Dear Valued Customer,

Please review the information provided in this package. It contains important information regarding your account(s) with Jefferies LLC ("Jefferies").

FINRA Public Disclosure Program

Pursuant to Financial Industry Regulatory Authority (FINRA) Rule 2267, please be advised of the following:

- As part of its Public Disclosure Program, FINRA offers the following tollfree telephone listing which affords you the opportunity to check for any disciplinary history of its members (brokerage firms which belong to the FINRA) and their associated persons (stockbrokers and traders employed by FINRA members): 1 800.289.9999.
- FINRA maintains the following website which provides a wealth of information including recent developments such as rule changes and press releases, how to resolve disputes and disclosure of recent disciplinary matters: www.FINRA.org.
- 3. An investor brochure is available that includes information describing the FINRA's Public Disclosure Program. Availability of the brochure will be made through either the "800" toll free number or the FINRA website.

Securities Investor Protection Corporation (SIPC)

To obtain information on SIPC, including the SIPC Brochure, go to www.SIPC.org or contact SIPC directly at 202.371.8300.

Compliance with Applicable Laws

You represent that you will, and undertake to, comply with and fulfill all of your obligations under applicable laws and regulations and will not breach such applicable laws or regulations. "Applicable Law" means any law, rule, regulation, order, ruling, judicial interpretation or directive (whether or not having the force of law) referred to in these disclosures and/or which is applicable to you, us or an Affiliate or any of our agent service providers, any of our or their activities, any transaction, and/or any of the services provided.

Privacy Policy Notice

Your Privacy is Important to Us

At Jefferies, we understand that our relationship with you is based on trust. This is reflected in everything we do; including the way we handle our clients' nonpublic personal information. The following disclosure explains what personal information we collect, what we do with that information and steps we have put in place to protect the nonpublic personal information you have entrusted to us.

Information We Collect

From time to time, we gain access to your personal information through:

- · Our interaction with you on the telephone, in person or through e-mail.
- Account Applications or other forms you complete.
- · Transactions in your account for or on your behalf.
- $\bullet \quad \hbox{Our website or the websites of our affiliated companies}.\\$
- Trading tools or other information tools we may make available to you.
- Third parties with whom we deal, such as consumer-reporting agencies, to verify information we receive from you and your creditworthiness.

Information We Disclose

It is Jefferies' policy not to disclose any of your nonpublic personal information to third parties without your consent, unless those parties are providing services or support to us and have agreed to keep your nonpublic information confidential.

Examples of these parties include the company we use to prepare and mail your account statements or to perform our internal auditing. Even if you cease to transact business with Jefferies, we will continue to apply the same protections to your nonpublic personal information as we did when you were an active client.

Client Information

Maintaining client confidentiality is an important part of how Jefferies conducts business. Jefferies has internal protocols, controls, and visibility permissioning rules based on account coverage role designed to safeguard the use of client information.

In addition to providing client coverage to you, Jefferies may use client information for several purposes including risk management, supervision, legal and regulatory matters. Access to such information is limited to specific employees on a "need to know" basis including client coverage teams, support groups, and management. Jefferies may also use or disclose internally created and evolving analytics based on aggregated and/or anonymized information in connection with offering other products and services.

The Jefferies Family of Companies

Jefferies is at the center of a family of related companies which are owned in whole or in part by Jefferies Financial Group Inc. These affiliated companies allow us to provide greater value to our customers, employees and shareholders. In the course of our business, employees or representatives of various Jefferies affiliates will have access to your nonpublic personal information. They have agreed to hold your information confidential and to comply with the privacy policy established by Jefferies.

Protecting Your Information

Jefferies protects your nonpublic information from access by third parties by maintaining physical, electronic and procedural safeguards. We limit access to your information to those employees who are trained in the proper handling of nonpublic client information and who need access to the information to perform their job functions.

It is the policy of Jefferies' businesses that collect U.S. Social Security numbers in the course of business to:

- · Protect the confidentiality of such Social Security numbers;
- · Prohibit the unlawful disclosure of such Social Security numbers; and
- · Limit access to such Social Security numbers.

For more information, to find out what personal information of yours we have collected, or to update your personal information, please contact your Account Executive.

Identity Theft Prevention Program

Jefferies Financial Group Inc. and its operating subsidiaries have implemented an Identity Theft Prevention Program ("Program") to protect its customers and their accounts from identity theft. Jefferies' Program is in compliance with the Federal Trade Commission's Identity Theft Red Flag Rules and Address Discrepancy Rules, which implement Sections 114 and 315 of the Fair and Accurate Credit Transactions Act of 2003 (the "FACT Act"), as codified in amendments to the Fair Credit Reporting Act of 1970, as well as SEC Regulation S-ID and CFTC Rule 17 CFR Part 162 Subpart C.

The Program is designed to allow Jefferies to identify, detect and respond to "red flags", or patterns, practices or specific activities that could indicate a possible risk of identity theft related to new or existing cash and margin accounts.

Further information regarding the Identity Theft Red Flag and Address Discrepancy Rules, is available from the FTC's web site at: https://www.sec.gov/tm/infosmallbussecgidentity-theft-red-flag-secg.

Business Continuity Disclosure

Important Notice in the case of Business Disruptions

Jefferies has established an enterprise-wide business continuity planning program to assess and manage the effects of a significant emergency disruption on its business operations in an effort to provide continuity of critical business functions. Such critical business functions include entering of client orders, completing securities transactions and providing clients' access to their cash and securities.

Consistent with regulatory requirements, Jefferies provides this disclosure statement to its clients summarizing the program. Due to the proprietary nature of some information, detailed plans for the program cannot be publicly disseminated.

The business continuity planning program begins with each business unit's assessment of its business continuity risk. This process encompasses all aspects of Jefferies key business functions. The assessment defines, for each business process, its criticality and a method for recovery. Individual business unit plans are reviewed and updated annually, or as significant business changes occur. The plan is designed to describe the actions Jefferies will take in the event of disruptions of varying scope. This includes incidents involving a single office building where any of Jefferies' offices are located, city-wide or regional events of disruption. It also includes a plan for people loss, where staff members may be unable to work at their normal business location.

Jefferies leverages its regional and out- of-region office locations to replicate critical data and system applications including alternative manual procedures identified

to enable continued functionality. The plan has been reasonably designed to allow Jefferies to continue its business, likely at a reduced capacity, and safeguard the interests of our customers. The Firm expects to be able to meet its client obligations within the day.

While Jefferies' business continuity plan has been reasonably designed to allow the Firm to operate during emergency incidents of varying scope, such potential incidents are unpredictable. The Firm has no control over certain infrastructure such as utilities, communication networks, transportation, and third-party providers upon which Jefferies may rely during an emergency.

Because of the unpredictable and unknown nature of a potential future business disruption, Jefferies cannot guarantee that its systems will always be available or able to recover in the event of a serious emergency disruption. Jefferies' business continuity plan is subject to change without notice. If the plan is modified, an updated version will be posted on the Firm's website (www.jefferies.com) and will be made available to customers upon request. Nothing contained in this document amends or changes any of the terms set forth in any agreements between Jefferies and any of its customers.

SEC Rule 15c3-5 Market Access

Market Access Controls

SEC Rule 15c3-5 requires broker-dealers with access to exchanges or Alternative Trading Systems ("ATS") to establish, document and maintain a system of risk management controls and supervisory procedures that are reasonably designed to systematically limit financial exposure of the broker dealer. Jefferies has developed systems which may pause or reject certain orders that exceed certain pre-determined risk parameters. Jefferies may intervene and review paused orders so that we may manage the overall risk and financial exposure of the Firm.

