AMENDMENTS TO THE SGX-ST TRADING RULES

RULE	CURRENT RULES	NEW / AMENDED RULES
Amendments to Definitions and Interpretation		
	-	**S** “Prescribed Security” — Shall have the meaning ascribed to it in Rule 8.2A.1;
Amendments to Chapter 8 - Trading		
8.2A	-	**Closing Price of Prescribed Securities**
8.2A.1	-	A Prescribed Security refers to such security, Futures Contract or product or class of securities, Futures Contracts or products that SGX-ST may prescribe. *Refer to Practice Note 8.2A.2.*
8.2A.2	-	The closing price of a Prescribed Security shall be determined in accordance with the relevant formula and procedures applicable to each Prescribed Security, as determined by SGX-ST from time to time. In arriving at such formula and procedure, SGX-ST may take into account factors, including but not limited to: (1) the last traded price; (2) prevailing bids and offers during the trading phase and/or closing routine; and/or (3) price data derived from pricing models, as selected or

Underlined = Additions
~~Struckthrough~~ = Deletions

RULE	CURRENT RULES	NEW / AMENDED RULES
		established by SGX-ST from time to time. *Refer to Practice Note 8.2A.2.*
8.2A.3	-	Notwithstanding the foregoing, SGX-ST shall reserve the right to amend the closing price of any Prescribed Security if it so deems necessary.
8.2A.4	-	Without limiting Rule 2.4.1, SGX-ST (including SGX-ST's subsidiaries, related companies and holding company), its Directors, Officers, employees and agents make no warranty, express or implied, and shall have no liability to any person in respect of, or in connection with, the closing price of a Prescribed Security, including without limitation: (1) the accuracy, reliability or timeliness of the closing price of a Prescribed Security; (2) the merchantability and fitness of the closing price of a Prescribed Security for a particular purpose; (3) any direct, special, punitive, indirect or consequential damages (including lost profits) in relation to use of or reliance on the closing price of a Prescribed Security, even when notified of the possibility of such damages; and/or (4) any errors, omissions or delays in calculating, determining or disseminating the closing price of a Prescribed Security.
Amendments to Chapter 11 – Capital and Financial Requirements		
11.9.8	A Trading Member shall cause daily review to be made of all margin financing accounts to ensure that credit is not over-extended beyond the approved facility and that the margin financing requirements prescribed above are met at all times. For the purpose of computing margin financing requirements	A Trading Member shall cause daily review to be made of all margin financing accounts to ensure that credit is not over-extended beyond the approved facility and that the margin financing requirements prescribed above are met at all times. For the purpose of computing margin financing requirements in a margin financing account, the last

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RULE	CURRENT RULES	NEW / AMENDED RULES
	in a margin financing account, the last done price of the security on the preceding Market Day shall be used. All transactions done on the same day shall be combined on a transaction date basis and the total cost of purchase or the net proceeds of sale including any commission charged and other expenses shall be taken into account for computing margin financing requirements.	done price of the security on the preceding Market Day, or in the case of a Prescribed Security, the closing price of the Prescribed Security on the preceding Market Day, shall be used. All transactions done on the same day shall be combined on a transaction date basis and the total cost of purchase or the net proceeds of sale including any commission charged and other expenses shall be taken into account for computing margin financing requirements.
Amendments to Chapter 18 – Exchange Options Trading		
18.10.4	**Rights Issue** In the case when underlying securities become entitled to rights, the Exercise Price for the underlying securities ex rights shall be calculated by deducting from the Exercise Price for the underlying securities the value of the rights accruing to such underlying securities calculated on the last done price of the underlying securities on the last day on which such underlying securities are traded cum rights, unless otherwise determined by SGX-ST.	**Rights Issue** In the case when underlying securities become entitled to rights, the Exercise Price for the underlying securities ex rights shall be calculated by deducting from the Exercise Price for the underlying securities the value of the rights accruing to such underlying securities calculated on the last done price, or in the case where the underlying securities is a Prescribed Security, the closing price, of the underlying securities on the last day on which such underlying securities are traded cum rights, unless otherwise determined by SGX-ST.

