**SR-NFX-2019-19 Exhibit B**

**NASDAQ Futures, Inc. (NFX)
General Reference Guide**

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# executive summary

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#  overview of the market

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### Order Book (”On-Exchange Trades”)

The Trading System provides sophisticated and rich trade matching functionalities with efficient execution of a broad range of hedge, strategy and contingent trades.

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### Off-Order Book Trade Reporting (”Off-Exchange Trades”)

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Instrument Structure

Instruments available for trading consist of standardized Futures and Options on Futures Contracts. Each Instrument can be traded as an outright Instrument for purchase or sale, or as part of a Combination Order (strategy), namely the simultaneous purchase or sale of two, but no more than four, Instruments (respective legs). The Exchange may list Futures or Options, but not Futures and Options combinations for trading, and users may create custom Combinations Orders (“Tailor-Made Combination” or “TMC”) for Futures or Options which are not already defined in the Order Book. User-defined TMCs may be initiated intraday, but some are not immediately available for trading (implementation is generally by the conclusion of the following Open Session). Market participants can place working Combination Orders that, if matched, simultaneously trade the referenced single leg Instruments according to the specified strategy without execution risk. Once implemented, a TMC Order Book is visible to the entire market for the remainder of its defined lifetime from one to ten days (or less, if a single leg expires).

Standard Combinations which will be pre-defined in the Trading System for Futures or Options will be comprised of the most liquid Intra-Commodity (e.g., NFX WTI Crude Oil Penultimate Financial Futures: March versus June contract) and Inter-Commodity combinations (e.g., NFX WTI Crude Oil Penultimate Financial Futures versus NFX RBOB Gasoline Penultimate Financial Futures versus NFX Heating Oil Penultimate Financial Futures “Crack Spread”). See Section 3.10 of this Reference Guide for further discussion on Combination Orders (strategies).

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Relational Model

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Trading System Access

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 Designated Representatives

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Risk Management Services

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### Trade Guard - Pre-Trade Risk Management (PTRM)

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### Kill Switch

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### Drop Copy

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# trading on the exchange

This section provides an introduction to the Exchange trading day. The trading day is comprised of standard Trading System session states, various ways to participate in each session, and risk management and limits during those sessions. When all sessions have terminated, no Orders or Quotes will be accepted by the Trading System.

The following outlines components of a trading day. Please consult product specifications for trading hours per product.

A trading day is divided into four sessions (times are EPT):



* Pre-Open Session Commences – 18:45 (Closes at 19:00)
* Open Session Commences – 19:00 (Closes at 18:00 the next trading day)
* Close Session Commences – 18:00 (Closes at 18:00)
* Post-Close Session Commences – 18:00 (Closes at 18:07)
	1. **Pre-Open Session**

To commence the Pre-Open Session, a market message is sent out to all Participants subscribed to Market Data indicating the start of the Pre-Open Session.

During the Pre-Open Session, Authorized Traders may enter Orders (including Quotes) which may be modified and canceled during the session. Orders will be time-stamped and queued until the end of the Pre-Open Session. During the Pre-Open Session, pre-existing Good-till-Cancelled (GTC) and Good-for-Day (DAY) Orders may be modified or canceled. Market Orders will not be accepted during the Pre-Open Session. Any Order with a Time in Force Condition of FOK or IOC would also be rejected during the Pre-Open Session. See Chapter IV, Section 3 of the Rulebook for Order types and Time in Force Conditions.

Orders submitted during the Pre-Open Session shall remain in the Order Book unmatched until the Uncross occurs at the beginning of the Open Session. During the Pre-Open Session, the market is transparent; all submitted and /or modified Orders with associated volume are disseminated to subscribers of market data.

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* 1. **The Uncross**

During the Pre-Open Session, a two sided auction is organized, where Orders entered during the Pre-Open Session on both sides of the Order Book are uncrossed automatically, at the Equilibrium Price at the conclusion of the Pre-Open Session. Before the Uncross is performed, a check is made for whether or not it is needed (i.e. if there are any crossed prices). If the Uncross is not required, the Open Session will commence and establish the Best Bid and Offer (BBO). The Trading System will automatically match all crossed Orders at the Equilibrium Price. The Open Session will commence and the opening price will be either: (i) the Equilibrium Price; or (ii) the first match in the Trading Session. During the Open Session, the Trading System will match Orders (which includes Quotes).