Large Trader Reporting

SEC Rule 13h-1 Large Trader Reporting requires a person/entity that meets the definition of a Large Trader to: (1) Identify itself to the SEC via filing a form 13H (2) Obtain a Large Trader ID ("LTID") from the SEC, and (3) Provide their LTID to all executing and clearing registered broker-dealers through which they transact in NMS securities and identify each account to which it applies. A Large Trader is defined as a person/entity whose trades in NMS equity securities and/or Listed Options for their own account or any account which they exercise discretion over that equals or exceeds either 2 million shares or \$20 million during any calendar day, or 20 million shares or \$200 million during any calendar month. All LTIDs can be submitted to: AmericasAccountOnboardingServices@jefferies.com.

Order Handling

Regulation Best Execution requires broker dealers to use reasonable diligence to ascertain the best market for the 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. In determining whether to make any order routing adjustments, Jefferies considers material differences in execution quality, including price improvement opportunities; material differences in price disimprovement (situations in which a client receives a worse price at execution than the best quotes prevailing in the market at the time the order arrived at the market or market maker); the likelihood of execution of limit orders; other material differences in execution quality, such as the speed of execution, size of execution, and transaction cost; client needs and expectations; and the existence of internalization or payment for order flow arrangements (which must not interfere with the best execution obligation).

When a "held" order is received by Jefferies, it will be handled within the terms specified by you or your fiduciary and with the objective of achieving the best overall execution possible. Achieving best execution may involve Jefferies acting in the capacity of agent, riskless principal, principal, or in the event of multiple executions, more than one capacity. When Jefferies acts in more than one capacity, the confirmation will reflect that fact as well. From time to time, executions for "not held" orders may be split with other customers or Jefferies. Under Rule 5320, when a "working" or "not held" order is received by Jefferies from an institutional account or of a size in excess of 10,000 shares and \$100,000 dollars, Jefferies may in a principal capacity, trade along with or ahead of such orders without the consent of the customer. Under the rule, a customer may "opt in" to protections afforded under this rule by notifying Jefferies in writing. Once received, Jefferies will not trade along with such orders from that customer without express consent on an order-by-order basis.

An order subject to irregular settlement terms (shortened or extended settlement) may cause you to be a holder of record regarding a corporate action or distribution on a record date on which you would not have been a holder of record had the securities settled subject to regular settlement terms. Where Jefferies, LLC has agreed to settle securities on an irregular settlement basis, Jefferies, LLC reserves the right to reclaim any economic benefit accruing to you in any corporate action (e.g., stock split, merger consideration) and any distribution (whether in cash or in kind and whether consisting of shares, rights or other property) that Jefferies, LLC would have been entitled to receive by being the holder of record on the relevant record date had the shares settled according to regular settlement terms. Jefferies, LLC reserves the right to bill you for any such economic benefit.

All orders received by the Electronic Trading Services ("ETS") Desk are handled on a "not held" basis, meaning Jefferies is not held to the size and price of transactions reported to the consolidated tape, or to published bids and offers. We will execute orders received according to the instructions specified when the order was placed, with the objective of achieving the best overall execution possible. Jefferies algorithms, with customer consent, may provide automated capital commitment to eligible orders in certain instances. Please speak to your Account Executive or to the ETS Desk to determine the best algorithm and trading strategy for your order flow. Orders directed to the ETS Desk will also be handled on a best efforts basis, unless instructed otherwise

by our client. Please speak to your Account Executive or the ETS Desk to discuss the differences between best efforts and guaranteed executions. When an algorithmic order is received by Jefferies, it will be handled within the parameters of the algorithm selected.

All orders received by Jefferies via FIX protocol must be marked as "held", meaning that Jefferies will execute your order at the earliest possible time, or "not held", meaning that Jefferies has time and price discretion over the order on the day it is entered. Orders that are received without a "held" or "not held" designation will be marked and executed as "not held" by Jefferies.

If we effect an execution for you in a security for which Jefferies is a registered market maker, we will identify that fact on your confirmation. Orders executed by Jefferies on a "net" basis may only apply to institutional clients. If so instructed, we will work your order on a "net" basis. Pursuant to Financial Industry Regulatory Authority ("FINRA") Rule 2124, a "net" transaction means "a principal transaction in which a broker-dealer, after having received an order to buy (sell) an equity security, purchases (sells) the equity security at one price (from (to) another broker-dealer or another customer) and then sells to (buys from) the customer at a different price." By this we mean, if we find both a buyer and seller, we may effect two transactions wherein Jefferies would sell to the buyer at one price and buy from the seller at another price, reporting two transactions to the "tape." Confirmations from such transactions would indicate a "net" price inclusive of any markup/markdown. Also, if you desire, we can effect your transactions on a principal basis with a "commission equivalent." In such cases the confirmation will note that we acted in such a capacity and will reflect that rate and amount of "commission equivalent" charged.

Jefferies will only execute a transaction on a "net" basis at the request of the customer. If you intend to trade on a net basis, you must inform your Account Executive at the time of order entry.

When multiple executions are employed consistent with a client's "work – not held" specification, confirmations may reflect the price as an average price. In such cases, the confirmation will state that the price was an "average price."

We calculate average prices by multiplying the number of shares executed at each price, adding all sums and dividing by the aggregate number of shares executed. Any client may request detail on the individual executions comprising an average price transaction. All remuneration received by Jefferies in connection with such transactions will be reflected in total.

Indications of interest ("IOI") are expressions of trading interest that contain one or more of the following elements: security name, side of the market, size, and/or price. When Jefferies identifies its IOI as "natural", Jefferies is representing that (i) it is committed to the price and quantity of the IOI if contacted within the appropriate time; and (ii) the IOI represents either customer interest, interest for the Firm's own account on a principal basis or as a result of facilitation, related hedging activity or a combination of such. Although you may act upon an IOI, it does not guarantee execution. The definitions of natural and non-natural may be inconsistent across the industry and third-party service providers. Jefferies may also disseminate IOIs through a service provider, and in doing so, it will disseminate IOIs in a manner consistent with the service provider's guidelines.

Guaranteed Benchmark Orders

Jefferies may receive orders from clients where both parties contractually agree to transact at a guaranteed price based on a particular benchmark (e.g., the official closing price or the VWAP of such securities over a specified time period).

Regulation NMS

Rule 611 of Regulation NMS, the "Order Protection Rule", requires trading centers to establish, maintain and enforce written policies and procedures reasonably designed to prevent the execution of trades at prices which are inferior to "protected quotes", subject to certain exceptions.

For certain block facilitations where Jefferies simultaneously routes ISOs to execute against a protected quotation with a superior price, with your consent we may keep better-priced executions to help offset our risk. Unless otherwise agreed Jefferies will pass through to your account all ISO fills priced better than the agreed upon trade price and reduce the quantity of such amount on your facilitation amount.

Order Marking

Rule 200 of SEC Regulation SHO requires that every sell order be marked as "long," "short" or "short exempt." It is the client's responsibility to properly mark sell orders sent to Jefferies to comply with Rule 200. In accordance with Reg SHO, sell orders may only be marked "long" if the seller is deemed to own the security being sold and can be reasonably expected to deliver that security no later than the settlement date of the transaction.

Accessing Liquidity

When executing orders on your behalf, Jefferies may utilize our Smart Order Router ("SOR") to access liquidity in both lit and non-displayed venues.

