) The Limit-Up Limit-Down Plan. The Exchange will handle routable orders in connection with the Limit-Up Limit-Down Plan as described in Exchange Rule 2622(e).

(4) **Routing Process**

(A) Routing of Market Orders. The System will designate Market Orders that are fully or partially routed to an away Trading Center as IOC and will cause such orders to be routed for execution to one or more Trading Centers for potential execution, per the entering User's instructions, in compliance with Rule 611 under Regulation NMS, Regulation SHO, and the Limit-

<u>Up Limit-Down Plan.</u> After the System receives responses to orders that were routed away, to the extent an order is not executed in full through the routing process, the System will cancel any <u>unexecuted portion back to the User.</u>

- (B) Routing of Marketable Limit Orders. The System will designate marketable Limit Orders that are fully or partially routed to an away Trading Center as IOC and will cause such orders to be routed for execution to one or more Trading Centers for potential execution, per the entering User's instructions, in compliance with Rule 611 under Regulation NMS, Regulation SHO, and the Limit-Up Limit-Down Plan. After the System receives responses to orders that were routed away, to the extent an order is not executed in full through the routing process, the System will process the balance of such order in accordance with the parameters set by the User when the order was originally entered. As such, the System will either:
 - (i) cancel the unfilled balance of the order back to the User;
 - (ii) process the unfilled balance of an order as an order designated as Do Not Route subject to the price sliding processes described in Exchange Rule 2614(g) and Exchange Rule 2622(e); or
 - (iii) repeat the process described in paragraph (a)(4) above and this paragraph (b)(3) by executing against the PEARL Equities Book and/or re-routing orders to other Trading Centers until the original incoming order is executed in its entirety or its limit price is reached. If the order's limit price is reached, the order will be posted in the PEARL Equities Book, subject to the price sliding processes set forth Exchange Rule 2614(g) and Exchange Rule 2622(e).
- (C) To the extent the System is unable to access a Protected Quotation and there are no other accessible Protected Quotations at the NBBO, the System treat the order as non-routable, provided, however, that this provision will not apply to Protected Quotations published by a Trading Center against which the Exchange has declared self-help pursuant to paragraph (d) below.
- (5) Routing Options. Routing options may be combined with all available order types and times-in-force instructions, with the exception of order types and times-in-force instructions whose terms are inconsistent with the terms of a particular routing option. The System will consider the quotations only of accessible Trading Centers. The term "System routing table" refers to the proprietary process for determining the specific trading venues to which the System routes orders and the order in which it routes them. The Exchange reserves the right to maintain a different System routing table for different routing options and to modify the System routing table at any time without notice. The System routing options are:
 - (A) Order Protection. Order Protection is a routing option under which an order checks the System for available shares and then is routed to attempt to execute against Protected Quotations at away Trading Centers. All routable orders will be defaulted to the Order Protection routing option.

(6) **Priority of Routed Orders**.

(A) Orders routed by the System to other Trading Centers are not ranked and maintained in the PEARL Equities Book pursuant to Rule 2616, and therefore are not available for execution against incoming orders and Aggressing Orders pursuant to paragraph (a) above.

- (B) Once routed by the System, an order becomes subject to the rules and procedures of the destination Trading Center.
- (C) The request to cancel an order routed to another Trading Center will not be processed unless and until all or a portion of the order returns unexecuted.
- (D) For an order that is partially routed to another Trading Center on arrival, the portion that is not routed is assigned a timestamp. If any unexecuted portion of the order returns to the PEARL Equities Book and joins any remaining resting portion of the original order, the returned portion of the order is assigned the same timestamp as the resting portion of the order. If the resting portion of the original order has already executed and any unexecuted portion of the order returns to the Exchange Book, the returned portion of the order is assigned a new timestamp.
- (E) Following the routing process described above, unless the terms of the order direct otherwise, any unfilled portion of the order shall be ranked in the PEARL Equities Book in accordance with the terms of such order under Exchange Rule 2616 and such order shall be eligible for execution under this Exchange Rule 2617.
- (c) **Display of Automated Quotations**. The System will be operated as an "automated market center" within the meaning of Regulation NMS, and in furtherance thereof, will display "automated quotations" within the meaning of Regulation NMS at all times except in the event that a systems malfunction renders the System incapable of displaying automated quotations. The Exchange shall communicate to Users its procedures concerning a change from automated to "manual quotations" (as defined in Regulation NMS).
- (d) **Self-Help.** Pursuant to the self-help provisions of Regulation NMS, the System may execute a transaction that would constitute a trade-through of a Protected Quotation displayed on another Trading Center if such Trading Center is experiencing a failure, material delay, or malfunction of its systems or equipment. If another Trading Center publishing a Protected Quotation repeatedly fails to respond within one (1) second to orders sent by the System to access the Trading Center's Protected Quotation, the System may disregard those Protected Quotations when routing, displaying, canceling or executing orders on the Exchange. When invoking self-help, the Exchange will:
- (1) Notify the non-responding Trading Center immediately after (or at the same time as) electing self-help; and
- (2) Assess whether the cause of the problem lies with the System and, if so, taking immediate steps to resolve the problem instead of invoking self-help.

Rule 2618. Risk Settings and Trading Risk Metrics

(a) **Risk Settings**

- (1) PEARL Equities offers certain risk settings applicable to a User's activities on PEARL Equities. The risk settings offered by PEARL Equities include:
 - (A) controls related to the size of an order (including restrictions on the maximum notional value per order and maximum shares per order);

- (B) controls related to the price of an order (including percentage-based and dollar-based controls);
- (C) controls related to the order types or modifiers that can be utilized (including short sales and ISOs); and
 - (D) controls to prohibit duplicative orders.

(2)

- (a) In addition to the risk settings enumerated above, PEARL Equities also offers risk functionality that permits Users to block new orders submitted, to cancel all open orders, or to both block new orders and cancel all open orders. Furthermore, PEARL Equities offers risk functionality that automatically cancels a User's orders to the extent the User loses its connection to PEARL Equities.
- (b) A "Purge Port" is a dedicated port that permits a User to simultaneously cancel all or a subset of its orders across multiple logical ports by requesting the Exchange to effect such cancellation. A User initiating such a request may also request that the Exchange block all or a subset of its new inbound orders across multiple logical ports. The block will remain in effect until the earlier of the time at which the User requests the Exchange remove the block or the end of the current trading day.

(b) Trade Risk Metrics

(1) Trading Collar. Except for orders that are eligible for the Opening Process under Exchange Rule 2615, the Trading Collar prevents incoming orders, including those marked ISO, from executing at a price outside the Trading Collar price range, i.e. prevents buy orders from trading or routing at prices above the collar and prevents sell orders from trading or routing at prices below the collar. The Trading Collar price range is calculated using the greater of numerical guidelines for clearly erroneous executions or a specified dollar value established by the Exchange. Executions are permitted at prices within the Trading Collar price range, inclusive of the boundaries. Upon entry, any portion of an order to buy (sell) that would execute at a price above (below) the Trading Collar Price is cancelled.

(A) The Trading Collar Reference Price is equal to the following:

- (i) consolidated last sale price disseminated during the Regular Trading Hours on trade date; or
- (ii) if (i) is not available, the prior day's Official Closing Price identified as such by the primary listing exchange, adjusted to account for events such as corporate actions and news events.
- (B) In the absence of a Trading Collar Reference Price, the Exchange will suspend the Trading Collar function, in the interest of maintaining a fair and orderly market in the impacted security.
- (C) The Exchange calculates the Trading Collar price range for a security by applying the Numerical Guideline and reference price (see table below) to the Trading Collar Reference Price, as defined in paragraph (A) above. The result is added to the Trading Collar Reference Price to determine the Trading Collar Price for buy orders, while the result is subtracted from the Trading

Collar Reference Price to determine the Trading Collar Price for sell orders. The Trading Collar Price for an order to buy (sell) that is not in the minimum price variation ("MPV") for the security, as defined in Exchange Rule 2612, will be rounded down (up) to the nearest price at the applicable MPV. The appropriate Trading Collar Price is assigned to all orders upon entry. The Trading Collar Price is not enforced throughout the life of the order nor updated once the order is resting on the PEARL Equities Book.

(D) The Numerical Guideline used in the Trading Collar Price calculation is based on the table below:

Trading Collar Reference Price	Regular Trading Hours Numerical Guidelines
Greater than \$0.00 up to and including \$25.00	10%
Greater than \$25.00 up to and including \$50.00	<u>5%</u>
Greater than \$50.00	3%

These percentages are based upon the numerical guidelines for clearly erroneous executions under Exchange Rule 2621. The specified dollar values will be posted to the Exchange's website and the Exchange will announce in advance any changes to the dollar value via a Regulatory Circular.

(E) For Market Orders only, a User may select a dollar value lower than the specified percentages and dollar values described under paragraph (D) on an order by order basis. In such case, the dollar value selected by the User will override the dollar values and specific percentages set forth under paragraph (D) above.

Rule 2619. Trade Execution and Reporting

- (a) Executions occurring as a result of orders matched against the PEARL Equities Book shall be reported by the Exchange to an appropriate consolidated transaction reporting system to the extent required by the Exchange Act and the rules and regulations thereunder. Executions occurring as a result of orders routed away from the System shall be reported to an appropriate consolidated transaction reporting system by the relevant reporting Trading Center. The Exchange shall promptly notify Users of all executions of their orders as soon as such executions take place.
- (b) The Exchange shall identify all trades executed pursuant to an exception or exemption from Rule 611 of Regulation NMS in accordance with specifications approved by the operating committee of the relevant national market system plan for an NMS stock. If a trade is executed pursuant to both the ISO exception of Rule 611(b)(5) of Regulation NMS and the self-help exception of Rule 611(b)(1) of Regulation NMS, such trade shall be identified as executed pursuant to the ISO exception.