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PRACTICE NOTE 4.6.7A(1)(C) — ERROR PREVENTION

Issue Date	Cross Reference	Enquiries
Added on 18 September 2012 and amended on [•].	Rule 4.6.7A(1)(c)	Please contact Member Supervision: Facsimile No : 6538 8273 E-Mail Address: membersup@sgx.com

1. Introduction

1.1 This Practice Note explains the types of error-prevention alerts contemplated in Rule 4.6.7A(1)(c).

2. Types of Error-Prevention Alerts

2.1 The types of error-prevention alerts to be made available may include but are not limited to the following:—

(a) maximum quantity per order — to alert Trading Representatives and customers of possible erroneous entries in relation to quantity; and

(b) price alerts — to alert Trading Representatives and customers of possible erroneous entries in relation to price.

2.2 Price alerts may include but are not limited to price range checks to alert Trading Representatives and customers when the new order entry price has exceeded:—

(a) ~~price range checks to alert Trading Representatives and customers when the new order entry price has exceeded~~ a certain percentage; or

(b) a certain number of ticks,

as compared to the most recent of the last traded price, ~~or~~ the previous settlement price, the closing price or the opening price, as the case may be~~if last traded price is not available~~.

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PRACTICE NOTE 8.2.1 – APPLICATION OF MARKET PHASES AND ALGORITHM

Issue Date	Cross Reference	Enquiries
17 February 2012, amended on 15 April 2013 and amended on [•].	Rules 8.2.1–8.2.3	Please contact Member Supervision: Facsimile No : 6538 8273 E-Mail Address: membersup@sgx.com

1. Introduction

1.1 This Practice Note explains the application of the various market phases and the algorithm used by SGX-ST in computing the single price for the Opening Routine, Closing Routine and Adjust Phase.

1.2 Rule 8.2.1 says the trading hours and the application of the market phases are as published by SGX-ST.

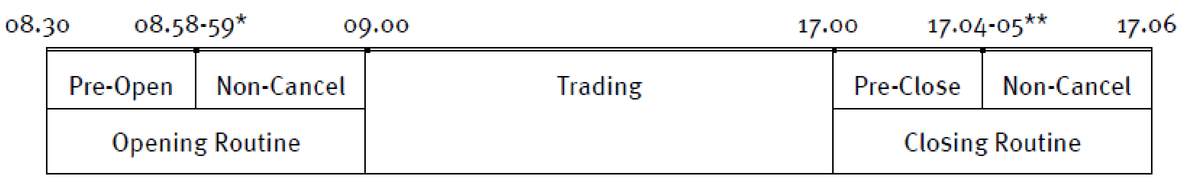
1.3 Rule 8.2.2 says SGX-ST may vary the trading hours and application of the market phases.

1.4 Rule 8.2.3 sets out the various market phases.

2. Application of Market Phases

2.1 Summary of Market Phases

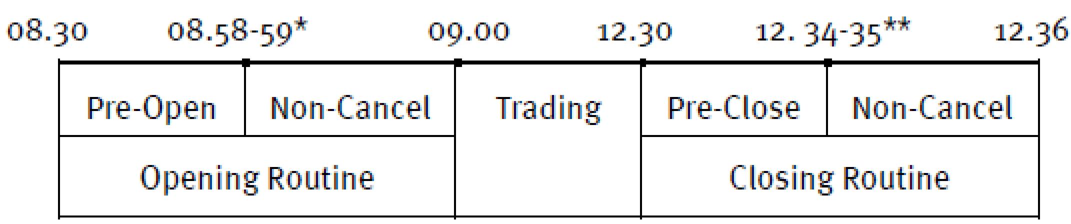
(1) Normal Day Trading



* Please see Point 2.2(2) and (3).

** Please see Point 2.5(3) and (4)

(2) Half-Day Trading



* Please see Point 2.2(2) and (3).

** Please see Point 2.5(3) and (4)

2.2 Opening Routine

(1) The Opening Routine is a 30-minute session before normal trading starts at 09:00 hours. It comprises the Pre-Open Phase and the Non-Cancel Phase.

(2) Pre-Open Phase (08:30 to 08:58–59 hours)

(a) Orders can be entered, reduced in quantity or withdrawn in the ready and unit share markets.

(b) The bid (offer) can be higher (lower) than the offer (bid).