Clients can specify the venues that they prefer or want to exclude. All orders placed into a Jefferies algorithm trade independently of one another and do not interact or have impact on orders place in other Jefferies algorithms. Jefferies internal desks also utilize these algorithms.

Jefferies additionally may access liquidity through a "conditional order negotiation", which is a process for negotiating trades on a participating ATS based on specified parameters. If a conditional order sent to an ATS is potentially matched with a contra side order, Jefferies will receive a "conditional invitation", asking Jefferies to confirm the parameters of the trade. Jefferies will then have the ability to accept the conditional terms of the trade by sending a "firm up" order to the ATS, which will be handled as if it was a standard order. If you do not wish for Jefferies to send conditional negotiation messages on your behalf, please contact your Account Executive.

Stop Orders

While stop orders may be a useful tool for investors who are unable to regularly monitor the price of their positions, stop orders are not without potential risks.

Stop prices are not guaranteed execution prices. A "stop order" becomes a "market order" when the "stop price" is reached and firms are required to execute a market order fully and promptly at the current market price. The triggering event for stop orders sent to Jefferies is the national best bid reaching the stop order price for sell orders, and the national best offer reaching the stop order price for buy orders. Therefore, the price at which a stop order ultimately is executed may be very different from the investor's "stop price." Accordingly, while a customer may receive a prompt execution of a stop order that becomes a market order, during volatile market conditions, the execution may be at a significantly different price from the stop price if the market is moving rapidly.

Stop orders may be triggered by a short-lived, dramatic price change. Customers should be informed that, during periods of volatile market conditions, the price of a stock can move significantly in a short period of time and trigger an execution of a stop order (and the stock may later resume trading at its prior price level).

Investors should understand that if their stop order is triggered under these circumstances, they may sell at an undesirable price even though the price of the stock may stabilize during the same trading day.

Sell stop orders may exacerbate price declines during times of extreme volatility. The activation of sell stop orders may add downward price pressure on a security. If triggered during a precipitous price decline, a sell stop order also is more likely to result in an execution well below the stop price.

Placing a "limit price" on a stop order may help manage some of these risks. A stop order with a "limit price" (a "stop limit" order) becomes a "limit order" when the stock reaches the "stop price." A "limit order" is an order to buy or sell a security for an amount no worse than a specific price (i.e., the "limit price"). By using a stop limit order instead of a regular stop order, a customer will receive additional certainty with respect to the price the customer receives for the stock.

However, investors also should be aware that, because brokers cannot sell for a price that is lower (or buy for a price that is higher) than the limit price selected, there is the possibility that the order will not be executed at all.

Customers should be encouraged to use limit orders in cases where they prioritize achieving a desired target price more than receiving an immediate execution irrespective of price.

Volatile Market Conditions

The following information is to enhance your knowledge and understanding of issues during volatile market conditions.

Delavs

Extreme market conditions impacting the trading of securities (e.g., a shortage of liquidity and divergent prices during periods of significant news ratings changes, interest rate movements or other events creating substantive impact to the market) may cause delays in execution and executions at prices significantly away from the market price quoted or displayed at the time an order was entered. In extreme market conditions, Jefferies may ask you to route your order to other broker dealers if we are unable to process the order. Also, in extreme market conditions, Jefferies may take orders directed to algorithms of the Firm and instead execute the orders manually by internal trading staff, thereby potentially causing delays in execution. At no point is the firm relieved of its best execution obligations.

Types of Orders

Jefferies is required to execute held market orders fully and promptly without regard to price. While a customer may receive a prompt execution of a market order, the execution may be at a price significantly different from the current quoted price for that security. Limit orders will be executed only at the specified limit price or better. While the customer receives price protection, there is the possibility that the order will not be executed.

Access

Customers may suffer market losses during periods of volatility in the price and volume of a particular security when systems problems result in the inability to place buy or sell orders.

Market Buy Orders in IPO Stocks

FINRA Rule 5131(d)(4) prohibits a member from accepting a market order—whether from a customer of the firm, a customer of another broker-dealer or another broker-dealer—to purchase shares of a new issue in the secondary market prior to the commencement of trading of such shares in the secondary market. This prohibition extends to the acceptance of buy stop orders prior to the commencement of trading in the new issue in the secondary market. However, priced orders, such as limit orders and stop-limit orders, are not subject to the prohibition.

FINRA Rule 5270 - (Prohibition on Front-running of Block Transactions)

Under FINRA Rule 5270, Jefferies LLC is generally prohibited from trading for its own account while in possession of material, non-public market information ("MNPI") concerning an imminent customer block order transaction or providing such information to other customers for trading purposes prior to the time information concerning the block transaction has been made publicly available or due to the passage of time, the order has become stale or obsolete. Rule 5270 does not preclude transactions which Jefferies LLC can demonstrate are unrelated to the material, non-public market information received in connection with the customer order.

These types of transactions may include:

- transactions where the member has information barriers established to prevent internal disclosure of such information;
- · transactions to correct bona fide errors:
- · transactions to offset odd-lot orders: or
- transactions to purchase or sell individual or related securities or derivatives to unwind a facilitation position, or to hedge or pre-hedge the Firm's risk in preparing for and executing block orders.

The carve outs to Rule 5270 cited above could potentially impact the pricing of your block order/execution; however, Jefferies LLC will use reasonable efforts to minimize any such impact and provide best execution for our clients.

You may also choose to instruct the Firm and its affiliates not to trade for their own accounts ahead of, or alongside, your block order by notifying your account representative.

COD Orders

By submitting orders to Your Broker or for Your Account whereby payment for securities purchased or delivery of securities sold is to be made to or by your agent, you thereby agree:

- That you will furnish to Your Broker instructions with respect to the receipt or delivery
 of the securities involved in the transaction promptly upon receipt by you of each
 confirmation, or the relevant data as to each execution, relating to such order (even
 though such execution represents the purchase or sale of only a part of the order), and
- That in any event you will assure that such instructions are delivered to Your broker no later than: (a) the close of business on the second business day after the date of execution of a purchase order; or (b) the close of business on the first business day after the date of execution of a sale order.

Good 'til Cancel (GTC) Orders

A GTC order will remain open until it is executed or cancelled, whichever comes first. If an open institutional GTC order is not executed 60 days after it was entered, it will be cancelled by Jefferies.

Rule 203(b) of Regulation SHO (the "Locate Rule") requires that, prior to accepting an order to sell short an equity security, Jefferies borrows the security or enters into a bona-fide arrangement to borrow the security (a "pre-borrow"); or, Jefferies has reasonable grounds to believe that the security can be borrowed so that delivery will be made by settlement date (a "locate"). As locates provided by the Securities Finance Desk are valid only for the trade date on which they are given, Jefferies cannot accept GTC orders to sell short equity securities unless one of the exceptions detailed in Rule 203(b)(2) applies to the short sale order.

Client Orders in the Pre or Post Market

Jefferies may not accept an order from a client for execution in the pre-market session or post-market session without disclosing that extended hours trading involves material trading risks, including the possibility of lower liquidity, high volatility, changing prices, unlinked markets, an exaggerated effect from news announcements, wider spreads and any other relevant risk. The absence of an updated underlying index value or intraday indicative value is an additional trading risk in extended hours for Derivative Securities Products.

Material Trading Risks

- 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.
- 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 markets 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 versus what you would receive 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 versus what you would receive 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. These announcements may occur during extended hours 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 of Lack of Calculation or Dissemination of Underlying Index Value or Intraday Indicative Value ("IIV") 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.