Rule 2620. Clearance and Settlement; Anonymity

(a) All transactions through PEARL Equities shall be cleared and settled through a Qualified Clearing Agency using a continuous net settlement system. This requirement may be satisfied by direct participation,

use of direct clearing services, or by entry into a correspondent clearing arrangement with another Equity Member that clears trades through a Qualified Clearing Agency. If an Equity Member clears transactions through another Equity Member that is a member of a Qualified Clearing Agency ("Clearing Member"), such Clearing Member shall affirm to the Exchange in writing, through letter of authorization, letter of guarantee or other agreement acceptable to the Exchange, its agreement to assume responsibility for clearing and settling any and all trades executed by the Equity Member designating it as its clearing firm. The rules of any such clearing agency shall govern with respect to the clearance and settlement of any transactions executed by the Equity Member on the Exchange.

- (b) Notwithstanding paragraph (a), transactions may be settled "ex-clearing" provided that both parties to the transaction agree.
- (c) Each transaction executed within the System is executed on a locked-in basis and shall be automatically processed for clearance and settlement.
- (d) The transaction reports produced by the System will indicate the details of transactions executed in the System but shall not reveal contra party identities. Except as set forth in paragraph (e) below, transactions executed in the System will also be cleared and settled anonymously.
- (e) Except as required by any Qualified Clearing Agency, the Exchange will reveal the identity of an Equity Member or Equity Member's clearing firm in the following circumstances:
 - (1) for regulatory purposes or to comply with an order of a court or arbitrator; or
- (2) when a Qualified Clearing Agency ceases to act for an Equity Member or the Equity Member's clearing firm, and determines not to guarantee the settlement of the Equity Member's trades.
- (f) The Exchange may share any of a User's risk settings specified in Exchange Rule 2618(a) with the Clearing Member that clears transactions on behalf of the User.

Rule 2621. Clearly Erroneous Executions

- (a) **Definition.** For purposes of this Exchange Rule, the terms of a transaction executed on the Exchange are "clearly erroneous" when there is an obvious error in any term, such as price, number of shares or other unit of trading, or identification of the security. A transaction made in clearly erroneous error and cancelled by both parties or determined by the Exchange to be clearly erroneous will be removed from the Consolidated Tape.
- (b) Request and Timing of Review. A Member that receives an execution on an order that was submitted erroneously to the Exchange for its own or customer account may request that the Exchange review the transaction under this Exchange Rule. An Officer of the Exchange or such other employee designee of the Exchange ("Official") shall review the transaction under dispute and determine whether it is clearly erroneous, with a view toward maintaining a fair and orderly market and the protection of investors and the public interest. Such request for review shall be made in writing via e-mail or other electronic means specified from time to time by the Exchange in a circular distributed to Members.
- (1) **Requests for Review**. Requests for review must be received by the Exchange within thirty (30) minutes of execution time and shall include information concerning the time of the transaction(s), security symbol(s), number of shares, price(s), side (bought or sold), and factual basis for believing that the

trade is clearly erroneous. Upon receipt of a timely filed request that satisfies the numerical guidelines set forth in paragraph (c)(1) of this Exchange Rule, the counterparty to the trade, if any, shall be notified by the Exchange as soon as practicable, but generally within thirty (30) minutes. An Official may request additional supporting written information to aid in the resolution of the matter. If requested, each party to the transaction shall provide any supporting written information as may be reasonably requested by the Official to aid resolution of the matter within thirty (30) minutes of the Official's request. Either party to the disputed trade may request the supporting written information provided by the other party on the matter.

- (2) **Routed Executions**. Other market centers will generally have an additional thirty (30) minutes from receipt of their participant's timely filing, but no longer than sixty (60) minutes from the time of the execution at issue, to file with the Exchange for review of transactions routed to the Exchange from that market center and executed on the Exchange.
- (c) Thresholds. Determinations of whether an execution is clearly erroneous will be made as follows:
- (1) Numerical Guidelines. Subject to the provisions of paragraph (c)(3) below, a transaction executed during Regular Trading Hours shall be found to be clearly erroneous if the price of the transaction to buy (sell) that is the subject of the complaint is greater than (less than) the Reference Price by an amount that equals or exceeds the Numerical Guidelines set forth below. The execution time of the transaction under review determines whether the threshold is Regular Trading Hours (which occur before and after the Regular Trading Hours). The Reference Price will be equal to the consolidated last sale immediately prior to the execution(s) under review except for: (A) Multi-Stock Events involving twenty or more securities, as described in paragraph (c)(2) below; and (B) in other circumstances, such as, for example, relevant news impacting a security or securities, periods of extreme market volatility, sustained illiquidity, or widespread system issues, where use of a different Reference Price is necessary for the maintenance of a fair and orderly market and the protection of investors and the public interest.

Reference Price, Circumstance or Product	Regular Trading Hours Numerical Guidelines (Subject transaction's % difference from the Reference Price):
Greater than \$0.00 up to and including \$25.00	10%
Greater than \$25.00 up to and including \$50.00	<u>5%</u>
Greater than \$50.00	<u>3%</u>
Multi-Stock Event – Filings involving five or more, but less than twenty, securities whose executions occurred within a period of five minutes or less	10%
Multi-Stock Event – Filings involving twenty or more securities whose executions occurred within a period of five minutes or less	30%, subject to the terms of paragraph (c)(2) below

Reference Price, Circumstance or Product	Regular Trading Hours Numerical Guidelines (Subject transaction's % difference from the Reference Price):
Leveraged ETF/ETN Securities	Regular Trading Hours Numerical Guidelines multiplied by the leverage multiplier (i.e., 2x)

- (2) Multi-Stock Events Involving Twenty or More Securities. During Multi-Stock Events involving twenty or more securities the number of affected transactions may be such that immediate finality is necessary to maintain a fair and orderly market and to protect investors and the public interest. In such circumstances, the Exchange may use a Reference Price other than consolidated last sale. To ensure consistent application across market centers when this paragraph is invoked, the Exchange will promptly coordinate with the other market centers to determine the appropriate review period, which may be greater than the period of five minutes or less that triggered application of this paragraph, as well as select one or more specific points in time prior to the transactions in question and use transaction prices at or immediately prior to the one or more specific points in time selected as the Reference Price. The Exchange will nullify as clearly erroneous all transactions that are at prices equal to or greater than 30% away from the Reference Price in each affected security during the review period selected by the Exchange and other markets consistent with this paragraph.
- (3) Additional Factors. Except in the context of a Multi-Stock Event involving five or more securities, an Official may also consider additional factors to determine whether an execution is clearly erroneous, including but not limited to, system malfunctions or disruptions, volume and volatility for the security, derivative securities products that correspond to greater than 100% in the direction of a tracking index, news released for the security, whether trading in the security was recently halted/resumed, whether the security is an initial public offering, whether the security was subject to a stock-split, reorganization, or other corporate action, overall market conditions, validity of the consolidated tape trades and quotes, consideration of primary market indications, and executions inconsistent with the trading pattern in the stock. Each additional factor shall be considered with a view toward maintaining a fair and orderly market and the protection of investors and the public interest.
- (d) **Outlier Transactions**. In the case of an Outlier Transaction, an Official may, in his or her sole discretion, and on a case-by-case basis, consider requests received pursuant to paragraph (b) of this Exchange Rule after thirty (30) minutes, but not longer than sixty (60) minutes after the transaction in question, depending on the facts and circumstances surrounding such request.
- (1) An "Outlier Transaction" means a transaction where the execution price of the security is greater than three times the current Numerical Guidelines set forth in paragraph (c)(1) of this Exchange Rule.
- (2) If the execution price of the security in question is not within the Outlier Transaction parameters set forth in paragraph (d)(1) of this Exchange Rule but breaches the 52-week high or 52-week low, the Exchange may consider Additional Factors as outlined in paragraph (c)(3), in determining if the transaction qualifies for further review or if the Exchange shall decline to act.

(e) **Review Procedures**

- withdraw the initial request for review, the transaction under dispute shall be reviewed, and a determination shall be rendered by the Official. If the Official determines that the transaction is not clearly erroneous, the Official shall decline to take any action in connection with the completed trade. In the event that the Official determines that the transaction in dispute is clearly erroneous, the Official shall declare the transaction null and void. A determination shall be made generally within thirty (30) minutes of receipt of the complaint, but in no case later than the start of Regular Trading Hours on the following trading day. The parties shall be promptly notified of the determination.
- (2) Appeals. If a Member affected by a determination made under this Exchange Rule so requests within the time permitted below, the Clearly Erroneous Execution Panel ("CEE Panel") will review decisions made by the Official under this Exchange Rule, including whether a clearly erroneous execution occurred and whether the correct determination was made; provided however that the CEE Panel will not review decisions made by an Officer under paragraph (f) of this Exchange Rule if such Officer also determines under paragraph (f) of this Exchange Rule that the number of the affected transactions is such that immediate finality is necessary to maintain a fair and orderly market and to protect investors and the public interest, and further provided that with respect to rulings made by the Exchange in conjunction with one or more additional market centers, the number of affected transactions is similarly such that immediate finality is necessary to maintain a fair and orderly market and to protect investors and the public interest and, hence, are also non-appealable.
 - (A) The CEE Panel will be comprised of the Exchange's Chief Regulatory Officer ("CRO"), or a designee of the CRO, and representatives from two (2) Members.
 - (B) The Exchange shall designate at least ten (10) representatives of Members to be called upon to serve on the CEE Panel as needed. In no case shall a CEE Panel include a person affiliated with a party to the trade in question. To the extent reasonably possible, the Exchange shall call upon the designated representatives to participate on a CEE Panel on an equally frequent basis.
 - (C) A request for review on appeal must be made in writing via e-mail or other electronic means specified from time to time by the Exchange in a circular distributed to Members within thirty (30) minutes after the party making the appeal is given notification of the initial determination being appealed. The CEE Panel shall review the facts and render a decision as soon as practicable, but generally on the same trading day as the execution(s) under review. On requests for appeal received between 3:00 p.m. Eastern Time and the close of trading, a decision will be rendered as soon as practicable, but in no case later than the trading day following the date of the execution under review.
 - (D) The CEE Panel may overturn or modify an action taken by the Official under this Exchange Rule. All determinations by the CEE Panel shall constitute final action by the Exchange on the matter at issue.
 - (E) If the CEE Panel votes to uphold the decision made pursuant to paragraph (e)(1) above, the Exchange will assess a \$500.00 fee against the Member(s) who initiated the request for appeal. In addition, in instances where the Exchange, on behalf of a Member, requests a determination by another market center that a transaction is clearly erroneous, the Exchange will pass any resulting charges through to the relevant Member.
 - (F) Any determination by an Official or by the CEE Panel shall be rendered without prejudice as to the rights of the parties to the transaction to submit their dispute to arbitration.

