

Appendix A - Text of Provisions Respecting Electronic Trading

The Universal Market Integrity Rules are hereby amended as follows:

1. Rule 1.1 is amended by adding the following definition of "Electronic Trading Rules":

"Electronic Trading Rules" means National Instrument 23-103 *Electronic Trading* as amended, supplemented and in effect from time to time.

- 2. Rule 1.2 is amended by:
 - (a) deleting the word "and" at the end of clause (b);
 - (b) renumbering clause (c) of subsection (1) as clause (d), and
 - (c) inserting the following as clause (c) of subsection (1):
 - (c) defined or interpreted in the Electronic Trading Rules has the meaning ascribed to it in that National Instrument.
- 3. Rule 7.1 is amended by adding the following subsections:
 - (6) Notwithstanding any other provision of this Rule, a Participant or an Access Person shall adopt, document and maintain a system of risk management and supervisory controls, policies and procedures reasonably designed, in accordance with prudent business practices, to ensure the management of the financial, regulatory and other risks associated with:
 - (a) access to one or more marketplaces; and
 - (b) if applicable, the use by the Participant, any client of the Participant or the Access Person of an automated order system.
 - (7) A Participant may, on a reasonable basis:
 - (a) authorize an investment dealer to perform on its behalf the setting or adjusting of a specific risk management or supervisory control, policy or procedure; or
 - (b) use the services of a third party that provides risk management and supervisory controls, policies and procedures.
 - (8) An authorization over the setting or adjusting of a specific risk management or supervisory control, policy or procedure or retaining the



services of a third party under subsection (7) must be in a written agreement with the investment dealer or third party that;

- (a) precludes the investment dealer or third party from providing any other person control over any aspect of the specific risk management or supervisory control, policy or procedure;
- (b) unless the authorization is to an investment dealer that is a Participant, precludes the authorization to the investment dealer over the setting or adjusting of a specific risk management or supervisory control, policy or procedure respecting an account in which the investment dealer or a related entity of the investment dealer holds a direct or indirect interest other than an interest in the commission charged on a transaction or reasonable fee for the administration of the account; and
- (c) precludes the use of a third party unless the third party is independent of each client of the Participant other than affiliates of the Participant.
- (9) A Participant shall forthwith notify the Market Regulator:
 - (a) upon entering into a written agreement with an investment dealer or third party described in subsection (8), of:
 - (i) the name of the investment dealer or third party, and
 - (ii) the contact information for the investment dealer or the third party which will permit the Market Regulator to deal with the investment dealer or third party immediately following the entry of an order or execution of a trade for which the Market Regulator wants additional information; and
 - (b) of any change in the information described in clause (a).
- (10) The Participant shall review and confirm:
 - (a) at least annually that:
 - (i) the risk management and supervisory controls, policies and procedures under subsection (6) are adequate,
 - (ii) the Participant has maintained and consistently applied the risk management and supervisory controls, policies and procedures since the establishment of the controls, policies and procedures or the date of the last annual review, and



- (iii) any deficiency in the adequacy of a control, policy or procedure has been documented and promptly remedied;
- (b) if the Participant has authorized an investment dealer to perform on its behalf the setting or adjusting of a specific risk management or supervisory control, policy or procedure or retained the services of a third party, at least annually by the anniversary date of the written agreement with the investment dealer or third party that:
 - (i) the risk management and supervisory controls, policies and procedures adopted by the investment dealer or third party under subsection (6) are adequate,
 - (ii) the investment dealer or third party has maintained and consistently applied the risk management and supervisory controls, policies and procedures since the establishment of the controls, policies and procedures or the date of the last annual review, and
 - (iii) any deficiency in the adequacy of a control, policy or procedure has been documented by the Participant and promptly remedied by the investment dealer or third party, and
 - (iv) the investment dealer or third party is in compliance with the written agreement with the Participant.

4. Rule 7.11 is amended by:

- (a) inserting in the title the words "and Correction" after the word "Cancellation";
- (b) inserting in clause (b) the phrase "or corrected" immediately following the word "varied";
- (c) deleting clause (d) and inserting the following clauses:
 - (d) with the prior consent of the Market Regulator, if the variation, cancellation or correction would be necessary to correct an error caused by a system or technological malfunction of the marketplaces systems or equipment or caused by an individual acting on behalf of the marketplace; or
 - (e) with notice to the Market Regulator immediately following the variation, cancellation or correction of the trade in such form and manner as may



be required by the Market Regulator and such notice shall be given, if the variation, cancellation or correction is made:

- (i) prior to the settlement of the trade, by:
 - (A) the marketplace on which the trade was executed at the request of a party to the trade and with the consent of each Participant and Access Person that is a party to the trade, or
 - (B) the clearing agency through which the trade is or was to be cleared and settled, and
- (ii) after the settlement of the trade, by each Participant and Access Person that is a party to the trade.
- 5. Part 10 is amended by adding the following as Rule 10.17:

Gatekeeper Obligations with Respect to Electronic Trading

- (1) A Participant that has, under Rule 7.1, authorized an investment dealer to perform on its behalf the setting or adjusting of a specific risk management or supervisory control, policy or procedure or the provision of risk management or supervisory controls, policies and procedures to a third party shall forthwith report to the Market Regulator the fact that:
 - (a) the written agreement with the investment dealer or third party has been terminated; or
 - (b) the Participant knows or has reason to believe that the investment dealer or third party has failed to promptly remedy any deficiency identified by the Participant.