Policy on Order Routing and Order Flow Payment Practices

The Securities and Exchange Commission ("SEC") Rule 607 requires that all broker dealers disclose their policies regarding the receipt of payment for order flow, the nature of order routing policies for orders subject to payment for order flow and the degree to which these orders can receive price improvement.

Jefferies routes orders to various exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs), and other market centers (including other Broker-Dealers) some of which provide Jefferies with payment for order flow. Certain market centers offer cash credits for orders that provide liquidity to their books and charge explicit fees for orders that extract liquidity from their books. Periodically, the amount of credits that Jefferies receives from one or more such market centers may exceed the amount that Jefferies is charged. Such payments would constitute payment for order flow.

Please be advised that for orders received by Jefferies, Jefferies receives order flow payments in varying amounts from U.S. option exchanges – market makers pursuant to the published marketing fee programs that have been adopted by the exchanges and approved by the SEC. Several option Exchanges have also adopted a "maker – taker" market structure, in which exchange members are charged for orders that take liquidity from the exchange and receive a rebate for orders that provide liquidity to the exchange. The charges imposed or rebates offered by these exchanges affect the total cost of execution.

The source and amount of any compensation received by JEFF in connection with any transaction for your account is available upon written request.

In accordance with Rule 605 and 606 under the Securities Exchange Act of 1934, please be advised that Jefferies discloses on a monthly and quarterly basis, respectively, its execution quality and order routing practices on its website: **www.jefferies.com**. Select Investor Relations, followed by SEC Filings and lastly SEC Disclosure Reports.

Rule 606(b)(3) requires Jefferies LLC to upon request, disclose the nature of any relationship it has with venues that it routes client orders; furnish clients with the venues to which individual not-held orders were sent for execution and provide a standardized set of execution quality metrics (rebates from trading venues, principal facilitation stats, Actionable IOI's, etc.) for the previous six months.

Client requests should be directed to their registered representative.

Rule 105 of Regulation M – Important Information for Persons Seeking Allocations of Public Offering Securities

SEC Rule 105 of Regulation M (17 C.F.R. §242.105) generally prohibits any person from purchasing in a public securities offering subject to the Rule if that person sold short the securities that are the subject of the offering within a specified period of time immediately preceding the pricing of such offering.

Following is a set of frequently asked questions intended to provide a general understanding of the Rule's scope and application, as well as three important exceptions to the general prohibition. For additional information on Rule 105, please see the SEC's adopting release, available at: https://www.sec.gov/files/rules/final/2007/34-56206.pdf.

1. What types of securities offerings are covered by Rule 105?

The Rule applies only to offerings that meet all of the following criteria:

- · The securities being offered and sold are equity securities;
- The offering is conducted on a firm-commitment basis;¹ and
- The offering is either (i) a SEC registered offering for cash or (ii) a Regulation A
 or E offering for cash.²

Offerings subject to the Rule are referred to herein as "Covered Offerings," and the securities that are the subject of a Covered Offering are referred to herein as "Subject Securities."

The SEC has stated that, in the case of a convertible securities offering (e.g., a convertible debt offering), the convertible note is the "Subject Security," whereas the underlying common stock or other underlying security is a "reference security" and not a "Subject Security."

- ¹ As a practical matter, most underwritten public offerings are conducted on a firm-commitment basis.
- ² Regulation A provides an exemption from registration under the Securities Act of 1933 ("Securities Act") allowing certain small businesses to publicly offer up to \$5 million of securities within any 12-month period. Regulation E provides an exemption from registration under the Securities Act for securities offerings by registered small business investment companies or investment companies that have elected to be regulated as business development companies pursuant to Section 54(a) of the Investment Company Act of 1940.
- 2. For Covered Offerings, what does the Rule prohibit?

The Rule generally prohibits a person from purchasing shares in a Covered Offering if the person effected any short sales of the Subject Securities during the Rule's "Restricted Period" (see Q&A No. 3, below). There are three exceptions to this general prohibition, which are further discussed in Q&A No. 4.

3. When does the Rule's "Restricted Period" begin and end?

The Rule's "Restricted Period" begins on the later of:

- · 5 business days prior to the pricing of the offering; or
- The initial filing of the registration statement (registered offerings) or a notification on Forms 1- A (Regulation A offerings) or 1-E (Regulation E offerings).
- · In each case, the Rule's "Restricted Periods" ends with the pricing of the offering.
- 4. What are the exceptions to the general prohibition?

There are three separate and distinct exceptions to the Rule's general prohibitions.

A person who sold the Subject Securities short during the Restricted Period for a Covered Offering may still purchase in that offering if it is able to claim one of these exceptions:

- · The bona fide purchase exception
- · The separate accounts exception
- · The investment company exception
- 5. What is the "bona fide" purchase exception?

A person who sold the Subject Securities short during the Rule's Restricted Period may still purchase in a Covered Offering if the person makes one or more "bona fide" purchase(s) of the security. To qualify for this exception, the Restricted Period short sales and the subsequent "bona fide" purchases must satisfy the following criteria:

- The purchase(s) must occur after the last Restricted Period short sale and be at least
 equivalent to the aggregate amount of the person's Restricted Period short sale(s).
- The purchase(s) must be reported transactions effected during regular trading hours and no later than the end of the regular trading session on the business day prior to the day of pricing.
- Any of the Restricted Period short sales that were reported transactions must have been effected prior to the last 30 minutes of the regular trading session on the business day prior to the day of pricing.
- The purchase(s) must be "bona fide" and not part of a plan or scheme to evade the Rule (e.g., the SEC has stated that a transaction that does not include the economic elements of risk associated with a purchase would not qualify as bona fide).
- 6. What is the "separate accounts" exception?

This exception provides that, in the case of a single, legal person (e.g., a fund) with separate trading units or accounts, one or more of such trading units or accounts may receive an allocation in a Covered Offering, even if other trading units or accounts sold the Subject Security short during the Rule's Restricted Period, provided that trading decisions with respect to the individual accounts /units are made separately and without coordination or cooperation between or among them. Please note that the SEC has provided specific guidance as to the nature of the procedures and information barriers different types of persons should have in place in order to claim this exception. Such determination will necessarily be very fact sensitive.

Persons seeking to rely upon this exception should consult with their in-house and/or outside securities counsel in order to assess their procedures and the ability to claim the exception with respect to one or more of their accounts, units or departments.

7. What is the investment company exception?

This exception allows a registered investment company, or any series of such an investment company, to purchase in a Covered Offering, even if a separate series of that same investment company, or an affiliated investment company (including a series of such affiliated investment company), sold the Subject Security short during the Rule's Restricted Period.

SEC Rule requires that CNS participants close out settlement date fails

Rule 204 requires that CNS participants such as Jefferies close out any failed settlement that exists on the settlement date for an equity security (the business day after trade date, or "T+1"). If the close-out does not take place at or before the opening of trading on T+2 (in the case of short sales) and T+4, respectively (in the case of long sales), Rule 204 imposes restrictions on Jefferies' ability to effect future short sales in that security. In addition, SEC Rule 10b-21, an anti-fraud provision designed to deter "naked" short selling targets any short seller that deceives a broker-dealer or other market participant about the seller's intention or ability to deliver securities sold short and who then fails to deliver on T+1. Jefferies has prepared this summary of the rule requirement for your convenience. It is not intended to be legal advice or to be conclusive. You should consult your own counsel to assess the impact of Rule 204 on you.

For more information regarding SEC Rule 204, please contact your Account Executive or go to Jefferies website **www.jefferies.com** under Customer Notices and Policies for a rule summary titled, "Rule 204 Customer Notice – CNS Participant close out of settlement date fails".