- System Disruption or Malfunctions. In the event of any disruption or a malfunction in the operation of any electronic communications and trading facilities of the Exchange in which the nullification of transactions may be necessary for the maintenance of a fair and orderly market or the protection of investors and the public interest exist, an Officer of the Exchange or other senior level employee designee, on his or her own motion, may review such transactions and declare such transactions arising out of the operation of such facilities during such period null and void. In such events, the Officer of the Exchange or such other senior level employee designee will rely on the provisions of paragraph (c)(1)-(3) of this Exchange Rule, but in extraordinary circumstances may also use a lower Numerical Guideline if necessary to maintain a fair and orderly market, protect investors and the public interest. Absent extraordinary circumstances, any such action of the Officer of the Exchange or other senior level employee designee pursuant to this paragraph (f) shall be taken within thirty (30) minutes of detection of the erroneous transaction. When extraordinary circumstances exist, any such action of the Officer of the Exchange or senior level employee designee must be taken by no later than the start of Regular Trading Hours on the trading day following the date of execution(s) under review. Each Member involved in the transaction shall be notified as soon as practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of paragraph (e)(2) above.
- (g) Officer Acting on Own Motion. An Officer of the Exchange or senior level employee designee, acting on his or her own motion, may review potentially erroneous executions and declare trades null and void or shall decline to take any action in connection with the completed trade(s). In such events, the Officer of the Exchange or such other senior level employee designee will rely on the provisions of paragraph (c)(1)-(3) of this Exchange Rule. Absent extraordinary circumstances, any such action of the Officer of the Exchange or other senior level employee designee shall be taken in a timely fashion, generally within thirty (30) minutes of the detection of the erroneous transaction. When extraordinary circumstances exist, any such action of the Officer of the Exchange or other senior level employee designee must be taken by no later than the start of Regular Trading Hours on the trading day following the date of execution(s) under review. When such action is taken independently, each party involved in the transaction shall be notified as soon as practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of paragraph (e)(2) above.
- Trade Nullification for UTP Securities that are Subject of Initial Public Offerings ("IPOs"). Pursuant to SEC Rule 12f-2, as amended, the Exchange may extend unlisted trading privileges to a security that is the subject of an IPO when at least one transaction in the subject security has been effected on the national securities exchange or association upon which the security is listed and the transaction has been reported pursuant to an effective transaction reporting plan. A clearly erroneous error may be deemed to have occurred in the opening transaction of the subject security if the execution price of the opening transaction on the Exchange is the lesser of \$1.00 or 10% away from the opening price on the listing exchange or association. In such circumstances, the Officer of the Exchange or other senior level employee designee shall declare the opening transaction null and void or shall decline to take action in connection with the completed trade(s). Clearly erroneous executions of subsequent transactions of the subject security will be reviewed in the same manner as the procedure set forth in (e)(1). Absent extraordinary circumstances, any such action of the Officer of the Exchange or other senior level employee designee pursuant to this subsection (h) shall be taken in a timely fashion, generally within thirty (30) minutes of the detection of the erroneous transaction. When extraordinary circumstances exist, any such action of the Officer of the Exchange or other senior level employee designee must be taken by no later than the start of Regular Trading Hours on the trading day following the date of execution(s) under review. Each party involved in the transaction shall be notified as soon as practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of paragraph (e)(2) above.

- Securities Subject to Limit Up-Limit Down Plan. For purposes of this paragraph, the phrase "Limit Up-Limit Down Plan" or "Plan" shall mean the Plan to Address Extraordinary Market Volatility Pursuant to Rule 608 of Regulation NMS under the Exchange Act. The provisions of paragraphs (a) through (g) above and (j) through (k) below, shall govern all Exchange transactions, including transactions in securities subject to the Plan, other than as set forth in this paragraph (i). If as a result of an Exchange technology or systems issue any transaction occurs outside of the applicable price bands disseminated pursuant to the Plan, an Officer of the Exchange or senior level employee designee, acting on his or her own motion or at the request of a third party, shall review and declare any such trades null and void. Absent extraordinary circumstances, any such action of the Officer of the Exchange or other senior level employee designee shall be taken in a timely fashion, generally within thirty (30) minutes of the detection of the erroneous transaction. When extraordinary circumstances exist, any such action of the Officer of the Exchange or other senior level employee designee must be taken by no later than the start of Regular Trading Hours on the trading day following the date on which the execution(s) under review occurred. Each Member involved in the transaction shall be notified as soon as practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of paragraph (e)(2) above. In the event that a single plan processor experiences a technology or systems issue that prevents the dissemination of price bands, the Exchange will make the determination of whether to nullify transactions based on paragraphs (a) through (g) above and (j) through (k) below.
- Multi-Day Event. A series of transactions in a particular security on one or more trading days may (j) be viewed as one event if all such transactions were effected based on the same fundamentally incorrect or grossly misinterpreted issuance information resulting in a severe valuation error for all such transactions (the "Event"). An Officer of the Exchange or senior level employee designee, acting on his or her own motion, shall take action to declare all transactions that occurred during the Event null and void not later than the start of trading on the day following the last transaction in the Event. If trading in the security is halted before the valuation error is corrected, an Officer of the Exchange or senior level employee designee shall take action to declare all transactions that occurred during the Event null and void prior to the resumption of trading. Notwithstanding the foregoing, no action can be taken pursuant to this paragraph with respect to any transactions that have reached settlement date or that result from an initial public offering of a security. To the extent transactions related to an Event occur on one or more other market centers, the Exchange will promptly coordinate with such other market center(s) to ensure consistent treatment of the transactions related to the Event, if practicable. Any action taken in connection with this paragraph will be taken without regard to the Numerical Guidelines set forth in this Exchange Rule. Each Member involved in a transaction subject to this paragraph shall be notified as soon as practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of paragraph (e)(2) above.
- (k) Trading Halts. In the event of any disruption or malfunction in the operation of the electronic communications and trading facilities of the Exchange, another market center or responsible single plan processor in connection with the transmittal or receipt of a regulatory trading halt, suspension or pause, an Officer of the Exchange or senior level employee designee, acting on his or her own motion, shall nullify any transaction in a security that occurs after the primary listing market for such security declares a regulatory trading halt, suspension or pause with respect to such security and before such regulatory trading halt, suspension or pause with respect to such security has officially ended according to the primary listing market. In addition, in the event a regulatory trading halt, suspension or pause is declared, then prematurely lifted in error and is then re-instituted, an Officer of the Exchange or senior level employee designee shall nullify transactions that occur before the official, final end of the halt, suspension or pause according to the primary listing market. Any action taken in connection with this paragraph shall be taken in a timely

fashion, generally within thirty (30) minutes of the detection of the erroneous transaction and in no circumstances later than the start of Regular Trading Hours on the trading day following the date of execution(s) under review. Any action taken in connection with this paragraph will be taken without regard to the Numerical Guidelines set forth in this Exchange Rule. Each Member involved in a transaction subject to this paragraph shall be notified as soon as practicable by the Exchange, and the party aggrieved by the action may appeal such action in accordance with the provisions of paragraph (e)(2) above.

Rule 2622. Limit Up-Limit Down Plan and Trading Halts

Paragraphs (a) through (d) of this Exchange Rule shall be in effect during a pilot period that expires at the close of business on October 18, 2020. If the pilot is not either extended or approved permanently at the end of the pilot period, the Exchange shall amend this Exchange Rule.

- (a) The Exchange shall halt trading in all stocks and shall not reopen for the time periods specified in this Exchange Rule if there is a Level 1, 2, or 3 Market Decline.
- (1) For purposes of this Exchange Rule, a Market Decline means a decline in price of the S&P 500 Index between 9:30 a.m. and 4:00 p.m. on a trading day as compared to the closing price of the S&P 500 Index for the immediately preceding trading day. The Level 1, Level 2, and Level 3 Market Declines that will be applicable for the trading day will be publicly disseminated before 9:30 a.m.
 - (2) A "Level 1 Market Decline" means a Market Decline of 7%.
 - (3) A "Level 2 Market Decline" means a Market Decline of 13%.
 - (4) A "Level 3 Market Decline" means a Market Decline of 20%.

(b) Halts in Trading

- (1) If a Level 1 Market Decline or a Level 2 Market Decline occurs after 9:30 a.m. and up to and including 3:25 p.m., or in the case of an early scheduled close, 12:25 p.m., the Exchange shall halt trading in all stocks for 15 minutes after a Level 1 or Level 2 Market Decline. The Exchange shall halt trading based on a Level 1 or Level 2 Market Decline only once per trading day. The Exchange will not halt trading if a Level 1 Market Decline or a Level 2 Market Decline occurs after 3:25 p.m., or in the case of an early scheduled close, 12:25 p.m.
- (2) If a Level 3 Market Decline occurs at any time during the trading day, the Exchange shall halt trading in all stocks until the primary listing market opens the next trading day.
- (c) If a primary listing market halts trading in all stocks, the Exchange will halt trading in all stocks until trading has resumed on the primary listing market or notice has been received from the primary listing market that trading may resume. If the primary listing market does not reopen a security within 15 minutes following the end of the 15-minute halt period, the Exchange may resume trading in that security.
- (d) Nothing in this Exchange Rule 2622 should be construed to limit the ability of the Exchange to otherwise halt, suspend, or pause the trading in any stock or stocks traded on the Exchange pursuant to any other Exchange rule or policy.

(e) Limit Up-Limit Down Mechanism

(1) **Definitions**.