(c) No matching of orders.

(d) This phase will end randomly at any time from 08:58 to 08:59 hours.

(3) Non-Cancel Phase (08:58–59 to 09:00 hours)

(a) This phase will begin immediately after the Pre-Open Phase ends, which may be at any time from 08:58 to 08:59 hours.

(aa) No input, amendment and withdrawal of orders.

(b) Orders that can be matched are matched at a single price computed based on an algorithm set by SGX-ST. The computed price will be the opening price for the day.

(c) Unmatched orders are carried forward into the morning trading session.

2.3 Trading Phase

(1) The Trading Phase will be from 09:00 to 17:00 hours.

(2) The Trading Phase allows order entry, reduction in order size and withdrawal of orders. Orders are matched in the order of price priority followed by time priority.

(3) All unmatched orders after the Trading Phase are carried forward to the Closing Routine.

2.4 Adjust Phases

(1) An Adjust Phase operates upon the lifting of a suspension of a security or Futures Contract. A trading halt operates in the same way as an Adjust Phase.

(2) Upon Lifting of a Suspension

(a) The Adjust Phase sets in for 15 minutes. A longer time can be specified.

(b) Orders can be entered, reduced in quantity or withdrawn for the ready and unit share markets.

(c) The bid (offer) can be higher (lower) than the offer (bid).

(d) Orders that can be matched will be matched at the end of the Adjust Phase at a single price computed based on an algorithm set by SGX-ST before normal trading resumes. Unmatched orders at the end of the Adjust Phase are carried forward into the phase of the market applicable when the Adjust Phase ends.

(e) However, this behaviour does not apply when the end of Adjust Phase coincides with the Opening Routine or Closing Routine. In these circumstances, orders entered are carried forward into and matched accordingly in the respective Opening Routine or Closing Routine.

(3) During a Trading Halt

(a) Existing orders remain valid.

(b) Orders can be entered, reduced in quantity or withdrawn in the ready and unit share markets.

(c) The bid (offer) can be higher (lower) than the offer (bid).

(d) Orders that can be matched will be matched at the end of the trading halt at a single price computed based on an algorithm set by SGX-ST.

(e) Unmatched orders are carried forward into the phase applicable to the market at the time of lifting of trading halt.

(f) If the trading halt is not lifted by the end of a Market Day, all unmatched orders lapse.

2.5 Closing Routine

(1) The Closing Routine is a 6-minute session after trading stops at 17:00 hours for normal day trading, or 12:30 hours for half-day trading. It comprises the Pre-Close Phase and the Non-Cancel Phase.

(2) All unmatched orders are carried forward to the Closing Routine at 17:00 hours (for normal day trading) or 12:30 hours (for half-day trading).

(3) Pre-Close Phase (17:00 to 17:04–05 hours/12:30 to 12:34–35 hours)

(a) Orders can be entered, reduced in quantity or withdrawn in the ready and unit share markets.

(b) The bid (offer) can be higher (lower) than the offer (bid).

(c) No matching of orders.

(d) This phase will end randomly at any time from 17:04 to 17:05 hours (for normal day trading) or 12:34 to 12:35 (for half-day trading).

(4) Non-Cancel Phase (17:04–05 to 17:06 hours/12:34–35 to 12:36 hours)

(a) This phase will begin immediately after the Pre-Close Phase ends, which may be at any time from 17:04 to 17:05 hours (for normal day trading) or 12:34 to 12:35 (for half-day trading).

(aa) No input, amendment and withdrawal of orders.

(b) Orders that can be matched are matched at a single price computed based on an algorithm set by SGX-ST. ~~The~~ Unless otherwise specified, the computed price will be the closing price for the day.

(c) All unmatched orders lapse.

(5) This routine is designed to reduce the risk of manipulating closing prices with a single transaction at an unusually high or low price, just before the trading session ends.

3. Algorithm Used by SGX-ST to Compute the Single Price at Which Orders at the End of the Opening Routine, Closing Routine and Adjust Phase are Matched

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3.1 The methodology for computing the single price at which orders at the end of the Opening Routine, Closing Routine and Adjust Phase are matched ("Equilibrium Price") is as follows[1]:—

(1) The Equilibrium Price is the price that has the largest tradable volume and the lowest imbalance. "Imbalance" refers to the net difference between the cumulative bid volume and cumulative ask volume. See Example 1.