The adopted final release for Rule 204 may be found on the SEC's website at: https://www.sec.gov/investor/pubs/regsho.htm.

Low Priced, High Risk and Cannabis Equity Securities

In light of increased risks associated with transactions involving high risk, low-price and cannabis securities, Jefferies may not accept deposit, custody/safekeeping, trade execution or trade clearance/settlement of certain high risk, low-priced and cannabis securities. Securities that may fall within high-risk categories include OTCID, OTC Pink Limited Information, Expert Market and Grey Market securities; OTC securities designated Caveat Emptor; OTC securities with a high OTC Markets Risk Score; and, Cannabis Securities trading on unapproved exchanges. The "high risk" categories above are not exhaustive. Jefferies may, at its discretion, block or provide exceptions for transactions in low-priced, high risk and cannabis securities that fall outside the Firm's thresholds.

Trade Volume Advertisements

Equity trading volume executed by Jefferies is advertised on a post-trade basis via Bloomberg and other service providers. Jefferies adheres to the relevant guidelines issued by these service providers. These advertisements are non-directional, aggregated at the symbol level, and include client flows across various Jefferies business lines. Clients may opt out of having their executed order flow advertised. Upon client request, Jefferies may distribute client data to client vendors for the purpose of broker reviews, execution analysis and related services. Jefferies provides aggregated data relating to client activities to various industry ranking services.

Written Commentary

Written commentary prepared and distributed by Equity Sales and Trading staff at Jefferies is not a product of the Jefferies Research Department and is not subject to Research review. Written commentary is intended for institutional investors only and may not be forwarded without consent from Jefferies. Written commentary is provided solely for informational purposes and is not intended to serve as a basis for any investment decisions made by clients.

Sales of Restricted and Control Stock

Prior to placing an order to sell securities that have been issued pursuant to an exemption from registration ("restricted stock") or securities that are deemed control stock (stock that is acquired or owned by an affiliate or control person of the issuer), clients must notify their Jefferies client service representative or sales representative. Jefferies will conduct appropriate pre-trade due diligence to determine restrictions that may be applicable to the resale of such securities pursuant to Rule 144 of the Securities Act of 1933.

Jefferies may request information concerning the manner by which the shares were acquired, the amount of time the shares have been held, affiliate status (your relationship to the issuer), and other relevant information it deems necessary to confirm the status of the shares. Additionally, Jefferies will require copies of both a Sellers Letter and any physical share certificates appended with a restricted legend. If Jefferies is unable to complete its due diligence process, the Firm will not accept your order to sell restricted securities.

The manner of sale, including the amount of shares you may sell within the registration exemption provided by Rule 144, will depend upon the nature of the restriction(s) applicable to your shares and this may affect both the timing of execution and the price at which your order is executed.

If you fail to notify Jefferies of the restricted status of your shares prior to placing an order to sell such securities, Jefferies may be unable to provide you with a Broker's Representation Letter, which is generally required to settle resales of restricted securities. As a result, Jefferies may require you to cover any unapproved sale of restricted securities to avoid a settlement failure and any associated buy-in.

Option Orders 500 Contracts and Over – Executed Through Block Order Solicitation Mechanisms

Jefferies is required to provide to you the following disclosure regarding option orders of 500 contracts and over that may be executed using the various Exchange Solicitation Mechanisms:

When handling an order of 500 contracts or more on your behalf, Jefferies may solicit other parties to execute against your order and may thereafter execute your order using a block order Solicitation Mechanism. This functionality provides a single-price execution only, so that your entire order may receive a better price after being exposed to the Exchange's participants, but will not receive partial price improvement.

For further details on the operation of these Mechanisms, please refer to: International Securities Exchange ("ISE") Rule 716, which is available at **www.iseoptions.com** under "Regulation - Rules."

Chicago Board Options Exchange ("CBOE") Rule 6.74B, which is available at **www.cboe.com/legal**. This disclosure applies to all option Exchanges which employ a block order Solicitation Mechanism.

Trading Listed Options with Inter-Dealer Brokers and Third-Party Trading Desks

Protecting the confidentiality and security of customer information is an important part of how Jefferies LLC conducts its business. Jefferies LLC has controls in place which are designed to protect a customer's confidential information. When handling a customer order, Jefferies LLC may use the economic terms of the trade (but not the customer's identity) with one or more third parties (including interdealer brokers) in order to source liquidity, which is consistent with the Firm's best execution obligations.

Option Internalization

Jefferies LLC ("JEFF" of the "Firm") option low touch client orders can be "internalized" by the Firm. This is when the Firm may act as counterparty to the client order with principal trading interest. When JEFF internalizes an order, it remains obligated to provide best execution for the client order. The Firm may internalize client orders through a third-party broker-dealer platform, where client orders are, in sequence: (1) limited to interacting with JEFF principal orders; and (2) if not paired with JEFF principal interest, then eligible to interact with a broader pool of counterparty liquidity on the platform. Matched orders are then routed by the third-party broker-dealer to options exchanges where they are subject to price improvement auctions pursuant to the rules of such exchanges and are executed. If a client's order is not paired with JEFF or other counterparty interest on the third-party broker-dealer platform, the third-party broker-dealer will route the client order to option exchanges for execution.*

*Firm clients that **do not** want their orders to be "internalized", may opt out. In such instances, please reach out to your JEFF account executive.

Options: Tied Hedge

When handling an option order of 500 contracts or more on your behalf, Jefferies may buy or sell a hedging stock, security futures or futures position following receipt of the option order but prior to announcing the option order to the trading crowd. The option order may thereafter be executed using exchange tied hedge procedures. These procedures permit the option order and hedging position to be presented for execution as a net-priced package subject to certain requirements.

For further details on the operation of the procedures, please refer to NYSE Arca Rule 6.74, NYSE Amex Rule 934.3NY, CBOE Rule 6.74.10 which are available at www.nyse.com, www.cboe.com/legal and https://www.cboe.com/us/options/regulation/, respectively.

Professional Customer Designation for Listed Options

Per U.S. Option Exchange Rules, Jefferies is required to review customer activity on at least a quarterly basis to determine whether a customer is a "Professional Customer". The definition of a Professional Customer is any customer that averages more than 390 listed option orders per day during any month of a calendar quarter. Once a customer is deemed "Professional", the origin code must be recorded on the order ticket for the next calendar quarter. This notice is to inform you that Jefferies will mark your orders as Professional Customer if it is determined that the above criteria has been met. Furthermore, if you are deemed "Professional" from trading activity outside of Jefferies, please notify the Firm immediately, so Jefferies can make the appropriate origin code changes to the client account.

Actionable Identifier

OCC Rule 401 requires that an "Actionable Identifier" be included on all customer and firm securities options trades submitted to OCC for processing other than market maker trades. The OCC believes that having an Actionable Identifier on customer and firm trades will allow Clearing Members to timely identify trades transmitted as part of a CMTA arrangement as well as trades transmitted through the "give-up" process at the exchanges. Client's preferred Actionable Identifiers should be communicated to a Jefferies registered representative.

Option Position Limits

Client orders in listed and applicable OTC options are subject to OCC position and exercise limits. The OCC's website, **www.theocc.com**, contains current position and exercise limit information. Such limits are subject to frequent modification.

Allocation of Exercise Notices

Clients are assigned exercise notices on a manual random selection. The random selection method is automated. In the event that a manual assignment allocation must be performed due to a system failure, the manual allocation follows the same logic as the automated method. Upon client request, Jefferies will provide the Client with further information regarding the procedure used to assign exercise notices.

