FOR CLIENTS OF VIRTU AMERICAS LLC ("VAL" OR THE "Firm")

SECURITIES INVESTOR PROTECTION CORPORATION

Please make note that you can obtain information about SIPC, including the SIPC brochure, by visiting www.sipc.org or calling (202) 371-8300.

SECTION 311 NOTICES (PROHIBITED ACCOUNTS)

Pursuant to U.S. regulations issued under Section 311 of the USA PATRIOT Act, 31 CFR 103.193, VAL is prohibited from establishing, maintaining, administering or managing a correspondent account for, or on behalf of: Banco Delta Asia; Bank of Dandong; Burma; Commercial Bank of Syria (Includes Syrian Lebanese Commercial Bank); Democratic People's Republic of Korea; FBME Bank Ltd.; Halawi Exchange Co.; Islamic Republic of Iran; and Kassem Rmeiti & Co. For Exchange. Regulations also require us to notify you that you may not provide any of the aforementioned entities or their subsidiaries with access to the account(s) that you hold with us. If we become aware that one of these entities or any of their subsidiaries is indirectly using the account that you hold with us, we will be required to take appropriate steps to prevent such access including, where necessary, terminating your account(s). Updated Section 311 Special Measures can be viewed at:

https://www.fincen.gov/resources/statutes-and-regulations/311-special-measures

PAYMENT FOR ORDER FLOW

VAL may receive remuneration for directing orders to a particular broker or dealer and may route orders to market centers, including national securities exchanges, alternative trading systems, electronic communications networks, and broker-dealers that may offer credits for certain types of orders while assessing fees for other types of orders. In some cases, the credits offered by a market center may exceed the charges assessed, such that a market center may make a payment to VAL in relation to orders directed to such market center. Such remuneration, if any, is considered compensation to us. The source and amount of any compensation received on behalf of your particular order will be disclosed upon written request.

ORDER ROUTING

VAL will make routing information on orders you route to the Firm available upon request in compliance with SEC Rule 606. If you would like more information, please contact our Client Services Department at (646) 682-6199.

FINRA RULE 5320 – INSTITUTIONAL ORDER HANDLING PRACTICES

FINRA Rule 5320 generally provides that a broker-dealer handling a customer order in an equity security is prohibited from trading that security for its own account at a price that would satisfy the customer order, unless the firm immediately executes the customer's order up to the size of its own order at the same price or better. While the rule applies broadly to all types of customers and order sizes, it provides exemptions that permit broker-dealers to trade for their own account provided certain conditions are met.

VAL's market making unit engages in market making-related activities, including trading to manage risks resulting from customer facilitation and capital commitment activities. Consistent with the "no knowledge" exemption under Rule 5320, VAL has implemented internal controls, including information barriers, to prevent desks outside of its market making unit from obtaining knowledge of orders that are handled by the market making unit.

FINRA Rule 5320 also permits firms to negotiate the terms and conditions on the acceptance of certain large-sized orders (orders of 10,000 shares or more and have a value of $100,000 or more) and orders from institutional accounts that would permit the broker dealer to trade ahead of or along with such orders provided that the broker-dealer provides clear and comprehensive written disclosure at account opening and annually thereafter. Additionally, the broker-dealer is required to provide its institutional accounts with the opportunity to opt in to the Rule 5320 protections with respect to all or a portion of its order(s). You may opt in to Rule 5320 protection by notifying your Virtu Representative. Orders may be opted-in to Rule 5320 protection on a blanket or order-by-order basis.

If you do not opt in to the Rule 5320 protections with respect to all or a portion order(s), VAL may reasonably conclude that you have consented to the Firm trading a security on the same side of the market for its own account at a price that would satisfy your order. Even when a customer has opted in to the FINRA Rule 5320 protections, VAL may still obtain consent on an order-by-order basis to trade ahead of or along with a customer order.

FINRA RULE 5270 DISCLOSURE – BLOCK ORDERS

FINRA Rule 5270 prohibits a broker-dealer from buying or selling a security or a "related financial instrument" for its own account when that member has material, non-public information concerning an imminent block transaction in that security, a related financial instrument or a security underlying the related financial instrument prior to the time information concerning the block transaction has been made publicly available, or has otherwise become stale or obsolete. However, Rule 5270 permits certain exceptions, one of which allows a broker-dealer to trade for its own account when transactions are undertaken to fulfill or facilitate the execution of the customer block order (including hedging or block positioning).