Example 1

Bid Volume	Price	Ask Volume	Cumulative Bid Volume (a)	Cumulative Ask Volume (b)	Tradable Volume	Imbalance (a)-(b)	Pressure
0	3.750	10	340	10	10	330	Buy
0	3.760	20	340	30	30	310	Buy
50	3.770	50	340	80	80	260	Buy
100	3.780	80	290	160	160	130	Buy
70	**3.790**	**30**	**190**	**190**	**190**	**0**	**Nil**
30	3.800	40	120	230	120	70	Sell
90	3.810	20	90	250	90	160	Sell

In this example, the Equilibrium Price is $3.790 where the tradable volume is the largest and the imbalance is the lowest. If the highest tradable volume occurs at more than one price the algorithm will then consider imbalance, see sub-paragraph (2).

(2) If the highest tradable volume occurs at more than one price the Equilibrium Price is the price with the lowest imbalance. See Example 2.

Example 2

Bid Volume	Price	Ask Volume	Cumulative Bid Volume (a)	Cumulative Ask Volume (b)	Tradable Volume	Imbalance (a)-(b)	Pressure
0	3.750	10	340	10	10	330	Buy
0	3.760	20	340	30	30	310	Buy
50	3.770	50	340	80	80	260	Buy
100	**3.780**	**110**	**290**	**190**	**190**	**100**	**Buy**
70	**3.790**	**20**	**190**	**210**	**190**	**20**	**Sell**
30	3.800	40	120	250	120	130	Sell
90	3.810	20	90	270	90	180	Sell

In this example, the Equilibrium Price is $3.790 where the tradable volume is the largest (190) and the imbalance is the lowest (20).

If market orders are present a situation may arise in which the lowest imbalance occurs at "Market Price", see sub-paragraph (2A).

[1] The examples shown are not exhaustive.

If the highest tradable volume and lowest imbalance occur at more than one price the algorithm will then consider market pressure, see sub-paragraph (3).

(2A) If market orders are present and the market order volume on one side exceeds the cumulative order volume on the opposite side there would be a Market Order Surplus. This means that the lowest imbalance occurs at “Market Price”. In this situation, one tick will be added on the side with the Market Order Surplus and that would be the Equilibrium Price. See Example 2A.

Example 2A

Bid Volume	Price	Ask Volume	Cumulative Bid Volume (a)	Cumulative Ask Volume (b)	Tradable Volume	Imbalance (a)-(b)	Pressure
	MKT		50	0			
	3.750	10	50	10	10	40	Buy
	3.760		50	10	10	40	Buy
	3.770	10	50	20	20	30	Buy
10	3.780		50	20	20	30	Buy
	3.790		40	20	20	20	Buy
10	3.800		40	20	20	20	Buy
	3.810		**30**	**20**	**20**	**10**	**Buy**
30	MKT		30	20	20	10	Buy

In this example, the lowest imbalance (10) occurs where market order bid volume (30) exceeds cumulative ask volume (20). One tick has therefore been added on the bid side, and the Equilibrium Price is $3.810.

(3) If the highest tradable volume and lowest imbalance occur at more than one price (“the price overlap”) the Equilibrium Price is determined by market pressure:

(a) with only buy pressure within the price overlap, the Equilibrium Price is the highest price within the price overlap, or

(b) with only sell pressure within the price overlap, the Equilibrium Price is the lowest price within the price overlap. See Example 3.

Buy (sell) pressure occurs when the cumulative bid (offer) volume is greater than the cumulative offer (bid) volume at a particular price.

Example 3

Bid Volume	Price	Ask Volume	Cumulative Bid Volume (a)	Cumulative Ask Volume (b)	Tradable Volume	Imbalance (a)-(b)	Pressure
0	3.750	10	260	10	10	250	Buy
0	3.760	20	260	30	30	230	Buy
50	3.770	50	260	80	80	180	Buy
0	**3.780**	**110**	**210**	**190**	**190**	**20**	**Buy**

90	**3.790**	**0**	**210**	**190**	**190**	**20**	**Buy**
30	3.800	40	120	230	120	110	Sell
90	3.810	20	90	250	90	160	Sell

In this example there is only buy pressure in price overlap, the Equilibrium Price is $3.790 which is the highest price in the price overlap.