- (A) The term "Plan" or "Limit Up-Limit Down Plan" means the Plan to Address Extraordinary Market Volatility Pursuant to Rule 608 of Regulation NMS under the Exchange Act, as amended from time to time.
- (B) All capitalized terms not otherwise defined in this paragraph (e) shall have the meanings set forth in the Plan or Exchange rules, as applicable.
- (2) Exchange Participation in the Plan. The Exchange is a Participant in, and subject to the applicable requirements of, the Plan, which establishes procedures to address extraordinary volatility in NMS Stocks.
- (3) **Member Compliance**. Equity Members shall comply with the applicable provisions of the Plan.
- (4) Exchange Compliance with the Plan. The System shall not display or execute buy (sell) interest above (below) the Upper (Lower) Price Bands, unless such interest is specifically exempted under the Plan.
- (5) Re-pricing and Cancellation of Interest. Depending on a User's instructions, the System shall re-price and/or cancel buy (sell) interest that is priced or could be executed above (below) the Upper (Lower) Price Band. When re-pricing resting orders because such orders are above (below) the Upper (Lower) Price Band, the Exchange will provide new timestamps to such orders. The Exchange will also provide new timestamps to resting orders at the less aggressive price to which such orders are re-priced. Any resting interest that is re-priced pursuant to this Exchange Rule shall maintain priority ahead of interest that was originally less aggressively priced, regardless of the original timestamps for such orders.
 - (A) Market Orders and orders Designated IOC. The System will only execute Market Orders and orders designated IOC at or within the Price Bands.
 - (B) Limit-Priced Interest. Limit-priced interest will be cancelled if a User has entered instructions not to use the re-pricing process under this paragraph (e) and such interest to buy (sell) is priced above (below) the Upper (Lower) Price Band. If re-pricing is permitted based on a User's instructions, both displayable and non-displayable incoming limit-priced interest to buy (sell) that is priced above (below) the Upper (Lower) Price Band shall be re-priced to the Upper (Lower) Price Band. The System shall re-price resting limit-priced interest to buy (sell) to the Upper (Lower) Price Band if Price Bands move such that the price of resting limit-priced interest to buy (sell) would be above (below) the Upper (Lower) Price Band. If the Price Bands move again and a User has opted into the Exchange's optional multiple price sliding process, as described in Exchange Rule 2614(g)(1)(C), the System shall reprice such limit-priced interest to the most aggressive permissible price up to the order's limit price. All other displayed and non-displayed limit interest repriced pursuant to this paragraph (e) will remain at its new price unless the Price Bands move such that the price of resting limit-priced interest to buy (sell) would again be above (below) the Upper (Lower) Price Band.
 - (C) Routable Orders. If routing is permitted based on a User's instructions, orders shall be routed away from the Exchange pursuant to Exchange Rule 2617(b), provided that the System

shall not route buy (sell) interest at a price above (below) the Upper (Lower) Price Band.

- (D) Sell Short Orders. During a Short Sale Period, as defined in Exchange Rule 2614(g)(3)(A), short sale orders not marked short exempt priced below the Lower Price Band shall be repriced to the higher of the Lower Price Band or the Permitted Price, as defined in Exchange Rule 2614(g)(3)(A).
- (6) **Re-opening of Trading following a Trading Pause**. At the end of the Trading Pause, the Exchange shall re-open the security pursuant to the procedures set forth in Exchange Rule 2615.
- (f) On the occurrence of any trading halt pursuant to this Exchange Rule, except where a User has designated that its orders be cancelled, all outstanding orders in the System will remain on the PEARL Equities Book.
- (g) All times referenced in this Exchange Rule 2622 shall be Eastern Time.

Rule 2623. Short Sales

All short sale orders shall be identified as "short" or "short exempt" when entered into the System. If marked "short exempt," the Exchange shall execute, display and/or route a short sale order marked "short exempt" without regard to any short sale price test restriction in effect during a Short Sale Period, as defined in Exchange Rule 2614(g)(3)(A). The Exchange relies on the marking of an order as "short exempt" when handling such order, and thus, it is the entering Member's responsibility, not the Exchange's responsibility, to comply with the requirements of Regulation SHO relating to marking of orders as "short exempt."

Rule 2624. Locking or Crossing Quotations in NMS Stocks

- (a) **Definitions.** For purposes of this Exchange Rule 2624, the following definitions shall apply:
- (1) The terms Automated Quotation, Effective National Market System Plan, Intermarket Sweep Order, Manual Quotation, NMS stock, Protected Quotation, Regular Trading Hours, and Trading Center shall have the meanings set forth in Rule 600(b) of Regulation NMS.
- (2) The term Crossing Quotation shall mean the display of a bid for an NMS stock during Regular Trading Hours at a price that is higher than the price of an offer for such NMS stock previously disseminated pursuant to an Effective National Market System Plan, or the display of an offer for an NMS stock during Regular Trading Hours at a price that is lower than the price of a bid for such NMS stock previously disseminated pursuant to an Effective National Market System Plan.
- (3) The term Locking Quotation shall mean the display of a bid for an NMS stock during Regular Trading Hours at a price that equals the price of an offer for such NMS stock previously disseminated pursuant to an Effective National Market System Plan, or the display of an offer for an NMS stock during Regular Trading Hours at a price that equals the price of a bid for such NMS stock previously disseminated pursuant to an Effective National Market System Plan.
- (b) **Prohibition**. Except for quotations that fall within the provisions of paragraph (d) of this Exchange Rule, the System shall not make available for dissemination, and Users shall reasonably avoid displaying, and shall not engage in a pattern or practice of displaying, any quotations that lock or cross a Protected Quotation, and any Manual Quotations that lock or cross a quotation previously disseminated pursuant to

an Effective National Market System Plan.

(c) Manual quotations. If a User displays a Manual Quotation that locks or crosses a quotation previously disseminated pursuant to an Effective National Market System Plan, such User shall promptly either withdraw the Manual Quotation or route an Intermarket Sweep Order to execute against the full displayed size of the Locked or Crossed Quotation.

(d) Exceptions

- (1) The Locking or Crossing Quotation was displayed at a time when the Trading Center displaying the Locked or Crossed Quotation was experiencing a failure, material delay, or malfunction of its systems or equipment.
- (2) The Locking or Crossing Quotation was displayed at a time when a protected bid was higher than a protected offer in the NMS stock.
- (3) The Locking or Crossing quotation was an Automated Quotation, and the User displaying such Automated Quotation simultaneously routed an Intermarket Sweep Order to execute against the full displayed size of any Locked or Crossed Protected Quotation.
- (4) The Locking or Crossing Quotation was a Manual Quotation that locked or crossed another Manual Quotation, and the User displaying the locking or crossing Manual Quotation simultaneously routed an Intermarket Sweep Order to execute against the full displayed size of the locked or crossed Manual Quotation.

Rule 2625. Proprietary Data Products

The Exchange offers the following data products:

- (a) **Depth of Market Feed**. The Depth of Market Feed is data feed that contains the displayed price and displayed size of each order in an Equity Security entered into the System, as well as order execution information, order cancellations, order modifications, order identification numbers, and administrative messages.
- (b) **Top of Market Feed**. The Top of Market Feed is a data feed that contains the displayed price and aggregate size of displayed top of book quotations, order execution information, and administrative messages for Equity Securities entered into the System.
- (c) **Historical Data**. Historical Data is a data product that offers historical Equity Security data for orders entered into the System upon request.

Rule 2626. Retail Order Attribution Program

(a) **Definitions**

(1) **Retail Member Organization**. A "Retail Member Organization" or "RMO" is an Equity Member (or a division thereof) that has been approved by the Exchange under this Exchange Rule to submit Retail Orders.

(2) **Retail Order**. A "Retail Order" is an agency or riskless principal order that meets the criteria of FINRA Rule 5320.03 that originates from a natural person and is submitted to the Exchange by a Retail Member Organization, provided that no change is made to the terms of the order with respect to price or side of market and the order does not originate from a trading algorithm or any other computerized methodology.

(b) Retail Member Organization Qualifications and Application

- (1) To qualify as a Retail Member Organization, an Equity Member must conduct a retail business or route retail orders on behalf of another broker-dealer. For purposes of this Exchange Rule, conducting a retail business shall include carrying retail customer accounts on a fully disclosed basis.
 - (2) To become a Retail Member Organization, a Member must submit:
 - (A) an application form;
 - (B) supporting documentation, which may include sample marketing literature, website screenshots, other publicly disclosed materials describing the Equity Member's retail order flow, and any other documentation and information requested by the Exchange in order to confirm that the applicant's order flow would meet the requirements of the Retail Order definition; and
 - (C) an attestation, in a form prescribed by the Exchange, that substantially all orders submitted as Retail Orders will qualify as such under this Exchange Rule.
- (3) After an applicant submits the application form, supporting documentation, and attestation, the Exchange shall notify the applicant of its decision in writing.
- (4) A disapproved applicant may: (A) request an appeal of such disapproval by the Exchange as provided in paragraph (d) below; and/or (B) reapply for Retail Member Organization status 90 days after the disapproval notice is issued by the Exchange.
- (5) A Retail Member Organization may voluntarily withdraw from such status at any time by giving written notice to the Exchange.
- designed to assure that it will only designate orders as Retail Orders if all requirements of a Retail Order are met. Such written policies and procedures must require the Member to: (i) exercise due diligence before entering a Retail Order to assure that entry as a Retail Order is in compliance with the requirements of this Exchange Rule, and (ii) monitor whether orders entered as Retail Orders meet the applicable requirements. If a Retail Member Organization does not itself conduct a retail business but routes Retail Orders on behalf of another broker-dealer, the Retail Member Organization's supervisory procedures must be reasonably designed to assure that the orders it receives from such other broker-dealer that are designated as Retail Orders meet the definition of a Retail Order. The Retail Member Organization must: (i) obtain an annual written representation, in a form acceptable to the Exchange, from each other broker-dealer that sends the Retail Member Organization orders to be designated as Retail Orders that entry of such orders as Retail Orders will be in compliance with the requirements of this Exchange Rule; and (ii) monitor whether Retail Order flow routed on behalf of such other broker-dealers meets the applicable requirements.

