Technical Notes on the Price Control Mechanism during the Closing Auction Session for Exchange Participants using Broker Supplied Systems

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1.0 Introduction

The Exchange is going to enhance the Closing Auction Session (CAS) under AMS/3 by introducing a percentage-based price control mechanism. This document serves as a technical reference for Broker Supplied System (BSS) users to review the impacts on and to implement the necessary changes to their respective BSS systems in relation to this forthcoming introduction of the price control mechanism during the CAS. The implementation date is tentatively set on 22 June 2009, subject to the approval of the necessary rule amendments by the Securities and Futures Commission and market readiness.

2.0 Price Control Mechanism

The Exchange will use the last nominal price of the previous continuous trading session (i.e., nominal price at 4 pm for full-day trading or nominal price at 12:30 pm for half-day trading) of each security as the Reference Nominal Price for the price control, which will initially be set at $\pm 2\%$ of the Reference Nominal Price and may be adjusted by the Exchange should the need arise.

Any newly input at-auction limit orders during the CAS or any orders amended during the CAS will be subject to this price control. All order prices must be on the spread in accordance with the Spread Table as per the current practice and must not deviate more than $\pm 2\%$ from the Reference Nominal Price.

For the avoidance of doubt, the price control limit will not be applied to:

- a. all outstanding orders² carried over to the CAS from the Continuous Trading Session;
- b. at-auction orders (ie orders without specified price) input during the CAS;
- c. securities without nominal price at 4 pm (ie Reference Nominal Price = 0, which means it is Not Available); and
- d. Pre-Opening Session (POS) and Continuous Trading Session (CTS).

It should also be noted that the current price spread validation as well as price and consideration warnings will continue to apply without change.

3.0 Open Message Definition Specification

3.1 Market Information Update

Reference Nominal Price

According to the Rules of the Exchange, during the CAS, the nominal price of a security is equal to the Indicative Equilibrium Price (IEP) whenever the IEP is available. Otherwise, it is

¹ The price control limit will be applied to those orders with change in order price or increase in order quantity. Order amendment to reduce order quantity and order cancellation will not be subject to order price control.

² If such orders are amended during the CAS, the price limit will still be applied to those orders with change in order price or increase in order quantity.

equal to the last nominal price of the previous CTS (i.e., the Reference Nominal Price). Currently, this nominal price is broadcast to the market whenever there is any price update during the CAS.

However, after the implementation of the price control mechanism, the Exchange will <u>no</u> <u>longer</u> disseminate nominal prices during the CAS even when the IEP (including the final IEP) is available. This is to ensure that the last data received in this data field before the commencement of the CAS and during the CAS are in fact the Reference Nominal Price. BSS users can refer to Section 3.2 below for the details of obtaining nominal price during the CAS.

BSS users should refer to the last nominal price of each security they receive during the CTS and treat this last nominal price as the Reference Nominal Price. In case there is any subsequent price update during the CAS, e.g., when an IEP is available, the Reference Nominal Price (instead of the current nominal price) will be broadcast again in the existing Nominal Price data field.

It should be noted that no change will be made to the message specification to BSS interface except that:

- (i) the value disseminated in the nominal price field (OG open message with Msg ID 2102,) during the CAS will stay set to the Reference Nominal Price until Day Close, after which the nominal price field will be updated with the official closing price; and
- (ii) the existing trading status description field in the status update message (OG open message with Msg ID 2106) for the CAS will carry extra information to differentiate it from the POS (i.e. with new prefixes to indicate that trading status has proceeded to Order Input / Pre-order Matching / Order Matching of the CAS);

For the information of BSS users, the nominal price label of security enquiry page displayed on all terminals (including on-floor terminals, off-floor terminals, and MWS workstations) will change from "NOMINAL" to "REF NOM" upon the commencement of the CAS. The new label "REF NOM" will remain on the screen until the closing price has been determined (by then the label will be changed to "DAY CLOSE" and correspondingly the data field will show the closing price of the security).

3.2 Open Message ID 2102

The open message with Msg ID 2102 is the open message to BSS systems for Security Dynamic Information. Within Msg 2102, Tag 99160 is for disseminating the value of the nominal price. During the CAS, Tag 99160 will contain the value of the Reference Nominal Price. The IEP will be given under Tag 99649 of the same message as usual. Please note that the latest nominal price during the CAS will no longer be disseminated by Msg 2102. Should the BSS system require the latest nominal price during CAS, the nominal price can be calculated based on the values of Tag 99160 and Tag 99649 given in Msg 2102. The method of calculation is recapped below:

According to the trading rules, nominal price during the CAS is equal to the IEP (i.e., Tag 99649) if it is available (i.e., with a value greater than 0). Otherwise, nominal price during the CAS is equal to the nominal price at the end of the previous continuous trading session (i.e., Reference Nominal Price, Tag 99160)

3.3 Open Message ID 2106

The open message with Msg ID 2106 is the open message to BSS systems for Market Trading Statuses. Within Msg 2106, Tag 99421 is the market trading status code while Tag 99648 is the freetext description for the respective market trading status. Msg 2106 is currently broadcast to BSS systems on a regular basis.

In order to assist the BSS system to differentiate the CAS from the POS so that BSS can invoke processing logic specific to the CAS if necessary, a prefix of "CAS" will be added to the freetext description under Tag 99648 of Msg ID 2106 during CAS. Examples of the changes are given below:

Market trading	The current description of the	The new description of the
status in Tag 99421	market trading status in Tag	market trading status in
during the CAS	99648 during the CAS	Tag 99648 during the CAS
OI	Order Input	CAS Order Input
NC	Pre-order Matching	CAS Pre-order Matching
MA	Order Matching	CAS Order Matching

For the avoidance of doubt, there will not be changes made to other freetext description in Tag 99648 except for the freetext described above.