The Policies to the Universal Market Integrity Rules are hereby amended as follows:

- 1. Part 1 of Policy 7.1 is amended by:
 - (a) replacing at the start of the seventh paragraph the word "Where" with the word "When";
 - (b) deleting in the seventh paragraph the phrase "(for example by a client with a systems interconnect arrangement in accordance with Policy 2-501 of the Toronto Stock Exchange)";
 - (c) adding at the end of the third bullet of the eight paragraph the phrase "other than a client required to use the "short-marking exempt" designation"; and



- (d) deleting at the end of the fourth bullet of the eighth paragraph the phrase "(unless the trading system of the Participant restricts trading activities in affected securities".
- 2. Part 2 of Policy 7.1 is amended by:
 - (a) deleting the phrases "Participants are reminded that", "the entry of", and "(For example, for Participants that are Participating Organizations of the TSE, reference should be made to the Policy on "Connection of Eligible Clients of Participating Organizations)"; and
 - (b) adding the word "entered" immediately before the phrase "must comply".
- 3. Part 3 of Policy 7.1 is amended in respect of the table of Minimum Compliance Procedures for Trading Supervision UMIR and Policies by:
 - (a) adding reference to "Electronic Access to Marketplaces", "Rule 7.1" and "Securities Legislation" and associated compliance review procedures;
 - (b) amending the term "restricted list" to "restricted security";
 - (c) amending the term "firm restricted list" to "firm trading restriction"; and
 - (d) deleting references to Rule 7.8 and Rule 7.9 and substituting reference to Rule 7.7 in regard to "restricted issues".
- 4. Policy 7.1 is further amended by adding the following Parts:

Part 7 – Specific Provisions Applicable to Electronic Access

Trading supervision related to electronic access to marketplaces must be performed by a Participant or Access Person in accordance with a documented system of risk management and supervisory controls, policies and procedures reasonably designed to ensure the management of the financial, regulatory and other risks associated with electronic access to marketplaces.

The risk management and supervisory controls, policies and procedures employed by a Participant or Access Persons must include:

- automated controls to examine each order before entry on a marketplace to prevent the entry of an order which would result in:
 - o the Participant or Access Person exceeding pre-determined credit or capital thresholds,



- o a client of the Participant exceeding pre-determined credit or other limits assigned by the Participant or to that client, or
- o the Participant, Access Person or client of the Participant exceeding pre-determined limits on the value or volume of unexecuted orders for a particular security or class of securities;
- provision to prevent the entry of an order this is not in compliance with Requirements;
- provision of immediate order and trade information to compliance staff of the Participant or Access Person; and
- regular post-trade monitoring for compliance with Requirements.

A Participant or Access Person is responsible and accountable for all functions that they outsource to a service provider as set out in Part 11 of Companion Policy 31-103CP *Registration Requirements and Exemptions*.

Supervisory and compliance monitoring procedures must be designed to detect and prevent account activity that is or may be a violation of Requirements which includes applicable securities legislation, requirements of any self-regulatory organization applicable to the account activity and the rules and policies of any marketplace on which the account activity takes place. These procedures must include "post-order entry" compliance testing enumerated under Part 1 of Policy 7.1 to detect orders that are not in compliance with specific rules, and by addressing steps to monitor trading activity, as provided under Part 5 of Policy 7.1, of any person who has multiple accounts, with the Participant and other accounts in which the person has an interest or over which the person has direction or control.

Part 8 – Specific Provisions Applicable to Automated Order Systems

Trading supervision by a Participant or Access Person must be in accordance with a documented system of risk management and supervisory controls, policies and procedures reasonably designed to ensure the management of the financial, regulatory and other risks associated with the use of an automated order system by the Participant, the Access Person or any client of the Participant.

Each Participant or Access Person must have a level of knowledge and understanding of any automated order system used by the Participant, the Access Person or any client of the Participant that is sufficient to allow the



Participant or Access Person to identify and manage the risks associated with the use of the automated order system.

The Participant or Access Person must ensure that every automated order system used by the Participant, the Access Person or any client of the Participant is tested in accordance with prudent business practices initially before use and at least annually thereafter. A written record must be maintained with sufficient details to demonstrate the testing of the automated order system undertaken by the Participant, Access Person and any third party employed to provide the automated order system or risk management or supervisory controls, policies and procedures.

The scope of appropriate order and trade parameters, policies and procedures should be tailored to the strategy or strategies being pursued by an automatic order system with due consideration to the potential market impact of defining such parameters too broadly and in any event must be set so as not to exceed the marketplace thresholds applicable to the marketplace on which the order is entered or would otherwise exceed the limits publicly disclosed by the Market Regulator for the exercise of the power of a Market Integrity Official under Rule 10.9 of UMIR.

The Market Regulator expects the risk management and supervisory controls, policies and procedures to comply with the Electronic Trading Rules and be reasonably designed to prevent the entry of any order that would interfere with fair and orderly markets. This includes adoption of compliance procedures for trading by clients, if applicable, containing detailed guidance on how testing of client orders and trades is to be conducted to ensure that prior to engagement and at least annually thereafter, each automated order system is satisfactorily tested assuming various market conditions. In addition to regular testing of the automated order systems, preventing interference with fair and orderly markets requires development of pre-programmed internal parameters to prevent or "flag" with alerts on a real-time basis, the entry of orders and execution of trades by an automated order system that exceed certain volume, order, price or other limits.

Each Participant or Access Person must have the ability to immediately override or disable automatically any automated order system and thereby prevent orders generated by the automated order system from being entered on any marketplace.

Notwithstanding any outsourcing or authorization over of risk management and supervision controls, a Participant or Access Person is responsible for any order entered or any trade executed on a marketplace, including any order or trade



resulting from the improper operation or malfunction of the automated order system. This responsibility includes instances in which the malfunction which gave rise to a "runaway" algorithm is attributed to an aspect of the algorithm or automated order system that was not "accessible" to the Participant or Access Person for testing.