(c) Failure of RMO to Abide by Retail Order Requirements

- (1) If a Retail Member Organization designates orders submitted to the Exchange as Retail Orders and the Exchange determines, in its sole discretion, that such orders fail to meet any of the requirements set forth in paragraph (a) of this Exchange Rule, the Exchange may disqualify an Equity Member from its status as a Retail Member Organization.
- (2) **Disqualification Determinations**. The Exchange shall determine if and when an Equity Member is disqualified from its status as a Retail Member Organization. When disqualification determinations are made, the Exchange shall provide a written disqualification notice to the Equity Member.
- (3) Appeal and/or Reapplication for Retail Member Organization Status. A Retail Member Organization that is disqualified under this paragraph (c) may: (A) appeal such disqualification as provided in paragraph (d) below; and/or (B) reapply for Retail Member Organization status 90 days after the date of the disqualification notice from the Exchange.

(d) Appeal of Disapproval or Disqualification

- (1) If an Equity Member disputes the Exchange's decision to disapprove it under paragraph (b) above or disqualify it under paragraph (c) above, the Member ("appellant") may request, within five business days after notice of the decision is issued by the Exchange, that the Retail Attribution Panel (the "Panel") review the decision to determine if it was correct.
- (2) The Panel shall consist of the Exchange's Chief Regulatory Officer ("CRO"), or a designee of the CRO, and two officers of the Exchange designated by the Chief Information Officer ("CIO").
- (3) The Panel shall review the facts and render a decision within the time frame prescribed by the Exchange.
- (4) The Panel may overturn or modify an action taken by the Exchange under this Exchange Rule. A determination by the Panel shall constitute final action by the Exchange.

(e) Reserved.

on the Exchange's proprietary data feeds on an order-by-order basis. A Retail Member Organization may also instruct the Exchange to identify all its Retail Orders as Retail on a port-by-port basis. A Retail Member Organization that instructs the Exchange to identify all its Retail Orders as Retail on a port-by-port basis. A Retail Member Organization that instructs the Exchange to identify all its Retail Orders as Retail on a particular port will be able to override such setting and designate any individual Retail Order from that port as Attributable or as Non-Attributable, as set forth in Exchange Rule 2614(c)(6).

CHAPTER XXVII. TRADING PRACTICE RULES

Rule 2700. Market Manipulation

(a) No Equity Member shall execute or cause to be executed or participate in an account for which there are executed purchases of any security at successively higher prices, or sales of any security at successively lower prices, or otherwise engage in activity, for the purpose of creating or inducing a false, misleading or artificial appearance of activity in such security on PEARL Equities or for the purpose of unduly or improperly influencing the market price for such security or for the purpose of establishing a price which

does not reflect the true state of the market in such security.

- (b) All orders must be entered for the purpose of executing bona fide transactions, including, without limitation:
- (1) No Equity Member shall enter or cause to be entered, an order with the intent, at the time of order entry, to cancel the order before execution, or to modify the order to avoid execution.
- (2) No Equity Member shall enter or cause to be entered an executable or non-executable order or orders with the intent to mislead other market participants.
- (3) No Equity Member shall enter or cause to be entered an executable or non-executable order with the intent to overload, delay, or disrupt the performance of the systems of the Exchange, its Members, other exchanges, National Market System Plans, or market participants.
- (4) No Equity Member shall enter or cause to be entered executable or non-executable orders with intent to disrupt the orderly conduct of trading or the fair execution of transactions on the Exchange or elsewhere in the National Market System.
- (5) These provisions shall apply at all times the System is available to Equity Members without exception.

Additionally, all non-executable orders must be entered in good faith for legitimate purposes.

Rule 2701. Fictitious Transactions

- (a) No Equity Member, for the purpose of creating or inducing a false or misleading appearance of activity in a security traded on PEARL Equities or creating or inducing a false or misleading appearance with respect to the market in such security shall:
- (1) execute any transaction in such security which involves no change in the beneficial ownership thereof, or
- (2) enter any order or orders for the purchase of such security with the knowledge that an order or orders of substantially the same size, and at substantially the same price, for the sale of such security, has been or will be entered by or for the same or different parties, or
- (3) enter any order or orders for the sale of any such security with the knowledge that an order or orders of substantially the same size, and at substantially the same price, for the purchase of such security, has been or will be entered by or for the same or different parties.
- (b) Transactions in a security resulting from the unintentional interaction of orders originating from the same firm that involve no change in the beneficial ownership of the security, ("self-trades") generally are bona fide transactions for purposes of this Exchange Rule; however, Equity Members must have policies and procedures in place that are reasonably designed to review their trading activity for, and prevent, a pattern or practice of self-trades resulting from orders originating from a single algorithm or trading desk, or related algorithms or trading desks. Transactions resulting from orders that originate from unrelated algorithms or separate and distinct trading strategies within the same firm would generally be considered bona fide self-trades. Algorithms or trading strategies within the most discrete unit of an effective system

of internal controls at a member firm are presumed to be related. This subsection (b) does not change Equity Members' existing obligations under Exchange Rules 2100 and 2300.

Rule 2702. Excessive Sales by an Equity Member

No Equity Member shall execute purchases or sales in any Equity Security traded on PEARL Equities for any account in which such Equity Member is directly or indirectly interested, which purchases or sales are excessive in view of the Equity Member's financial resources or in view of the market for such security.

Rule 2703. Manipulative Transactions

- (a) No Equity Member shall participate or have any interest, directly or indirectly, in the profits of a manipulative operation or knowingly manage or finance a manipulative operation.
- (b) Any pool, syndicate or joint account organized or used intentionally for the purpose of unfairly influencing the market price of a security shall be deemed to be a manipulative operation.
- (c) The solicitation of subscriptions to or the acceptance of discretionary orders from any such pool, syndicate or joint account shall be deemed to be managing a manipulative operation.
- (d) The carrying on margin of a position in such security or the advancing of credit through loans to any such pool, syndicate or joint account shall be deemed to be financing a manipulative operation.
- (e) No Equity Member shall offer that a transaction or transactions to buy or sell a designated security will influence the closing transaction in that security.

Rule 2704. Dissemination of False Information

No Equity Member shall make any statement or circulate and disseminate any information concerning any Equity Security traded on PEARL Equities which such Equity Member knows or has reasonable grounds for believing is false or misleading or would improperly influence the market price of such Equity Security.

Rule 2705. Prohibition Against Trading Ahead of Customer Orders

- (a) Except as provided herein, an Equity Member that accepts and holds an order in an Equity Security from its own customer or a customer of another broker-dealer without immediately executing the order is prohibited from trading that security on the same side of the market for its own account at a price that would satisfy the customer order, unless it immediately thereafter executes the customer order up to the size and at the same or better price at which it traded for its own account.
- (b) An Equity Member must have a written methodology in place governing the execution and priority of all pending orders that is consistent with the requirements of this Exchange Rule. An Equity Member also must ensure that this methodology is consistently applied.
- (c) Large Orders and Institutional Account Exceptions. With respect to orders for customer accounts that meet the definition of an "institutional account" or for orders of 10,000 shares or more (unless such orders are less than \$100,000 in value), an Equity Member is permitted to trade a security on the same side of the market for its own account at a price that would satisfy such customer order, provided that the Equity Member has provided clear and comprehensive written disclosure to such customer at account

opening and annually thereafter that:

- (1) discloses that the Equity Member may trade proprietarily at prices that would satisfy the customer order, and
- (2) provides the customer with a meaningful opportunity to opt in to the Rule 2705 protections with respect to all or any portion of its order.

If the customer does not opt in to the Rule 2705 protections with respect to all or any portion of its order, the Equity Member may reasonably conclude that such customer has consented to the Equity Member trading a security on the same side of the market for its own account at a price that would satisfy the customer's order.

In lieu of providing written disclosure to customers at account opening and annually thereafter, an Equity Member may provide clear and comprehensive oral disclosure to and obtain consent from the customer on an order-by-order basis, provided that the Equity Member documents who provided such consent and such consent evidences the customer's understanding of the terms and conditions of the order.

For purposes of this Exchange Rule, "institutional account" shall mean the account of:

- (A) a bank savings and loan association, insurance company or registered investment company;
- (B) an investment adviser registered either with the Commission under Section 203 of the Investment Advisers Act or with a state securities commission (or any agency or office performing like functions); or
- (C) any other person (whether a natural person, corporation, partnership, trust or otherwise) with total assets of at least \$50 million.

(d) No-Knowledge Exception

- (1) With respect to NMS stocks (as defined in Rule 600 of Regulation NMS), if an Equity Member implements and utilizes an effective system of internal controls, such as appropriate information barriers, that operate to prevent one trading unit from obtaining knowledge of customer orders held by a separate trading unit, those other trading units trading in a proprietary capacity may continue to trade at prices that would satisfy the customer orders held by the separate trading unit. An Equity Member that structures its order handling practices in NMS stocks to permit its proprietary and/or market-making desk to trade at prices that would satisfy customer orders held by a separate trading unit must disclose in writing to its customers, at account opening and annually thereafter, a description of the manner in which customer orders are handled by the Equity Member and the circumstances under which the Equity Member may trade proprietarily at its proprietary and/or market-making desk at prices that would satisfy the customer order.
- (2) If an Equity Member implements and utilizes appropriate information barriers in reliance on this exception, the Equity Member must uniquely identify such information barriers in place at the department within the Equity Member where the order was received or originated. Appropriate information barriers must, at minimum, comply with the requirements set forth in Rule 303.
 - (3) Members must maintain records that indicate which orders rely on the No-Knowledge

Exception and submit these records to the Exchange upon request.

- (e) **Riskless Principal Exception.** The obligations under this Exchange Rule shall not apply to an Equity Member's proprietary trade if such proprietary trade is for the purposes of facilitating the execution, on a riskless principal basis, of an order from a customer (whether its own customer or the customer of another broker-dealer) (the "facilitated order"), provided that the Equity Member:
- (1) submits a report, contemporaneously with the execution of the facilitated order, identifying the trade as riskless principal to the Exchange (or another self-regulatory organization if not required under Exchange rules); and
- (2) has written policies and procedures to ensure that riskless principal transactions for which the Equity Member is relying upon this exception comply with applicable Exchange rules. At a minimum these policies and procedures must require that the customer order was received prior to the offsetting principal transaction, and that the offsetting principal transaction is at the same price as the customer order exclusive of any markup or markdown, commission equivalent or other fee and is allocated to a riskless principal or customer account in a consistent manner and within 60 seconds of execution.