For example if a client requests that VAL execute a guaranteed-priced order ("Guaranteed Order"), VAL will usually establish a hedge through a single or multiple purchase (sale) transactions in order to offset the risks associated with facilitating the Guaranteed Order. VAL will typically establish the hedge before it executes (fills) the client's Guaranteed Order, and the hedge will usually involve transacting as principal in the same security, however, it may also involve transacting as principal in related derivative and/or financial instruments (e.g., standardized options, futures, exchange traded funds, fixed income securities). The Firm generally attempts to establish a perfect hedge, but may not always do so under certain circumstances such as natural forces of supply and demand. If the Firm is not able to establish a perfect hedge VAL may, at its good faith discretion, purchase (sell) a different quantity of shares than the quantity of shares on the Guaranteed Order(s).

Additionally, the final price that is received on your order may be impacted by VAL's hedging and positioning activity particularly with regard to thinly-traded stocks or large hedging transactions. For example, if a client places a large Guaranteed Order(s) to purchase/sell a thinly-traded stock, and the Firm enters into related hedge transactions, the Firm's transactions may contribute to an increase/decrease in the stock's price, which in turn could increase/decrease the guaranteed price. Moreover, VAL may be handling other client orders concurrently with your guaranteed order, and may trade principally in connection with the facilitation of these orders, which may affect the final price received on your order. VAL will make reasonable efforts to balance each of its client's, and the Firm's needs, in handling orders.

"NOT HELD" OR "HELD" ORDER HANDLING

When you place an order with VAL for execution in the equities markets, you may specify that VAL handles your order on either a "not held" or "held" basis.

A "not held" order is an un-priced, order which, by definition, does not have price protection. At times, VAL may execute trades for itself or for other clients at prices which the "not held" order you have entered could be executed but VAL may choose not to execute your order at the same price(s). VAL will designate your orders as not held unless you advise us otherwise on an order by order basis. When handling not held orders, we will exercise our reasonable trading judgment with respect to the time and the price of execution consistent with our duty of best execution.

A "held" order does not permit VAL to exercise its professional judgment in handing your order. If you send VAL a held market order or held limit order, VAL will seek to execute or route the order for execution at prevailing and available market prices.

NET TRADING DISCLOSURE FOR INSTITUTIONAL CUSTOMERS

For clients that do not pay a disclosed commission for executed "not held" orders, VAL may execute such "not held" orders on a "net" basis. When executing "not held" orders on a "net" basis, VAL will accumulate a position in a principal account to fill your order and then execute your order at a price(s) that is above its average accumulation cost in the case of a buy order or below its average accumulation cost in the case of a sell order. The difference between VAL's average cost to accumulate a position to fill your "not held" order and the price reported to you and the consolidated tape is compensation to VAL for the execution of your order. The amount of this compensation is not separately disclosed on confirmations. Details regarding the individual executions used to fill your order(s) are available upon request. If you object to our handling your orders on a net basis as described above, please send an email to nvscompliance@virtu.com and a VAL representative will contact you to discuss alternative compensation arrangements.

BLIND RISK BID, PORTFOLIO AND PROGRAM TRADING DISCLOSURE

In connection with, and to facilitate the execution of client transactions in which VAL agrees to guarantee an execution that is tied to a particular benchmark, price level, blind risk bid or other pricing mechanism, VAL may engage in hedging activities once we have committed capital to the client order. This is done in an effort to hedge our potential exposure and to offset the risk of such commitment. While these hedging activities may ultimately influence the prices a client receives, we employ reasonable efforts to minimize market impact. Alternatively, a client may instruct VAL not to engage in such hedging, however, our level of capital commitment will likely reflect the additional risk associated with our inability to hedge our risk.