(4) If the highest tradable volume and lowest imbalance occur at more than one price and there is both buy and sell pressure or nil pressure within the price overlap, the Equilibrium Price is:

(a) the price within the price overlap that is the closest to the last traded price, or

(b) where there is no last traded price, the lowest price within the price overlap.

See Example 4.

Example 4

Bid Volume	Price	Ask Volume	Cumulative Bid Volume (a)	Cumulative Ask Volume (b)	Tradable Volume	Imbalance (a)-(b)	Pressure
0	3.750	10	260	10	10	250	Buy
0	3.760	20	260	30	30	230	Buy
50	3.770	50	260	80	80	180	Buy
0	**3.780**	**130**	**210**	**210**	**210**	**0**	**Nil**
90	**3.790**	**0**	**210**	**210**	**210**	**0**	**Nil**
30	3.800	40	120	250	120	130	Sell
90	3.810	20	90	270	90	180	Sell

In this example, assuming that the last traded price was $3.800, the Equilibrium Price is $3.790.

PRACTICE NOTE 8.2A.2 – CLOSING PRICE OF PRESCRIBED SECURITY

Issue Date	Cross Reference	Enquiries
Issued on [•]	Rule 8.2A.2	Please contact Securities Market Control:— E-Mail Address : securities.mc@sgx.com

1. Introduction

1.1 Rule 8.2A.2 of the Rules states that the closing price of a Prescribed Security shall be determined in accordance with the relevant formula and procedures applicable to each Prescribed Security, as determined by SGX-ST from time to time. In arriving at such formula and procedure, SGX-ST may take into account factors, including but not limited to:

(1) the last traded price;

(2) prevailing bids and offers during the trading phase, and/or closing routine; and/or

(3) price data derived from pricing models, as selected or established by SGX-ST from time to time.

This Practice Note sets out the formulas and procedures used by SGX-ST to determine the closing price of Prescribed Securities as contemplated in the above Rule.

1.2 Unless the context requires otherwise, the following terms shall have the meanings ascribed to them in Practice Note 8.2.1:

(1) "Closing Routine"; and

(2) "Trading Phase".

1.3 The following securities, Futures Contracts or products or classes of securities, Futures Contracts or products shall be a Prescribed Security for the purpose of Rule 8.2A.1:

(1) Exchange traded funds.

2 Closing Price of Prescribed Securities

2.1 Unless otherwise specified, SGX-ST may use any of the following as the closing price of a Prescribed Security for a Market Day:

(1) the single price at which orders are matched at the end of the Closing Routine as set out in Practice Note 8.2.1;

(2) the last traded price that occurred in the Closing Range;

(3) a price determined by SGX-ST taking into account the bid and offer prices present in the Trading System during the Closing Range;

(4) the last traded price that occurred prior to the Closing Range; or

(5) the closing price of the previous Market Day.

2.2 The Closing Range, for the purposes of this Practice Note, shall be the last 15 minutes of the Trading Phase, or such other time as may be determined by SGX-ST and notified to the market from time to time.

2.3 Where SGX-ST deems it necessary or desirable for ensuring a fair, orderly and transparent market or the integrity of the market, or for proper management of systemic risk in the market, SGX-ST may use an alternative formula and/or procedure to determine the closing price of a Prescribed Security.

2.4 SGX-ST shall, as soon as practicable, notify the Authority of any action taken by SGX-ST pursuant to paragraph 2.3 of this Practice Note.

PRACTICE NOTE 8.6.13A(3): ALTERNATIVE REFERENCE PRICE FOR NO-CANCELLATION RANGE

Issue Date	Cross Reference	Enquiries
Issued on [•]	8.6.13A(3)	Please contact Enforcement:— E-Mail Address : enforcement@sgx.com

1. Introduction

1.1. Rule 8.6.13A(3) provides that SGX-ST may, in its discretion, use an alternative price as the Reference Price for the no-cancellation range if (a) the price of the last good trade is not available; or (b) SGX-ST deems the price of the last good trade to be unreliable or inappropriate as a Reference Price.