Allocation Procedures for Securities Subject to a Call Provision

Customers of Jefferies LLC ("Jefferies") may hold in their accounts securities that can be redeemed (called) either in full or partially prior to the stated maturity date, in accordance with the terms of the specific securities' indenture or otherwise in accordance with the terms of the issuer of the security.

When a partial call is announced, Jefferies will be notified of the details of the partial call by its depository, the Depository Trust & Clearing Corporation (DTCC).

Notice may also be provided to Jefferies by its relevant custodian or sub-custodian. The notice will include the quantity of securities that Jefferies and/or its customers are holding that are subject to the call.

When this information is received by Jefferies, it uses an impartial lottery and allocation process ("Allocation Process") to select the customer accounts from which the subject securities will be called.

Accounts that have a long position in the partially called security on the morning of the day the call is announced will be included in the Allocation Process.

Through the Allocation Process, each customer's holdings have an equal chance of being called or not being called. There is also a determination as to whether the partial call price is considered to be in-the-money (i.e., the call price is above market value) or out-of-the-money (i.e., the call price is below market value).

This determination is made on the day that the Allocation Process takes place and is accomplished by comparing the call price to the market value of the security in question, using the prior nights close or most recent price for the comparison.

If the partial call is in-the-money, Jefferies will exclude its own accounts and the accounts of associated persons, including employees (collectively, "Firm and Employee Accounts"), from the Allocation Process unless customer accounts are completely satisfied. If the call is out-of-the-money, then Firm and Employee Accounts will be included in the Allocation Process.

Customers should be aware that their accounts may be affected by the partial call by a percentage that will differ with the percentage that is announced by the issuer.

Further details about Jefferies Allocation Procedures will be made available upon request.

Off-Floor Market Making

All options exchanges prohibit "off-floor market making" by priority customers. Off-floor market making is generally defined as a regular and continuous practice of entering and maintaining orders to both buy and sell the same security (in the case of options, the same series) at the same time.

U.S. Treasury Securities Fails Charge Trading Practice

Jefferies has adopted the U.S. Treasury Securities Fails Charge Trading Practice published by the Treasury Market Practices Group ("TMPG") and the Securities Industry Financial Markets Association ("SIFMA"). Accordingly, all delivery versus payment or delivery versus transfer transactions that we have with you is subject to the US Treasury Securities Fails Charge Trading Practice published by TMPG and SIFMA at: https://www.sifma.org/resources/general/fails-charge-trading-practices/.

Treasury Market Practice Group ("TMPG") Guidelines for Handling Information

Jefferies LLC has been designated by the Federal Reserve Bank of New York as a primary dealer in U.S. Treasury securities. Jefferies adheres to the guidelines related to the TMPG handling practices. The guidelines include the establishment of information handling policies related to the appropriate use and handling of confidential information, disclosure, an internal control program and review and training. https://www.newyorkfed.org/tmpg.

For additional information please contact your Jefferies representative.

Jefferies is Registered with SEC and MSRB

We wish to inform you that Jefferies is registered as a broker dealer with both the SEC and the MSRB. Information about the duties of a dealer, as well as the procedures for filing a complaint, may be found on the MSRB's website by typing the following website into your internet browser: https://www.msrb.org/Rules-and-Interpretations/MSRB-Rules.

The general website for the MSRB is https://www.msrb.org/. If you have any questions, please contact your Jefferies account executive.

Anti-Money Laundering Policies and Customer Identification Program

The USA PATRIOT Act of 2001 was enacted in order to prevent the use of the U.S. financial system to facilitate terrorism and other criminal activity by imposing anti-money laundering requirements on brokerage firms.

Jefferies and its senior management are firmly committed to compliance with all applicable laws and regulations relating to combating money laundering activity. To this end, Jefferies has established a compliance program which includes: (1) internal policies, procedures and controls; (2) the designation of a compliance officer dedicated to

oversee its anti-money laundering efforts; (3) an ongoing employee training program; (4) provisions for an independent auditor to test the implementation of the Firm's program; and (5) risk based procedures for conducting ongoing customer due diligence, including understanding the nature and purpose of customer relationships and conducting ongoing monitoring to identify and report suspicious transactions and to maintain and update customer information.

As part of our compliance program, Jefferies is required to obtain, verify, and record information that identifies each individual or entity that opens an account. When you open an account, we will ask for your name, address, date of birth (for individuals), identification number, and other information that will allow us to identify you. We may also ask you to provide copies of identifying documents as necessary to enable the Firm to verify your identity. While we may be required to disclose this information pursuant to applicable laws, rules or regulations, it will otherwise be retained in confidence according to our Privacy Policy.

Tax Reporting Information

If you are subject to Internal Revenue Service (IRS) 1099 reporting requirements, you will be mailed a Consolidated Form 1099 and a Detailed Income Statement in February. In certain instances, your tax information will be mailed to you in March. Your Consolidated Form 1099 rather than your December Statement is the authoritative document for tax reporting purposes to the IRS.

Your Detailed Income Statement is a year-end summary that provides you with a complete breakdown of income, other distributions and investment activity in your account over the past tax year. Your Consolidated Form 1099 may not be identical to the Year to Date Dividends, Interest and Tax Activity Summary appearing on your December Statement for various reasons. In addition, sales transactions are reported to the IRS on a trade date basis (except for short sales that remained open and not closed at year end) through and including the last business day of the calendar year. Consequently, some trades reported to the IRS may not show as settled transactions on your December Statement.

For more information regarding differences between the December Statement and your Consolidated Form 1099 or for other tax reporting inquires please contact our Customer Reporting Department at: **201.761.7610**.

Unclaimed Property

Please be advised that your property may be transferred to the appropriate state if no activity occurs in your account within the time period specified by the applicable state law governing your account. In addition, your property may be transferred to the appropriate state if your account statement has been returned as undeliverable as required by such state.

Margin Risk Disclosure

The following information is to notify you of some basic facts about purchasing securities on margin and to alert you to the risks involved with trading securities in a margin account. Before trading in a margin account, you should carefully review your Customer Agreement (includes our Credit Interest Policy, Truth- In- Lending Statement and Margin Disclosure Statement).

If you have any questions, please call the Credit Manager at: 201.761.7783.

Risks of Borrowing on Margin

It is important that the risks involved in trading securities on margin are fully understood. Because it involves an extension of credit, it may not be appropriate for all investment objectives.

- You can lose more funds than you deposit in a margin account. A decline in the
 value of securities that are purchased on margin may require you to provide
 additional funds to avoid the forced sale of those securities or other securities in
 your account.
- Jefferies can force the sale of securities or other assets in your account(s).
 Jefferies can sell the securities in any of your accounts to cover a margin deficiency
 when the equity in your account falls below the margin maintenance requirements.
 The Federal Reserve Board establishes initial margin requirements and FINRA
 establishes the maintenance requirements; higher house maintenance requirements
 also may be established by Jefferies. You will also be responsible for any shortfall
 in the account after the sale.
- Jefferies can sell the securities in your account(s) without notice. Some investors
 mistakenly believe that a firm must contact them for a margin call to be valid and
 that the firm cannot liquidate securities in their accounts to meet the call unless the
 firm has contacted them first. Most firms will attempt to notify their customers of
 margin calls, but they are not required to do so. However, even if a firm has contacted
 a customer and provided a specific date by which the customer can meet a margin
 call, the firm can still take necessary steps to protect its financial interests, including
 immediately selling the securities without notice to the customer.
- Jefferies chooses which securities in your account(s) are liquidated or sold to meet a
 margin call. Because the securities are collateral for the margin loan, Jefferies has
 the right to decide which security to sell in order to protect its interests.