Additionally, VAL will likely facilitate the execution of multiple client orders simultaneously, where we are at risk (capital commitment) and on a riskless principal/agency basis. VAL may transact as principal, on the same side of the market in the same symbol at a price that would satisfy a client order to manage its risk without obtaining client consent as permitted under FINRA Rule 5320. However, VAL is required to offer our clients a meaningful opportunity to "opt in" to the FINRA Rule 5320 protections. Please contact your Virtu representative if you wish to "opt in" to the protections afforded by FINRA Rule 5320.

USE OF ORDER AND TRADE DATA

VAL may use certain order and execution data ("trade data") for bona-fide business purposes. For example, the Firm disseminates trade data to "trade advertisement" vendors and makes it available to VAL sales and trading personnel for the purpose of providing market color to clients. In providing market color, VAL may segment aggregated post trade execution information by symbol, internally aggregated buy or sell imbalances, and client. The Firm may also use trade data to perform venue and transaction cost analysis, for capital use analysis or when distributing IOIs (natural or otherwise) to clients. Certain business units may perform post-trade analysis of historical order information in order to develop and maintain profiles for clients that VAL will use to manage liquidity provision and to adjust internalization rates.

This disclosure is intended to illustrate how the Firm uses trade data but does not describe every aspect of how the Firm may use trade data for its business purposes. Please contact your Virtu Representative if you have questions or wish to request that your trade data be excluded.

INDICATIONS OF INTEREST

VAL utilizes certain vendors and communication protocols to advertise Indications of Interest ("IOIs"). VAL's use of the terms "House" and "Natural" may differ from the vendor's guidelines.

Natural IOIs are based on live orders that have hit VAL's book. These may originate from either VAL's retail or institutional client base and indicate that VAL has a client order(s) in hand and is looking for a contra side order. VAL disseminates "In Touch With" IOIs to communicate that a client has provided verbal or electronic non-firm instructions that they may be willing to trade at the advertised price and up to the size advertised.

VAL disseminates IOIs that are labeled as "House Natural." VAL systemically generates House Natural IOIs based on the imbalance between our executed retail flows over certain time intervals. VAL will disseminate these IOIs with both a size and price at which VAL would be willing to commit capital to complete a trade. VAL may or may not have an existing position in the symbol at the time that the House Natural IOI is generated. As retail imbalances may persist, VAL can use its incoming retail order flow to work out of positions established in response to IOIs.

VAL disseminates a non-natural IOI (a "Super") to communicate proprietary trading interest that typically will result in VAL having a long or short position that may need to be unwound in the marketplace.

REQUEST FOR QUOTE

Customers may send VAL a Request for Quote or "RFQ" to request a bid or offer on a particular security. VAL's response to an RFQ is indicative and non-binding. It is not a firm quote and reflects the price where VAL is willing but not obligated to trade.

SUITABILITY AND FINRA RULE 2111

FINRA Rule 2111 requires that a member or associated person must have a reasonable basis to believe that a recommended transaction or investment strategy involving a security or securities is suitable for the customer based on the information obtained through the reasonable diligence of the member or associated person to ascertain the customer's investment profile.

A member or associated person can fulfill the customer-specific suitability obligation for an institutional account, as defined in FINRA Rule 4512(c), if (1) the member or associated person has a reasonable basis to believe that the institutional customer is capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies involving a security or securities and (2) the institutional customer affirmatively indicates that it is exercising independent judgment in evaluating the member's or associated person's recommendations.

VAL does not offer equity research to clients nor does VAL make recommendations to clients. However, VAL does prepare and distribute institutional sales material that is a compilation of market color and trader commentary with input provided by equity trading, market making and/or sales personnel.

In sending an order to VAL, the Firm assumes that any decisions to purchase and/sell securities and the associated risks have been independently evaluated by its client.

FOREIGN CURRENCY

Transactions executed in overseas markets may be effected with an affiliate. If the trade is being settled in a currency different from the standard settlement currency of the traded security, VAL has effected the currency conversion it considered necessary for the purpose of complying with your instructions. VAL may effect currency transactions for its own account at rates that are different than the currency exchange rate applied to your order. Full details regarding the executing entity and the costs associated with the currency conversion when the conversion is executed by a Virtu affiliate are available upon written request. Foreign-currency-denominated securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or price of, or income derived from, the investment. In addition, clients who trade securities such as ADRs effectively assume currency risk as the values of these securities are influenced by foreign currencies.