An Equity Member must have supervisory systems in place that produce records that enable the Equity Member and the Exchange to reconstruct accurately, readily, and in a time-sequenced manner all facilitated orders for which the Equity Member relies on this exception.

- (f) **ISO Exception.** An Equity Member shall be exempt from the obligation to execute a customer order in a manner consistent with this Exchange Rule with regard to trading for its own account that is the result of an ISO routed in compliance with Rule 600(b)(31)(ii) of Regulation NMS where the customer order is received after the Equity Member routed the ISO. Where an Equity Member routes an ISO to facilitate a customer order and that customer has consented to not receiving the better prices obtained by the ISO, the Member also shall be exempt with respect to any trading for its own account that is the result of the ISO with respect to the consenting customer's order.
- (g) Odd Lot and Bona Fide Error Transaction Exceptions. The obligations under this Exchange Rule shall not apply to an Equity Member's proprietary trade that is (1) to offset a customer order that is in an amount less than a normal unit of trading; or (2) to correct a bona fide error. Equity Members are required to demonstrate and document the basis upon which a transaction meets the bona fide error exception. For purposes of this Exchange Rule, a bona fide error is:
- (1) the inaccurate conveyance or execution of any term of an order, including, but not limited to, price, number of shares or other unit of trading; identification of the security; identification of the account for which securities are purchased or sold; lost or otherwise misplaced order tickets; short sales that were instead sold long or vice versa; or the execution of an order on the wrong side of a market;
- (2) the unauthorized or unintended purchase, sale, or allocation of securities or the failure to follow specific client instructions;
- (3) the incorrect entry of data into relevant systems, including reliance on incorrect cash positions, withdrawals, or securities positions reflected in an account; or
- (4) a delay, outage, or failure of a communication system used to transmit market data prices or to facilitate the delivery or execution of an order.

- (h) Minimum Price Improvement Standards. The minimum amount of price improvement necessary for an Equity Member to execute an order on a proprietary basis when holding an unexecuted Limit Order in that same security, and not be required to execute the held Limit Order is as follows:
- (1) For customer Limit Orders priced greater than or equal to \$1.00, the minimum amount of price improvement required is \$0.01 for NMS stocks;
- (2) For customer Limit Orders priced greater than or equal to \$0.01 and less than \$1.00, the minimum amount of price improvement required is the lesser of \$0.01 or one-half (1/2) of the current inside spread;
- (3) For customer Limit Orders priced less than \$0.01 but greater than or equal to \$0.001, the minimum amount of price improvement required is the lesser of \$0.001 or one-half (1/2) of the current inside spread;
- (4) For customer Limit Orders priced less than \$0.001 but greater than or equal to \$0.0001, the minimum amount of price improvement required is the lesser of \$0.0001 or one-half (1/2) of the current inside spread;
- (5) For customer Limit Orders priced less than \$0.0001 but greater than or equal to \$0.00001, the minimum amount of price improvement required is the lesser of \$0.00001 or one-half (1/2) of the current inside spread;
- (6) For customer Limit Orders priced less than \$0.00001, the minimum amount of price improvement required is the lesser of \$0.000001 or one-half (1/2) of the current inside spread; and
- (7) For customer Limit Orders priced outside the best inside market, the minimum amount of price improvement required must either meet the requirements set forth above or the Equity Member must trade at a price at or inside the best inside market for the security.

In addition, if the minimum price improvement standards above would trigger the protection of a pending customer Limit Order, any better-priced customer Limit Order(s) must also be protected under this Exchange Rule, even if those better-priced limit orders would not be directly triggered under the minimum price improvement standards above.

- (i) Order Handling Procedures. An Equity Member must make every effort to execute a marketable customer order that it receives fully and promptly. An Equity Member that is holding a customer order that is marketable and has not been immediately executed must make every effort to cross such order with any other order received by the Equity Member on the other side of the market up to the size of such order at a price that is no less than the best bid and no greater than the best offer at the time that the subsequent order is received by the Equity Member and that is consistent with the terms of the orders. In the event that an Equity Member is holding multiple orders on both sides of the market that have not been executed, the Equity Member must make every effort to cross or otherwise execute such orders in a manner that is reasonable and consistent with the objectives of this Exchange Rule and with the terms of the orders. An Equity Member can satisfy the crossing requirement by contemporaneously buying from the seller and selling to the buyer at the same price.
- (j) Trading Outside Normal Market Hours. Equity Members generally may limit the life of a

customer order to the period of Regular Trading Hours of 9:30 a.m. to 4:00 p.m. Eastern Time. However, if the customer and Member agree to the processing of the customer's order outside Regular Trading Hours, the protections of this Exchange Rule shall apply to that customer's order at all times the customer order is executable by the Equity Member.

Rule 2706. Joint Activity

- (a) No Equity Member, directly or indirectly, shall hold any interest or participation in any joint account for buying or selling in an Equity Security traded on PEARL Equities, unless such joint account is promptly reported to the Exchange. The report should contain the following information for each account:
- (1) the name of the account, with names of all participants and their respective interests in profits and losses;
 - (2) a statement regarding the purpose of the account;
 - (3) the name of the Equity Member carrying and clearing the account; and
 - (4) a copy of any written agreement or instrument relating to the account.

Rule 2707. Influencing the Consolidated Tape

No Equity Member shall attempt to execute a transaction or transactions to buy or sell an Equity Security for the purpose of influencing any report appearing on the Consolidated Tape.

Rule 2708. Trade Shredding

No Equity Member or associated person of an Equity Member may engage in "trade shredding". Trade shredding is conduct that has the intent or effect of splitting any order into multiple smaller orders for execution or any execution into multiple smaller executions for the primary purpose of maximizing a monetary or in-kind amount to be received by the Equity Member or associated person of an Equity Member as a result of the execution of such orders or the transaction reporting of such executions. For purposes of this Exchange Rule 2708, "monetary or in-kind amount" shall be defined to include, but not be limited to, any credits, commissions, gratuities, payments for or rebates of fees, or any other payments of value to the Equity Member or associated person of an Equity Member.

Rule 2709. Options

- (a) No Equity Member shall initiate the purchase or sale on PEARL Equities for its own account, or for any account in which it is directly or indirectly interested, of any stock of any issuer in which it holds or has granted any put, call, straddle or option; provided, however, that this prohibition shall not be applicable in respect of any option issued by The Options Clearing Corporation.
- (b) No Equity Member acting as an odd-lot dealer shall become interested directly or indirectly, in a pool dealing or trading in the stock of any issuer in which it is an odd-lot dealer, nor shall it acquire or grant directly or indirectly, any option to buy or sell, receive or deliver shares of stock of any issuer in which such Equity Member is an odd-lot dealer, unless such option is issued by The Options Clearing Corporation.

Rule 2710. Best Execution and Interpositioning

(a) **Best Execution**

- (1) In any transaction for or with a customer or a customer of another broker-dealer, an Equity Member and persons associated with an Equity Member shall use reasonable diligence to ascertain the best market for the subject security and buy or sell in such market so that the resultant price to the customer is as favorable as possible under prevailing market conditions. Among the factors that will be considered in determining whether an Equity Member has used "reasonable diligence" are:
 - (A) the character of the market for the security (e.g., price, volatility, relative liquidity, and pressure on available communications);
 - (B) the size and type of transaction;
 - (C) the number of markets checked;
 - (D) accessibility of the quotation; and
 - (E) the terms and conditions of the order which result in the transaction, as communicated to the Member and persons associated with the Equity Member.
- (2) In any transaction for or with a customer or a customer of another broker-dealer, no Equity Member or person associated with an Equity Member shall interject a third party between the Equity Member and the best market for the subject security in a manner inconsistent with paragraph (a)(1) of this Exchange Rule.
- (b) When an Equity Member cannot execute directly with a market but must employ a broker's broker or some other means in order to ensure an execution advantageous to the customer, the burden of showing the acceptable circumstances for doing so is on the Equity Member.
- (c) Failure to maintain or adequately staff a department assigned to execute customers' orders cannot be considered justification for executing away from the best available market; nor can channeling orders through a third party as described above as reciprocation for service or business operate to relieve an Equity Member of its obligations under this Exchange Rule.
- (d) An Equity Member through which an order is channeled and that knowingly is a party to an arrangement whereby the initiating Member has not fulfilled its obligations under this Exchange Rule, will also be deemed to have violated this Exchange Rule.
- (e) The obligations described in paragraphs (a) through (d) above exist not only where the Equity Member acts as agent for the account of its customer but also where transactions are executed as principal.
- (f) Execution of Marketable Customer Orders. An Equity Member must make every effort to execute a marketable customer order that it receives fully and promptly.

(g) **Definition of "Market"**

For purposes of this Exchange Rule, the term "market" or "markets" is to be construed broadly, and it encompasses a variety of different venues, including, but not limited to, trading centers that are trading a

particular security. This expansive interpretation is meant to both inform broker-dealers as to the breadth of the scope of venues that must be considered in the furtherance of their best execution obligations and to promote fair competition among broker-dealers, exchange markets, and markets other than exchange markets, as well as any other venue that may emerge, by not mandating that certain trading venues have less relevance than others in the course of determining a firm's best execution obligations.

(h) Best Execution and Executing Brokers

An Equity Members duty to provide best execution in any transaction "for or with a customer of another broker-dealer" does not apply in instances when another broker-dealer is simply executing a customer order against the Equity Member's quote. The duty to provide best execution to customer orders received from other broker-dealers arises only when an order is routed from the broker-dealer to the Equity Member for the purpose of order handling and execution. This clarification is intended to draw a distinction between those situations in which the Equity Member is acting solely as the buyer or seller in connection with orders presented by a broker-dealer against the Equity Member's quote, as opposed to those circumstances in which the Equity Member is accepting order flow from another broker-dealer for the purpose of facilitating the handling and execution of such orders.

(i) Use of a Broker's Broker

Paragraph (b) of this Exchange Rule provides that when an Equity Member cannot execute directly with a market but must employ a broker's broker or some other means in order to ensure an execution advantageous to the customer, the burden of showing the acceptable circumstances for doing so is on the Equity Member. Examples of acceptable other side, or where the identity of the firm, if known, would likely cause undue price movements adversely affecting the cost or proceeds to the customer.