1.2. In normal market conditions, the price of the last good trade is adopted as the Reference Price. However, SGX-ST has considered that there may be situations where the price of the last good trade is not available or not appropriate. In such situations, SGX would seek to establish a Reference Price from alternative sources.

1.3. This Practice Note sets out the alternative prices that SGX-ST may consider in establishing the Reference Price when the price of the last good trade is inappropriate.

2. Alternative Prices

2.1. The table below sets out the alternative prices that SGX-ST may consider in establishing the Reference Price to determine the no-cancellation range.

Instrument	Alternative prices that may be adopted as the Reference Price
Extended Settlement Contracts	▪ The previous closing price. ▪ The price of the last good trade in the underlying stock.
American Depository Receipts	▪ The previous closing price of the underlying stock in home market. ▪ The previous closing price of the ADR in the US market.
Exchange Traded Funds	▪ The previous closing price as determined in accordance with Rule 8.2A. ▪ The average of the last quoted bid price and the last quoted offer price for the Exchange Traded Fund immediately preceding the error trade. The selection will not include the quotes provided by the Designated Market-Maker who is involved in the error trade which is under review. ▪ The Indicative Net Asset Value.

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Instrument	Alternative prices that may be adopted as the Reference Price
Exchange Traded Notes	▪ The average of the last quoted bid and the last quoted offer price for the Exchange Traded Note immediately preceding the error trade. The selection will not include the quotes provided by the Designated Market-Maker who is involved in the error trade which is under review. ▪ The price of other debt papers with a similar credit rating.
All other securities (excluding bonds and structured warrants)	▪ The previous closing price. ▪ The average of the last quoted bid price and the last quoted offer price for the security immediately preceding the error trade. The selection will not include the quotes provided by the parties who are involved in the error trade which is under review.

3. Alternative Prices Unsuitable

3.1. Where SGX-ST determines that an appropriate Reference Price cannot be established, it will not establish a no-cancellation range.

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Practice Note 8.10A — Circuit Breaker

Issue Date	Cross Reference	Enquiries
Issued on xx	Rule 8.10A	Please contact Securities Market Control:— Email: securities.mc@sgx.com

1. Introduction

1.1. Rule 8.10A.1 states that SGX-ST may prescribe, for certain securities and Futures Contracts, Circuit Breakers which are designed to temporarily restrict trading in these securities and Futures Contracts.

1.2. Rule 8.10A.2 adds that SGX-ST shall impose a Cooling-Off Period on such security or Futures Contract referred to in Rule 8.10A.1 if an incoming order seeks to be matched, either partially or fully, with an existing order in the Trading System at a price outside the Circuit Breaker,

1.3. The Cooling-Off Period can guard against disorderly situations in the face of rapid and unchecked market movements, by allowing the market and regulators a pause to take stock of the situation.

1.4. It is not intended to halt price movement. A fundamental role of a capital market is timely and accurate price discovery; as such, the market should be allowed to determine its own prices so long as it remains fair and orderly. Where large price movements are justified, what the circuit breaker facilitates is a more measured market movement enabled by the imposition of pauses which allow the market to analyse market conditions and all available information before resuming. By moderating the pace of big price movements, the circuit breaker prevents alarm to the market and averts contagion risk to other markets.

2. Coverage of Circuit Breaker

2.1. Circuit Breakers will apply to the following instruments:

(1) Stocks and unit trusts that are components of the Straits Times Index or the MSCI Singapore Free Index;

(2) Stocks, stapled securities, Real Estate Investment Trusts, business trusts, funds, exchange-traded funds and exchange-traded notes that have a reference price at the start of the Market Day of 0.50 or more in the underlying currency that Market Day. In the case of Yen-denominated instruments, Circuit Breakers are applied if the reference price at the start of the Market Day is ¥500 (denoted as “0.50” in the Trading System) or more that Market Day; and

(3) Marginable Futures Contracts with underlying instruments falling within (1) or (2) above.

2.2. The instruments are assessed against the criteria set out in paragraph 2.1 above on a daily basis to determine if Circuit Breakers will apply that Market Day.