ERRONEOUS EXECUTIONS

Bona fide errors can result from human error or system issues that affect the execution of an order. Such errors can occur at VAL or can occur outside of VAL at an exchange, an ATS or at other market centers utilized by VAL in connection with the execution of the order. Such errors can also result from general market volatility, communications or system breakdowns or other conditions over which VAL has no control. VAL reserves the right at its sole discretion to cancel or price-adjust any trade that is deemed by VAL to have been the result of an error, including the result of any of the above or an incorrect security symbol or name, size and/or prices that are unrelated to the market. VAL also reserves the right at its sole discretion to cancel any execution that was effected based upon incorrect or unreliable market data. In the event that VAL exercises this right, the Firm will use reasonable efforts to inform its clients in a timely manner.

VIRTU MATCHIT

VAL operates the Virtu MatchIt ATS ("MatchIt"). Other divisions of VAL or Virtu affiliates may transmit orders to MatchIt. These other divisions or affiliates may transmit orders to MatchIt in connection with their handling of client orders or for their own account on a proprietary basis. Additional information about MatchIt, including the MatchIt Execution Protocols and Form ATS, are available at https://www.virtu.com/trading-venues.

VIRTU FIXED INCOME LIQUIDITY ("VFI")

VFI is an electronically-enabled offering for trading US Treasuries offered by VAL. VAL trades as principal and is the counter party on all trades executed by VFI. VFI may transmit Indications of Interest (IOIs). Transmission of an order, including transmission in response to an IOI, may not result in a trade.

VEQ LINK ("LINK")

VEQ Link is an electronically-enabled offering for equities offered by VAL. VAL trades as principal and is the counter party on all trades executed by VEQ Link. VEQ Link may transmit Indications of Interest (IOIs). Transmission of an order, including transmission of an IOI, may not result in a trade.

PRE-MARKET & POST-MARKET EXECUTION RISK

Clients should be aware of the following risks when submitting orders for execution in the pre-market or post market sessions.

1. Risk of Lower Liquidity. Liquidity refers to the ability of market participants to buy and sell securities. Generally, the more orders that are available in a market, the greater the liquidity. Liquidity is important because with greater liquidity it is easier for investors to buy or sell securities, and as a result, investors are more likely to pay or receive a competitive price for securities purchased or sold. There may be lower liquidity in extended hours trading as compared to regular market hours. As a result, your order may only be partially executed, or not at all.
2. Risk of Higher Volatility. Volatility refers to the changes in price that securities undergo when trading. Generally, the higher the volatility of a security, the greater its price swings. There may be greater volatility in extended hours trading than in regular market hours. As a result, your order may only be partially executed, or not at all, or you may receive an inferior price in extended hours trading than you would during regular market hours.
3. Risk of Changing Prices. The prices of securities traded in extended hours trading may not reflect the prices either at the end of regular market hours, or upon the opening of the next

morning. As a result, you may receive an inferior price in extended hours trading than you would during regular market hours.

4. Risk of Unlinked Markets. Depending on the extended hours trading system or the time of day, the prices displayed on a particular extended hours system may not reflect the prices in other concurrently operating extended hours trading systems dealing in the same securities. Accordingly, you may receive an inferior price in one extended hours trading system than you would in another extended hours trading system.
5. Risk of News Announcements. Normally, issuers make news announcements that may affect the price of their securities after regular market hours. Similarly, important financial information is frequently announced outside of regular market hours. In extended hours trading, these announcements may occur during trading, and if combined with lower liquidity and higher volatility, may cause an exaggerated and unsustainable effect on the price of a security.
6. Risk of Wider Spreads. The spread refers to the difference in price between what you can buy a security for and what you can sell it for. Lower liquidity and higher volatility in extended hours trading may result in wider than normal spreads for a particular security.
7. Risk that Current Underlying Index Value or Intraday Indicative Value ("IIV") is Unavailable. For certain Derivative Securities Products, an updated underlying index value or IIV may not be calculated or publicly disseminated in extended trading hours. Since the underlying index value and IIV are not calculated or widely disseminated during the pre-market and post-market sessions, an investor who is unable to calculate implied values for certain Derivative Securities Products in those sessions may be at a disadvantage to market professionals.