(j) Orders Involving Securities with Limited Quotations or Pricing Information

Although the best execution requirements in this Exchange Rule apply to orders in all securities, markets for securities differ dramatically. One of the areas in which an Equity Member must be especially diligent in ensuring that it has met its best execution obligations is with respect to customer orders involving securities for which there is limited pricing information or quotations available. Each Equity Member must have written policies and procedures in place that address how the Equity Member will determine the best inter-dealer market for such a security in the absence of pricing information or multiple quotations and must document its compliance with those policies and procedures. For example, an Equity Member should analyze pricing information based on other data, such as previous trades in the security, to determine whether the resultant price to the customer is as favorable as possible under prevailing market conditions. In these instances, an Equity Member should generally seek out other sources of pricing information or potential liquidity, which may include obtaining quotations from other sources (e.g., other firms that the Equity Member previously has traded within the security).

(k) Customer Instructions Regarding Order Handling

If an Equity Member receives an unsolicited instruction from a customer to route that customer's order to a particular market for execution, the Equity Member is not required to make a best execution determination beyond the customer's specific instruction. Equity Members are, however, still required to process that customer's order promptly and in accordance with the terms of the order and its instructions. Where a customer has directed that an order be routed to another specific broker-dealer that is also a FINRA Member, the receiving broker-dealer to which the order was directed would be required to meet the requirements of

FINRA Rule 5310 with respect to its handling of the order.

(1) Regular and Rigorous Review of Execution Quality

No Equity Member can transfer to another person its obligation to provide best execution to its customers' orders. An Equity Member that routes customer orders to other broker-dealers for execution on an automated, non-discretionary basis, as well as an Equity Member that internalizes customer order flow, must have procedures in place to ensure the Equity Member periodically conducts regular and rigorous reviews of the quality of the executions of its customers' orders if it does not conduct an order-by-order review. The review must be conducted on a security-by-security, type-of-order basis (e.g., limit order, market order, and market on open order). At a minimum, an Equity Member must conduct such reviews on a quarterly basis; however, Equity Members should consider, based on the firm's business, whether more frequent reviews are needed.

(m) In conducting its regular and rigorous review, an Equity Member must determine whether any material differences in execution quality exist among the markets trading the security and, if so, modify the Equity Member's routing arrangements or justify why it is not modifying its routing arrangements. To assure that order flow is directed to markets providing the most beneficial terms for their customers' orders, the Equity Member must compare, among other things, the quality of the executions the Equity Member is obtaining via current order routing and execution arrangements (including the internalization of order flow) to the quality of the executions that the Equity Member could obtain from competing markets.

<u>In reviewing and comparing the execution quality of its current order routing and execution arrangements to the execution quality of other markets, an Equity Member should consider the following factors:</u>

- (1) price improvement opportunities (i.e., the difference between the execution price and the best quotes prevailing at the time the order is received by the market);
- (2) differences in price disimprovement (i.e., situations in which a customer receives a worse price at execution than the best quotes prevailing at the time the order is received by the market);
 - (3) the likelihood of execution of limit orders;
 - (4) the speed of execution;
 - (5) the size of execution;
 - (6) transaction costs;
 - (7) customer needs and expectations; and
 - (8) the existence of internalization or payment for order flow arrangements.
- (n) An Equity Member that routes its order flow to another Equity Member that has agreed to handle that order flow as agent for the customer (e.g., a clearing firm or other executing broker-dealer) can rely on that an Equity Member's regular and rigorous review as long as the statistical results and rationale of the review are fully disclosed to the Equity Member and the Equity Member periodically reviews how the review is conducted, as well as the results of the review.

Interpretations and Policies:

.01 Best Execution and Information Leakage

In FINRA Regulatory Notice 15-46, FINRA provides guidance, among other things, on best execution obligations in equity markets. FINRA notes that in conducting a review of execution quality in any security, a firm should consider a variety of relevant factors. For a firm that routines routes a customer order to multiple trading centers, one such factor that is highlighted is information leakage and the impact of information leakage on execution quality. In particular, FINRA notes that: "[f]irms should consider the risk of information leakage by routing orders to a particular venue in light of the fill rates achieved at that venue and carefully assess whether the risks outweigh the potential for an execution."

The Exchange's order execution and routing methodology are designed to substantially reduce potential information leakage related to executions on PEARL Equities.

Rule 2711. Publication of Transactions and Changes

- (a) The Exchange shall cause to be disseminated for publication on the Consolidated Tape all last sale price reports of transactions executed through the facilities of PEARL Equities pursuant to the requirements of an effective transaction reporting plan approved by the Commission.
- (b) To facilitate the dissemination of such last sale price reports, each Equity Member shall cause to be reported to PEARL Equities, as promptly as possible after execution, all information concerning each transaction required by the effective transaction reporting plan.
- (c) An official of the Exchange shall approve any corrections to reports transmitted over the Consolidated Tape. Any such corrections shall be made within one day after detection of the error.

Rule 2712. Trading Ahead of Research Reports

Equity Members shall comply with MIAX Rule 320, Trading Ahead of Research Reports, as if such rule were part of the PEARL Equities' Rules.

Rule 2713. Obligation to Honor System Trades

If an Equity Member, or clearing member acting on an Equity Member's behalf, is reported by the System, or shown by the activity reports generated by the System, as constituting a side of a System trade, such Equity Member, or clearing member acting on its behalf, shall honor such trade on the scheduled settlement date.

Rule 2714. Front Running of Block Transactions

- (a) Equity Members and persons associated with an Equity Member shall comply with FINRA Rule 5270 as if such Rule were part of the Exchange's rules.
- (b) Front Running of Non-Block Transactions. Although the prohibitions in FINRA Rule 5270 are limited to imminent block transactions, the front running of other types of orders that place the financial interests of the Equity Member or persons associated with an Equity Member ahead of those of its customer or the misuse of knowledge of an imminent customer order may violate other Exchange rules, including

Exchange Rules 2100 and 2705, or provisions of the federal securities laws.

Rule 2715. Disruptive Quoting and Trading Activity Prohibited

Equity Members shall comply with MIAX Rule 322, Disruptive Quoting and Trading Activity Prohibited, as if such rule were part of the PEARL Equities' Rules.

CHAPTER XXVIII. MISCELLANEOUS PROVISIONS

Rule 2800. Comparison and Settlement Requirements

- (a) Every Equity Member who is a Member of a qualified clearing agency shall implement comparison and settlement procedures under the rules of such entity.
- (b) For purposes of this Exchange Rule, a qualified clearing agency shall mean a clearing agency (as defined in the Exchange Act) which has agreed to supply the Exchange with data reasonably requested in order to permit the Exchange to enforce compliance by its Members and Member organizations with the provisions of the Exchange Act, the rules and regulations thereunder, and the Rules of the Exchange.
- (c) Anything contained in paragraph (a) to the contrary notwithstanding, the Board may extend or postpone the time of the delivery of a PEARL Equities transaction whenever, in its opinion, such action is called for by the public interest, by just and equitable principles of trade or by the need to meet unusual conditions. In such case, delivery shall be effected at such time, place and manner as directed by the Board.

Rule 2801. Failure to Deliver and Failure to Receive

Borrowing and deliveries shall be effected in accordance with Rule 203 of Regulation SHO, under the Exchange Act. The Exchange incorporates by reference Rules 200 and 203 of Regulation SHO, to Exchange Rule 2801, as if they were fully set forth herein.

Rule 2802. Forwarding of Proxy and Other Issuer-Related Materials

Equity Members shall comply with Exchange Rule 319, Forwarding of Proxy and Other Issuer-Related Materials, as if such rule were part of the PEARL Equities' Rules.

Rule 2803. Assigning of Registered Securities in Name of a Member or Member Organization

An Equity Member may authorize one or more persons who are its employees to assign registered securities in the name of such Equity Member and to guarantee assignments of registered securities with the same effect as if the name of such Equity Member had been signed under like circumstances by one of the partners of the Equity Member firm or by one of the authorized officers of the Equity Member corporation by executing and filing with the Exchange, in a form prescribed by it, a separate Power of Attorney for each person so authorized.

Rule 2804. Commissions

Nothing in the Exchange Rules, the By-Laws or the Exchange practices shall be construed to require, authorize or permit any Equity Member, or any person associated with an Equity Member, to agree or arrange, directly or indirectly, for the charging of fixed rates of commission for transactions effected on, or

effected by the use of the facilities of, PEARL Equities.

Rule 2805. Off-Exchange Transactions

No Rule, stated policy or practice of this Exchange shall prohibit or condition, or be construed to prohibit or condition or otherwise limit, directly or indirectly, the ability of any Equity Member to effect any transaction otherwise than on this Exchange with another person in any security listed on this Exchange or to which unlisted trading privileges on this Exchange have been extended.

Rule 2806. Regulatory Services Agreement

The Exchange may enter into one or more agreements with another self-regulatory organization to provide regulatory services to the Exchange to assist the Exchange in discharging its obligations under Section 6 and Section 19(g) of the Exchange Act. Any action taken by another self-regulatory organization, or its employees or authorized agents, acting on behalf of the Exchange pursuant to a regulatory services agreement shall be deemed to be an action taken by the Exchange; provided, however, that nothing in this provision shall affect the oversight of such other self-regulatory organization by the Commission. Notwithstanding the fact that the Exchange may enter into one or more regulatory services agreements, the Exchange shall retain ultimate legal responsibility for, and control of, its self-regulatory responsibilities, and any such regulatory services agreement shall so provide.

Rule 2807. Transactions Involving Exchange Employees

- (a) When an Equity Member has actual notice that an Exchange employee has a financial interest in, or controls trading in, an account, the Equity Member shall promptly obtain and implement an instruction from the employee directing that duplicate account statements be provided by the Equity Member to Exchange.
- (b) No Equity Member shall directly or indirectly make any loan of money or securities to any Exchange employee. Provided, however, that this prohibition does not apply to loans made in the context of disclosed, routine banking and brokerage agreements, or loans that are clearly motivated by a personal or family relationship.
- (c) Notwithstanding the annual dollar limitation set forth in Exchange Rule 2118, no Equity Member shall directly or indirectly give, or permit to be given, anything of more than nominal value to any Exchange employee who has responsibility for a regulatory matter that involves the Equity Member. For purposes of this subsection, the term "regulatory matter" includes, but is not limited to, examinations, disciplinary proceedings, membership applications, listing applications, delisting proceedings, and dispute-resolution proceedings that involve the Equity Member.