2.3. As stated in Rule 8.11.1A, SGX-ST may impose a trading halt on a security or Futures Contract when its underlying, or such instrument on the same underlying as SGX-ST may prescribe, is subject to a Cooling-Off Period pursuant to Rule 8.10A.2. This includes structured and company warrants. The duration of such halt will be aligned with the Cooling-Off Period.

3. Characteristics of Circuit Breakers and Cooling-Off Periods

3.1. A Circuit Breaker will have the following features:

(1) The Circuit Breaker is in operation during the Trading Phase.

(2) The Circuit Breaker, takes the form of a price band. Trading in a security or Futures Contract must be within or at the upper and lower thresholds of the price band. The price band is based on a prescribed percentage threshold from a reference price. The calculation of the price band is described in paragraph 4 below.

(3) When an incoming order seeks to match against a resting order at a price outside the upper or lower threshold, a Cooling-Off Period is activated. The incoming order is rejected and will not be matched at a price outside the upper and lower thresholds. An incoming order may have been partially matched against other orders up to the price band, beyond which the outstanding order would be rejected. The trades that were executed at or within the price band will not be affected by activation of the Cooling-Off Period, and only the outstanding volume of the incoming order will be rejected.

(4) During the Cooling-Off Period, trading in a security or Futures Contract continues at or within the price band that was established when the Cooling-Off Period was activated. If an incoming order seeks to match against a resting order at a price outside the upper or lower threshold, the incoming order will be rejected and will not be matched at a price outside the upper and lower thresholds. This will not extend the cooling-off period.

(5) After the Cooling-Off Period ceases, the upper and lower thresholds of the Circuit Breaker will be adjusted. The adjustment of the price band is described in paragraph 4. Trading in a security or Futures Contract will continue within and at the new price band.

3.2. When a Cooling-Off period is activated, the affected instrument(s) will have "CIRB" indicated in the Rmk column on the SGX website for the duration of the cooling-off period. The change in session state will also be broadcast to Trading Members.

3.3. The duration of the Cooling-Off Period is five minutes. The Cooling-Off Period will cease upon the commencement of any of the following, even if five minutes has not elapsed:

(1) Pre-close phase;

(2) Suspension; and

(3) Trading Halt.

3.4. The Equilibrium Price at the end of the Opening Routine, Closing Routine or Adjust Phase will not activate a Cooling-Off Period (refer to SGX-ST Practice Note 8.2.1 for details on the Opening Routine, Closing Routine and Adjust Phase).

4. Calculation of the Circuit Breaker

4.1. The upper threshold is 10% above the reference price and the lower threshold is 10% below the reference price:

4.2. The reference price for the start of the Market Day is as follows:

(1) the opening price of the security, failing which

(2) the previous Market Day's last traded price, or in the case of a Prescribed Security, the closing price of the Prescribed Security on the previous Market Day, failing which

(3) the last available traded price.

4.3. The reference price at the start of the Market Day is applicable to the first five minutes of the Trading Phase of each Market Day. The reference price for the rest of the Market Day is as follows:

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(1) the last traded price as of five minutes prior to each potential trade, failing which

(2) the reference price at the start of the Market Day.

4.4. If there are trades done during the Cooling-Off Period, the reference price following the Cooling-Off Period will be as described in paragraph 4.3 above. If there are no trades done during the Cooling-Off Period, the first trade after the Cooling-Off Period will not be subject to the Circuit Breaker. The price of the first trade will then serve as the reference price for the five minutes following the trade. Thereafter, the reference price will be as described in paragraph 4.3 above.

4.5. In the event that an instrument is suspended or halted, the reference price immediately upon the lifting of a halt/suspension for a security will be as follows:

(1) the Equilibrium Price, failing which

(2) the last traded price in the Trading phase preceding the halt/suspension, failing which

(3) the reference price at the start of the Market Day.

4.6. The reference price of a Marginable Futures Contract is the reference price of its underlying instrument at all times.

5. Illustration of Circuit Breaker operation

Scenario 1

5.1. Security A has an opening price of $1.00. The Circuit Breaker will apply to Security A on that Market Day.

5.2. No trades are executed after the market opens.

5.3. At 11:00:00a.m, an incoming buy order for one lot of Security A at $1.20 attempts to match against a resting sell order for five lots of Security A at $1.20.