FOR OUR ETF / ETN CLIENTS

Clients should consider the investment objectives, risks, and charges and expenses of the ETFs and ETNs carefully before investing. Each US listed ETF and ETN has filed a registration statement (including a prospectus) with the SEC which contains important information about the ETF or ETN as applicable. Before you invest in an ETF or ETN, you should obtain and read the prospectus in the registration statement and other documents the issuer has filed with the SEC (or other relevant international regulatory body) carefully for more complete information about the product. In the US, you may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov.

Alternatively, you may obtain a copy of the prospectus for each of the ETFs and ETNs mentioned in these materials from the issuer or by contacting your sales representative or by calling 800-544-7508. ETFs are redeemable only in creation unit size aggregations and may not be individually redeemed; are redeemable only through authorized participants; and are redeemable on an "in-kind" basis. The public trading price of a redeemable lot of the ETFs may be different from its net asset value. ETFs can trade at a discount or premium to the net asset value. Leveraged and inverse

ETFs have unique risks, including leverage, derivatives, complex investment strategies and compounding risk. Designed for intraday trading, they require active monitoring and management and are not suitable for all investors. For more information, SEC's Alert on Leveraged and Inverse ETFs at http://sec.gov/investor/pubs/leveragedetfs-alert.htm. There is always a fundamental risk of declining stock prices, which can cause losses to your investment.

RESTRICTED AND CONTROL SECURITIES AND REGISTERED OFFERRINGS

Restricted securities are securities acquired in unregistered, private sales from the issuing company or from an affiliate of the issuer. Investors typically receive restricted securities through private placement offerings, Regulation D offerings, employee stock benefit plans, as compensation for professional services, or in exchange for providing "seed money" or start-up capital to the company. SEC Rule 144(a)(3) identifies what sales produce restricted securities.

Control securities are those held by an affiliate of the issuing company. An affiliate is a person, such as an executive officer, a director or large shareholder, in a relationship of control with the issuer. Control means the power to direct the management and policies of the company in question, whether through the ownership of voting securities, by contract, or otherwise. If you buy securities from a controlling person or "affiliate," you acquire restricted securities, even if they were not restricted in the affiliate's hands.

Sales of securities that are offered pursuant to an effective registration statement filed with the Securities and Exchange Commission must be accompanied by or preceded by a registration statement. Under certain conditions, restricted and control securities may be sold to the public.

Unless we expressly agree otherwise in advance of any transaction, it is our expectation that you will not send VAL orders to sell securities that are restricted or control securities or offered pursuant to an effective registration statement such that VAL would be required to deliver a prospectus to its counterparties.

In the event that we expressly agree to accept such orders, we will first determine whether we can appropriately handle the transaction in compliance with relevant laws and regulations. We will likely contact the issuer, their counsel and the transfer agent and will typically ask you the following types of questions:

- How long have you held the securities?
- How did you acquire the securities?
- Have you recently sold or do you intend to sell additional securities of the same class?
- Have you solicited or made arrangements for the solicitation of buyers of your securities or made payments to any other persons in connection with the transactions?

Because securities that are, or at one time were, restricted frequently bear a legend on the certificates that serves to restrict their transfer, clearance and settlement such transactions may be delayed beyond the normal settlement cycle. Under these circumstances, orders may be required to be marked short. Proper marking of such orders will allow for additional time beyond the normal settlement cycle to make delivery, while improperly marked orders put you at risk of being bought-in.

As with all transactions, VAL reserves the right to refuse to accept orders and may cancel trades to the extent we are able if we suspect the transaction involves the types described above and you have not cooperated in informing VAL of the nature of the transactions in advance and provided appropriate information to help us ensure we can handle the transactions in compliance with applicable regulations.