- Jefferies can increase its "house" maintenance margin requirements at any time and is not
 required to provide you with advance written notice. These changes in firm policy often take
 effect immediately and may result in the issuance of a maintenance margin call. Your failure
 to satisfy the call may cause Jefferies to liquidate or sell securities in your account(s).
- You are not entitled to an extension of time on a margin call. While an extension
 of time to meet margin requirements may be available to customers under certain
 conditions, a customer does not have a right to the extension.
- Voting Loss Jefferies may lend your shares in a margin account to other customers
 or broker-dealers. When shares are lent, voting rights may be lent along with the
 shares. If a corporate vote takes place while your shares are on loan, you may be
 unable to vote those shares. Additionally, while shares are lent, you may receive a
 substitute payment in the form of cash in-lieu of dividends. While this cash payment
 is in an amount identical to the qualified dividend, it is not a dividend for tax purposes
 and must be reflected on a year- end statement as ordinary income.

Authorized Traders' List

Jefferies requests that you do not send us a list of personnel who are authorized to place orders. Jefferies defers to your internal controls to ensure that personnel who contact us to place orders are properly authorized to enter into the transactions they request. Jefferies is under no duty of inquiry or verification regarding the identity or capacity of any person submitting customer offers and/or customer orders that appear to Jefferies to have been submitted on customer's behalf, and any such person will be viewed as having the authority to bind customer. Where a list of authorized traders is shared with Jefferies, you acknowledge that Jefferies will not be liable for any loss, liability or cost whatsoever arising as a result of any unauthorized customer orders submitted on customer's behalf.

Electronic Access Disclosure

- Jefferies makes available various methods for electronically communicating trading data and market data to and from clients ("Systems"), some of which involve use of third-party software, online portals, API interfaces, transmission of data over the Internet or other software or systems ("Third Party Services"). Jefferies has no control over whether any Third-Party Service performs correctly or will remain available, or whether transmissions through any Third-Party Service or the Internet will be interrupted or delayed. Failure of any Third-Party System could result in Jefferies' inability to receive your order, cancellation request, or other communication, or your inability to receive market data, any trade confirmation, or other data. The risk of using any Third-Party Service lies entirely with you. It is your responsibility to inform us if you believe there has been a Systems failure of any kind, or if you believe any transmission you attempt to send us has not been properly received.
- Your use of a Third-Party Service may require that you enter into an agreement directly with the provider of such Third-Party Service (the "Third Party Provider"), and each Third-Party Provider may require that you pay fees for using its Systems or Third-Party Services. If you fail to pay a Third-Party Provider, you agree that we may bill you for those charges or debit any of your accounts under our control and pay those amounts to the applicable Third-Party Provider, or we may suspend your access to such Third-Party Provider's Third-Party Service. You agree to remain in good standing with each Third-Party Provider, provide us with evidence of your agreement with the Third-Party Provider upon request, and provide prompt notice of any termination or suspension of your relationship with a Third-Party Provider. In the event that a Third-Party Provider notifies us that you are not in compliance with an agreement with such Third-Party Provider, we may suspend or terminate your access to the applicable Third-Party Service, and we will use reasonable efforts to notify you of such suspension or termination. If our arrangement with a Third-Party Provider terminates, we may no longer be able to provide you with access to the applicable Third-Party Service.
- Electronic access to Systems is provided to you solely for your internal business purposes for the purposes of trading activity with us, and we reserve the right to suspend, restrict, modify, or terminate your access to any Systems at any time. You agree not to market, redistribute, or otherwise disseminate any data provided through any Systems, access to any Systems to any third party, or any data or information that is an output of calculations performed by you from such data or access ("Derivative Data"), in each case, without our express prior written consent. You are responsible for any actions taken by persons using usernames, passwords, or access methods that we provide to you ("Access Methods"), whether actions taken or any person given access to Access Methods were authorized by you or not, and you are responsible for training, supervising, and applying appropriate controls over any person who uses your Access Methods.
- In the event that we grant you consent to market, redistribute, or otherwise disseminate any Derivative Data, you are solely responsible for such Derivative Data, including without limitation compliance with any applicable law or regulation.
- Any information or data that is provided to you via any System is for informational purposes, as an aid for an investor in making the investor's own informed judgments and is not an offer or buy or sell any securities of any issuer. You agree to use your own independent judgment in selecting Systems, Third Party Services, and Third-Party Providers, and in making any determination to buy, sell, or otherwise transact in any security.
- WE PROVIDE ALL ELECTRONIC TRADING SERVICES ON AN "AS IS" AND "AS AVAILABLE" BASIS WITHOUT WARRANTIES OF ANY KIND. WE EXPRESSLY DISCLAIM ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, AND WE MAKE NO WARRANTIES THAT ACCESS TO ANY SYSTEMS WILL BE UNINTERRUPTED OR ERROR-FREE OR THAT ANY ASSOCIATED WEBSITES

- OR SERVERS WILL BE FREE OF ANY VIRUS OR OTHER HARMFUL COMPONENT JEFFERIES WILL HAVE NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR ANY DAMAGE, EXPENSE, OR LOSS INCURRED, DIRECTLY OR INDIRECTLY, FROM YOUR USE OR INABILITY TO USE ANY SYSTEM. NEITHER JEFFERIES NOR ANY THIRD-PARTY PROVIDERS PROVIDE ANY GUARANTEES OR MAKE ANY REPRESENTATIONS ABOUT THE TIMELINESS OR COMPLETENESS OF THE SYSTEMS OR ANY QUOTATIONS OR DATA FURNISHED THROUGH ANY SYSTEMS. IN NO EVENT SHALL JEFFERIES HAVE ANY LIABILITY FOR DAMAGES ARISING OUT OF YOUR USE OR INABILITY TO USE ANY SYSTEMS, WHETHER PUNITIVE, INCIDENTAL, SPECIAL, CONSEQUENTIAL, MULTIPLE, OR OTHER INDIRECT DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS, LOST REVENUES, TRADING LOSSES OR LOSS OF OPPORTUNITIES, OR WHETHER SUCH DAMAGES ARE DIRECT, REGARDLESS OF THE FORM OF ACTION (INCLUDING WITHOUT LIMITATION TORT OR NEGLIGENCE), WHETHER OR NOT WE COULD HAVE REASONABLY ANTICIPATED THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING LIMITATIONS AND EXCULPATIONS OF DAMAGES SHALL APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW. You agree not to rely solely on information provided through the Systems for trading purposes but will independently verify market prices through customary trading channels. The terms set forth in this bullet survive any termination or expiration of your access to any System.
- Regulatory authorities and Third-Party Providers require that you provide access to your systems in the event of an audit. You agree to permit Jefferies, any Third-Party Provider, and any regulatory authority to audit your use of the Systems and data contained in the Systems, and to provide reasonable access to the information and systems necessary for Jefferies or any Third-Party Provider to conduct such an audit. You agree to indemnify and hold us harmless from and against any demands, claims or suits by any third party (other than claims that use of the Systems infringes upon the proprietary rights of a third party) arising directly or indirectly out of or related to (a) your use of, reliance upon, or inability to use any System or any Third Party Service, or any portion of either of the foregoing, (b) any breach by you or any person you permit to use any System of any representation, warranty, covenant, procedure, or other provision of this Electronic Access Disclosure, or (c) any failure to maintain the security of any username, password, or other Access Method you receive. The terms set forth in this bullet survive any termination or expiration of your access to any System.
- To the extent that any System contains copyright notices, trademarks, restrictions on use, or other disclaimers or notices, you agree not to remove or bypass such notices and to comply with such notices, and you agree not or take any action inconsistent with the continued ownership of the Systems by Jefferies or any Third-Party Provider.
- To the extent that any Systems provide you access to futures or foreign currency trading interfaces or functionality, you understand that:
 - as a foreign approved participant of the Bourse de Montreal Inc. (the "Bourse"), Jefferies is required to inform you that if you trade the Bourse's listed futures contracts and options on futures contracts that are approved by the Commodity Futures Trading Commission that pursuant to sub-articles 6366 B) 2. b) iv) and 6366 B) 2. b) v) of Rule Six of the Bourse that the foreign approved participant can: 1. reject an order for any reason; and 2. change or remove an order and has the right to cancel any trade made by the client (you) for any reason;
 - you will not enter into any other clearing relationship for use through any interface that we provide without the prior written consent of Jefferies;
 - where the interface is not provided to you by Jefferies (e.g., NYMEX Clearport), you will obtain all software updates in a timely manner directly from the relevant exchange and contact the relevant exchange directly regarding any order entry or other problems you may have;
 - you understand that when transacting in futures or foreign currency transactions through any Systems, including without limitation any Third Party Services, (a) Jefferies may act as principal in transactions with you,
 - (b) Jefferies may engage in subsequent principal transactions with its affiliates to facilitate the execution and clearing of such transactions, and
 - (c) Jefferies or its affiliates may engage in proprietary transactions using any Systems; and
 - you will use the foreign currency trading interfaces only from within the United States.
- You represent, warrant and covenant to Jefferies that you have the sophistication, expertise and investment knowledge to make informed investment decisions on behalf of you or your clients, and that you are using the Systems as one of many sources of investment information from which to make independent investment decisions.
- References in this Electronic Access Disclosure to "you" or "your" mean the customer of Jefferies entering into this Electronic Access Disclosure. References to "we", "us", "our" or "Jefferies" mean Jefferies LLC. Unless otherwise agreed to in writing with Jefferies, your contractors or consultants may not use any Systems made available to you.