Rule 2808. Ex-Dividend or Ex-Rights Dates

Transactions in Equity Securities traded "regular" shall be "ex-dividend" or "ex-rights" as the case may be, on the business day preceding the record date fixed by the company or the date of the closing of transfer books, except when the Board of Directors rules otherwise. Should such record date or such closing of transfer books occur upon a day other than a business day this Exchange Rule shall apply for the second preceding business day.

CHAPTER XXIX. Securities Traded

Rule 2900. Unlisted Trading Privileges

- (a) The Exchange may extend unlisted trading privileges ("UTP") to any security that is an NMS Stock that is listed on another national securities exchange or with respect to which unlisted trading privileges may otherwise be extended in accordance with Section 12(f) of the Exchange Act and any such security shall be subject to all Exchange rules applicable to trading on the Exchange, unless otherwise noted.
- (b) UTP Exchange Traded Product. Any UTP security that is a UTP Exchange Traded Product, as defined in Rule 1901, will be subject to the additional following rules:
- (1) Information Circular. The Exchange will distribute an information circular prior to the commencement of trading in each such UTP Exchange Traded Product that generally includes the same information as is contained in the information circular provided by the listing exchange, including (a) the special risks of trading the new Exchange Traded Product, (b) the Exchange Rules that will apply to the new Exchange Traded Product, and (c) information about the dissemination of value of the underlying assets or indices.

(2) Product Description.

- (A) Scope of Product Description Requirements. The provisions of this subparagraph (2) apply only to UTP Exchange Traded Products that are the subject of an order by the Commission exempting such series from certain prospectus delivery requirements under Section 24(d) of the Investment Company Act of 1940 and are not otherwise subject to prospectus delivery requirements under the Securities Act of 1933.
- (B) Written Description of Terms and Conditions. The Exchange will inform Equity Members of the application of the provisions of this subparagraph to UTP Exchange Traded Products by means of an information circular. The Exchange requires that Equity Members provide each purchaser of UTP Exchange Traded Products a written description of the terms and characteristics of those securities, in a form approved by the Exchange or prepared by the openended management company issuing such securities, not later than the time a confirmation of the first transaction in such securities is delivered to such purchaser. In addition, Members will include a written description with any sales material relating to UTP Exchange Traded Products that is provided to customers or the public. Any other written materials provided by an Equity Member to customers or the public making specific reference to the UTP Exchange Traded Products as an investment vehicle must include a statement substantially in the following form:
- "A circular describing the terms and characteristics of [the UTP Exchange Traded Products] has been prepared by the [open-ended management investment company name] and is available from your broker. It is recommended that you obtain and review such circular before purchasing [the UTP Exchange Traded Products]."

An Equity Member carrying an omnibus account for a non-Member is required to inform such non-Member that execution of an order to purchase UTP Exchange Traded Products for such omnibus account will be deemed to constitute an agreement by the non-Member to make such written description available to its customers on the same terms as are directly applicable to the Equity Member under this Rule.

(C) Customer Requests for a Prospectus. Upon request of a customer, an Equity Member

will also provide a prospectus for the particular UTP Exchange Traded Product.

- (3) Trading Halts. The Exchange will halt trading in a UTP Exchange Traded Product as provided for in Exchange Rule 2622. Nothing in this Rule will limit the power of the Exchange under the Rules or procedures of the Exchange with respect to the Exchange's ability to suspend trading in any securities if such suspension is necessary for the protection of investors or in the public interest.
- (4) Equities Market Maker Restrictions. The following restrictions will apply to each Equity Member acting as a registered Equities Market Maker on the Exchange in a UTP Exchange Traded Product that derives its value from one or more currencies, commodities, or derivatives based on one or more currencies or commodities, or is based on a basket or index composed of currencies or commodities (collectively, "Reference Assets"):
 - (A) The Equity Member acting as a registered Equities Market Maker on the Exchange in a UTP Exchange Traded Product must file with the Exchange, in a manner prescribed by the Exchange, and keep current a list identifying all accounts for trading the underlying physical asset or commodity, related futures or options on futures, or any other related derivatives (collectively with Reference Assets, "Related Instruments"), which the Equity Member acting as a registered Equites Market Maker on the Exchange may have or over which it may exercise investment discretion. No Equity Member acting as a registered Equities Market Maker on the Exchange in the UTP Exchange Traded Product will trade in the underlying physical asset or commodity, related futures or options on futures, or any other related derivatives, in an account in which an Equity Member acting as a registered Equities Market Maker on the Exchange, directly or indirectly, controls trading activities, or has a direct interest in the profits or losses thereof, which has not been reported to the Exchange as required by this Rule.
 - (B) An Equities Market Maker on the Exchange will, in a manner prescribed by the Exchange, file with the Exchange and keep current a list identifying any accounts ("Related Instrument Trading Accounts") for which Related Instruments are traded:
 - (i) in which the Equities Market Maker holds an interest;
 - (ii) over which it has investment discretion; or
 - (iii) in which it shares in the profits and/or losses.

An Equities Market Maker on the Exchange may not have an interest in, exercise investment discretion over, or share in the profits and/or losses of a Related Instrument Trading Account that has not been reported to the Exchange as required by this Rule.

- (C) In addition to the existing obligations under Exchange rules regarding the production of books and records, an Equities Market Maker on the Exchange will, upon request by the Exchange, make available to the Exchange any books, records, or other information pertaining to any Related Instrument Trading Account or to the account of any registered or non-registered employee affiliated with the Equities Market Maker on the Exchange for which Related Instruments are traded.
- (D) An Equities Market Maker on the Exchange will not use any material nonpublic information in connection with trading a Related Instrument.

(5) Surveillance. The Exchange will enter into comprehensive surveillance sharing agreements with markets that trade components of the index or portfolio on which the UTP Exchange Traded Product is based to the same extent as the listing exchange's rules require the listing exchange to enter into comprehensive surveillance sharing agreements with such markets.

<u>CHAPTER XXX.</u> <u>DUES, FEES, ASSESSMENTS AND OTHER CHARGES; EFFECTIVE</u> <u>DATE</u>

Rule 3000. Authority to Prescribe Dues, Fees, Assessments and Other Charges

- (a) Generally. The Exchange may prescribe such reasonable dues, fees, assessments or other charges as it may, in its discretion, deem appropriate for the use of PEARL Equities. Such dues, fees, assessments and charges may include membership dues, transaction fees, communication and technology fees, regulatory charges, listing fees, and other fees and charges as the Exchange may determine. All such dues, fees and charges shall be equitably allocated among Equity Members, issuers and other persons using the Exchange's facilities.
- (b) Regulatory Transaction Fee. Under Section 31 of the Exchange Act, the Exchange must pay certain fees to the Commission. To help fund the Exchange's obligations to the Commission under Section 31 of the Exchange Act, a Regulatory Transaction Fee is assessed to Members. To the extent there may be any excess monies collected under this Exchange Rule, the Exchange may retain those monies to help fund its general operating expense. Each Equity Member engaged in executing transactions on PEARL Equities shall pay, in such manner and at such times as the Exchange shall direct, a Regulatory Transaction Fee equal to (i) the rate determined by the Commission to be applicable to covered sales occurring on the Exchange in accordance with Section 31 of the Exchange Act multiplied by (ii) the Equity Member's aggregate dollar amount of covered sales occurring on PEARL Equities during any computational period.
- (c) Schedule of Fees. The Exchange will provide Members with notice of all relevant dues, fees, assessments and charges of the Exchange for use of PEARL Equities. Such notice may be made available to Equity Members on the Exchange's website or by any other method deemed reasonable by the Exchange.
- (d) Cross-Connection Pass Through Fees. To the extent the Exchange is charged a fee by a third party that results directly from an Equity Member cross-connecting its trading hardware to the Exchange's System from another Trading Center's system that is located in the same data center as the Exchange, the Exchange will pass that fee on, in full, to the Equity Member.

Rule 3001. Regulatory Revenue

Any revenues received by the Exchange from fees derived from its regulatory function or regulatory fines related to PEARL Equities will not be used for non-regulatory purposes or distributed to the stockholder, but rather, shall be applied to fund the legal and regulatory operations of the Exchange (including surveillance and enforcement activities), or, as the case may be, shall be used to pay restitution and disgorgement of funds intended for customers (except in the event of liquidation of the Exchange, which case Miami International Holdings, Inc. will be entitled to the distribution of the remaining assets of the Exchange).

Rule 3002. Collection of Exchange Fees and Other Claims and Billing Policy

- (a) Each Equity Member, and all applicants for registration as such, shall be required to provide a clearing account number for an account at the National Securities Clearing Corporation ("NSCC") for purposes of permitting the Exchange to debit any undisputed or final fees, fines, charges and/or other monetary sanctions or other monies due and owing to the Exchange or other charges pursuant to Exchange Rule 3000, including the Exchange Fee Schedule thereto; Regulatory Transaction Fees pursuant to Exchange Rule 3000(b); dues, assessments and other charges pursuant to Rules 1202 and 1203 to the extent the Exchange were to determine to charge such fees; and fines, sanctions and other charges pursuant to Chapters IX, X, and XI of the Exchange Rulebook which are due and owing to the Exchange.
- (b) All disputes concerning fees, dues or charges assessed by the Exchange must be submitted to the Exchange in writing and must be accompanied by supporting documentation. All disputes related to fees, dues or other charges must be submitted to the Exchange no later than sixty (60) days after the date of the monthly invoice. All Exchange invoices are due in full on a timely basis and payable in accordance with paragraph (a) of this Exchange Rule 3002. Any disputed amount resolved in the Member's favor will be subsequently credited to the clearing account number for an account at the NSCC.

Interpretations and Policies:

<u>.01</u> **Fees Collected by FINRA**. The Exchange will not debit fees due to FINRA pursuant to Rule 3002(a), which are collected and retained by FINRA.

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