CANADIAN CLIENTS

Pursuant to the international dealer registration exemption in NI 31-103, VAL is informing you of the following:

1. It is not registered as a dealer in any of the following provinces: Québec, Ontario, British Columbia or Alberta. In each of these provinces, the Firm is trading with you, its client, in reliance upon an exemption from the dealer registration requirement under NI 31-103.
2. The Firm's principal place of business is located in New York, U.S.A.
3. There may be difficulty enforcing legal rights against the Firm because all or substantially all of its assets may be situated outside of Canada.
4. The name and address of its agent for service of process in the each of the listed provinces is listed below:

<u>Alberta</u>

Borden Ladner Gervais LLP
Centennial Place, East Tower, 1900, 520 - 3rd Avenue SW
Calgary, Alberta T2P 0R3
Attention: Jon Doll

<u>British Columbia</u>

Borden Ladner Gervais LLP
1200 Waterfront Centre, 200 Burrard Street
P.O. Box 48600
Vancouver, B.C. V7X 1T2
Attention: Shantela Blaeser

<u>Ontario</u>

Borden Ladner Gervais LLP
Bay Adelaide Centre, East Tower
22 Adelaide St W
Toronto, ON Canada M5H 4E3
Attention: Matthew Williams

<u>Quebec</u>

Borden Ladner Gervais LLP
1000 de La Gauchetière Street West, Suite 900, Montreal, Quebec H3B 5H4
Attention: Anick Morin

COST BASIS TAX REPORTING

Section 403 of the Energy Improvement and Extension Act of 2008 amended the Internal Revenue Code to mandate that every broker required to file a return with the IRS reporting gross proceeds from the sale of a covered security additionally report a customer's adjusted basis in the security and whether any gain or loss on the sale is classified as short-term or long-term.

A security is a "covered security" and therefore subject to the cost basis reporting requirements if it is acquired after its corresponding applicable date. For stock in a corporation, the applicable date is January 1, 2011. Brokers therefore are not required to report basis for any securities acquired before 2011. VAL utilizes the FIFO (First in First Out) methodology for calculating adjusted cost basis. If you wish to elect a different methodology, please contact your sales representative.

Business Continuity Summary Disclosure Statement

Virtu Americas LLC ("VAL") has developed a Business Continuity Plan ("BCP") detailing how we plan to respond to events that significantly disrupt our business. Since the timing and impact of disasters and disruptions are unpredictable, we will have to be flexible in responding to actual events as they occur.

VAL will make best efforts to notify clients of a switch over to the business continuity site as soon as possible in the event of an interruption. Such notice will likely be provided on our public website (http://www.virtu.com) and through email broadcasts.

Our Business Continuity Plan – Our business continuity plan is designed to permit VAL to resume operations as quickly as possible, given the scope and severity of a business disruption. Our business continuity plan addresses: data backup and recovery; mission critical systems; financial and operational assessments; alternative communications with clients, employees, and regulators; alternate physical location of employees; critical supplier, contractor, bank and counter-party impact; regulatory reporting; and assuring our clients prompt access to their funds and securities if we are unable to continue our business.

Varying Disruptions – Significant business disruptions can vary in their scope. A disruption might only affect VAL, a building housing VAL, a business district in which VAL is located, a city in which VAL is located or an entire region. Within each of these areas, the severity of the disruption can also vary from minimal to severe. In a disruption affecting only VAL or a building housing VAL, we will transfer our operations to a local site when needed and expect to recover and resume business within 4 hours for mission critical clearing systems and 24 hours for the majority of services. In a disruption affecting our business district, city, or region, we will transfer our operations to a site outside of the affected area, and recover and resume business with a goal of 24 hours. In either situation, we plan to continue in business and notify regarding how to contact us via telephone, email or through our website. If the significant business disruption is so severe that it prevents us from remaining in business, we will ensure that our clients' have prompt access to their funds and securities.

Contacting Us – If you have further questions regarding our business continuity plans please contact your sales representative or call VAL at 800.544.7508. While VAL has employed significant steps to develop, implement and maintain reasonable business continuity plans, VAL cannot guarantee our systems will absolutely recover after a significant business disruption. VAL will continually monitor and assess our plans and any material changes or updates will be available on our website or upon request.

This Summary is intended to satisfy the disclosure requirements set forth in FINRA Rule 4370.