5.4. The reference price of Security A at 11:00:00a.m is $1.00 because there have been no trades in the Trading phase, and the opening price is $1.00. Therefore, the upper limit of Security A's Circuit Breaker at 11:00:00a.m is:

$1.00 + (10% x $1.00) = $1.10:

The lower limit is:
$1.00 - (10% x $1.00) = $0.90.

5.5. As the incoming buy order, if matched, would result in a trade outside the upper limit of the Circuit Breaker, it is rejected, and the Cooling-Off Period begins. The Cooling-Off Period is in place from 11:00:00a.m to 11:05:00a.m, during which trading can occur within the price band i.e. at or between $0.90 and $1.10: If a buy order for one lot of Security A at $1.20 is re-entered at this time, it is rejected.

5.6. No trades occur during the Cooling-Off Period. The first trade after the Cooling-Off Period will not be subject to the Circuit Breaker. If the incoming buy order for one lot of Security A $1.20 is re-entered at this time (and the resting sell order for five lots at $1.20 is still in the order book), it will result in a traded price of $1.20. $1.20 will then be the new reference price for at least the next five minutes of trading.

Scenario 2

5.7. Security B has an opening price of $1.00. The Circuit Breaker will apply to Security B on that Market Day. At 10:00:00a.m, the last traded price as of five minutes ago (i.e. at 9:55:00a.m) is $0.90. This is therefore the reference price at 10:00:00a.m.

5.8. At 10:00:00a.m, two incoming sell orders are simultaneously placed for Security B at $0.82 (five lots) and $0.80 (five lots). The resting buy orders in terms of price priority are a resting buy order for five lots of Security B at $0.82, and another resting buy order for three lots of Security B at $0.80.

As the reference price of Security B at 10:00:00a.m is $0.90, the lower limit of Security B's price band is:

$0.90 – (10% of $0.90) = $0.81.

The upper limit is:

$0.90 + (10% of $0.90) = $0.99.

5.9. The incoming sell order will be matched at $0.82 (five lots) against the resting buy order for five lots at $0.82. The remaining sell order of $0.80 (five lots) will then attempt to match against the resting buy order for three lots of Security B at $0.80.

5.10. As the incoming sell order for $0.80, if matched, will result in a trade outside the lower limit of the price band,) the order is rejected, and the Cooling-Off Period begins. The Cooling-Off Period is in place from 10:00:00a.m to 10:05:00a.m, during which trading can occur within the price band i.e. at or between $0.81 and $0.99.

5.11. A buy market order comes in at 10:01.00a.m for five lots at $0.83, and a sell order for five lots at $0.83 is entered at 10:02:00a.m. This results in a matched trade for five lots of Security B at 10:02:00a.m.

5.12. The reference price immediately after the Cooling-Off Period ends at 10:05:00a.m is $0.82, reflecting the traded price five minutes ago just prior to the start of the Cooling-Off Period. At 10:07:00a.m, the reference price becomes $0.83, reflecting the traded price five minutes ago at 10:02:00a.m.

6. Exemption of New Listings from circuit breaker

6.1. SGX-ST will exempt New Listings from the circuit breaker on the first day of trading. This is because the offer price of a New Listing may potentially differ significantly from market valuation. Applying the circuit breaker on the first day of trading may unnecessarily impede the price discovery process.

6.2. New Listings refer to the following instruments that are newly listed, regardless of whether they are subject to an initial public offering or is placed out:

(1) Stocks;

(2) Stapled securities;

(3) Real Estate Investment Trusts:

(4) Business trusts;

(5) Funds;

(6) Exchange-traded funds; and

(7) Exchange-traded notes.

6.3. New Listings will include stocks of companies that have been previously delisted but have gone through the listing process again.

6.4. New Listings will also include stocks/units that are created by distribution of dividends in-specie.

6.5. New Listings will not include any instruments that are created as a result of stock consolidation, stock splits and other similar actions which result in the replacement of existing counters. This is because the last traded price of the existing counters prior to delisting act as indicators which will allow market participants to adequately approximate the price of these new instruments. New Listings will therefore also not include temporary odd-lot instruments that are created as a result of corporate actions or rights issues, and will also exclude schemes of arrangement.