Electronic Order Routing (U.S. Listed Options)

When executing client Non-Directed listed option orders, Jefferies LLC seeks to access venues which provide our clients with the best execution available in the marketplace. Jefferies LLC may route client listed option orders to unaffiliated broker-dealers and third party algo providers. Jefferies LLC considers a number of factors in evaluating third party execution services, including: price improvement, market depth, order size, speed of execution and numerous other factors. If you need a more in-depth understanding of the Firm's electronic option business, please reach out to your Jefferies LLC registered representative.

ID Markets

Where you submit an order in an ID Market, you may be required to open one or more accounts with a local broker where required by Applicable Law to effect the transaction(s) and, accordingly, we shall not be liable to you for the execution, settlement and/or the clearing of the transaction(s). The relevant local broker shall execute, settle and clear the transaction directly with you and they will be solely responsible for providing you with a formal trade confirmation unless otherwise agreed. An "ID Market" is a market in which a foreign institutional investor is required to have pre-registered and been issued with a local investor identification number to access and effect transactions in the local market either directly or via the relevant local broker.

Important Information Regarding Orders For Brazilian Securities

In connection with your account maintained by Jefferies LLC ("Jefferies"), please read the following information carefully.

Transactions in Brazilian securities are subject to Brazilian legislation on capital markets, in particular statutes, laws, codes, regulations, rules and requirements established by Brazil's governmental authorities, regulatory agencies and self-regulators, including without limitation the operating rules and manuals published by B3 S.A. – Brasil, Bolsa, Balcão ("B3") and legislation concerning anti-money laundering (collectively, "Brazilian Laws and Rules").

For further information regarding Brazilian regulation applicable to non-resident investors, please refer to the following websites, without limitation:

- National Monetary Council Resolution No. 4,373/14: https://www.gov.br/cvm/en/foreign-investors/regulation-files/resolution-cmn-4373-ing.pdf
- CVM Resolution No. 13/20: https://www.gov.br/cvm/en/foreign-investors/ regulation-files/RESOLUTIONCVM13__.pdf
- Other regulations of interest for NRI published by CVM: https://www.gov.br/cvm/en/foreign-investors/regulation-of-interest
- B3's Statute, Operating Rules and Manuals: https://www.b3.com.br/en_us/regulation/regulatory-framework/regulations-and-manuals/how-it-works.htm
- Other regulations of interest for NRI published by B3: https://www.b3.com.br/en_us/regulation/non-resident-investor/

By submitting orders for your account to Jefferies in Brazilian securities after your receipt of this notice, you thereby are deemed to agree and represent to Jefferies at the time of each such order:

- That you are not domiciled in Brazil and will promptly notify Jefferies if you become domiciled in Brazil,
- That you are authorized to trade securities in Brazil in compliance with all Brazilian Laws and Rules, and any trading of securities in Brazil by you shall comply with all Brazilian Laws and Rules,
- That you recognize and undertake to comply with the terms and obligations arising from the Brazilian Laws and Rules,
- That you have been informed of the eligibility criteria you must meet regarding the deposit of guarantees abroad, as provided in Brazilian Laws and Rules, which you acknowledge and undertake to comply with, including the provisions established in the B3 Clearinghouse Regulations and the B3 Clearinghouse Risk Management Manual, which, among other provisions, sets forth that the eligible assets to be deposited as guarantee abroad are: (i) Dollars; (ii) bonds issued by the US Treasury; (iii) bonds issued by German Treasury; and (iv) American Depositary Receipt (ADR) of shares eligible for acceptance as guarantee. You also agree and represent that you satisfy such criteria, and that you shall notify Jefferies if you cease to satisfy same,
- That you shall provide to Jefferies all the documentation and information needed by Jefferies to identify you, within the meaning of the Brazilian Laws and Rules regarding non-resident investors,
- That Jefferies will forward on your behalf your orders for Brazilian securities to one or more brokers who are registered with the Brazilian Securities and Exchange Commission (each, an "Executing Broker") for execution, clearance and settlement. Payments and the transfer of funds and securities in connection with your transactions in Brazilian securities shall occur directly between you and the relevant Executing Broker (or their respective agents or custodians). While Jefferies is not responsible for receiving, delivering and/or safeguarding funds for any such transactions in Brazilian securities, Jefferies shall monitor the settlement of your transactions and communications with the Executing Brokers.
- That Jefferies may be obligated to share with the Executing Brokers (or their respective agents or custodians) client identification information provided by you to Jefferies, and you hereby consent to such disclosure.

Important Information Regarding Finnish Securities

- Finnish securities will be held in a Custodial Nominee Account, registered in Jefferies LLC's nominee name;
- We hereby advise you that Jefferies, as a nominee, may pursuant to Finnish law exercise the same rights with regard to the Finnish Securities on a Custodial Nominee Account as an ordinary holder of a book-entry account;
- We hereby inform you, for any Finnish Securities for which you are the Beneficial Owner, of the fact that the transfers of Finnish Securities within the same custodial nominee account will not be individually registered in the Finnish CSD system, thus leaving the Beneficial Owner's rights dependent upon the entries made by Jefferies LLC in its books regarding the assets held on the Custodial Nominee Account;
- You hereby authorize Jefferies LLC to register your Finnish Securities on a Custodial Nominee Account;
- You hereby represent that if you hold Finnish Securities through Jefferies LLC as nominee, that the nominee registered Finnish Securities are not owned by Finnish citizens or by Finnish institutions.