The Equilibrium Price is the price at which the most quantity will execute with the lowest imbalance. Accordingly, following the Uncross, there are no crossed prices left in the Order Book. Executions at the Uncross are labelled as such in the ITCH Market Data protocols.

The Equilibrium Price may include the following Order Types:

* Market-to-Limit Orders;
* Limit Orders; and
* Quotes.

The following are excluded from the calculation of the Equilibrium Price:

* Market Orders;
* Stop Orders;
* Stop Limit Orders; and
* Fill or Kill Orders.

The following methodology is used to calculate Equilibrium Price:

* **Maximize Executed Quantity** – subject to the following, the Equilibrium Price shall be the price at which the execution of most quantity will occur.
* **Minimize Surplus Quantity** – if there is more than one price at which the most Orders will be executed, then, subject to the following, the Equilibrium Price will be the price which would generate the lowest imbalance.
* **Choose Price Closest to Reference Price** – if there is more than one price which would be determined by market pressure, the Equilibrium Price shall be the price closest to the Reference Price (a Reference Price can be: (i) the last price; (ii) previous day’s settlement price; or (iii) price set manually by NFX Market Operations).

**Note:** It is possible to calculate the Equilibrium Prices in Combination Order Books, based on Combination Orders entered directly into the Combination Order Book. This is determined in the same way as Equilibrium Price calculations for the Single Order Book with one exception; instead of the price closest to a Reference Price being selected for the Equilibrium Price, the average of the highest and lowest eligible price is chosen as Equilibrium Price.

The Order Book moves from no-matching during the Pre-Open Session to automated matching during the Open Session.

At the end of the Pre-Open Session, the System will remove unmatched or partially matched orders placed during the Pre-Open Session with Time-In-Force set to Immediate or Cancel. Partially matched Market-to-Limit Orders with Time in Force Conditions set to DAY, GTD or GTC are converted to Limit Orders with price equal to the Equilibrium Price. If trigger conditions are met by the Uncross, Stop Orders are triggered and executed. Stop Orders can be triggered by the Equilibrium Price, but do not contribute to the calculation of the Equilibrium Price.

Once the Uncross is complete in the respective leg markets, the Combination Order Books are Uncrossed at their respective Equilibrium Price.

* 1. **Open Trading Session – Automatic (Continuous) Matching**

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* + 1. **Automatic Order Matching**

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* + 1. **Matching Priority for Products**

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* + - 1. **Price, Time /Pro Rata Priority Algorithm Definition**

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* 1. **Close Session**

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* 1. **Post Close Session**

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* 1. **Trading Halts and Restoration of Trading**

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Quotes

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Request for Quote (RFQ)

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Reserved

Strategies – Combination Orders

The Trading System supports the trading of Strategies also referred to as Combination Orders, which will trade in a separate Order Book. The Exchange may list Futures or Options, but not Futures and Options combinations for trading, and users may create their own tailor made combination (TMC) for Futures or Options combinations not already defined in the Trading System. Combination Orders consisting solely of Call or Put Options of the same underlying and Expiry but with different strikes must include at least one buy and one sell leg. Market participants may submit Combination Orders that, if matched, will simultaneously trade the referenced single leg Instruments according to the specified strategy without execution risk. Combination Orders will first execute against respective legs of Orders before executing against other Combination Orders within the Combination Order Book. Once implemented, a TMC Order Book is visible to the entire market and lives throughout its defined lifetime from one to ten days (or less, if a single leg expires).

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Trade at Settlement

The Exchange may determine from time-to-time those Contracts and contract months for which Futures Participants may execute trades at the Daily Settlement Price (“Trade at Settlement” or “TAS”) and the trading hours of each contract during which Members may execute trades at the Daily Settlement Price (Daily Settlement Price first announced by the Exchange for the trade date on which the TAS Order is executed). There are two types of TAS Orders, a TAS Single Order and a TAS Combo Order (collectively “TAS Orders”).

For TAS Single Orders, the Exchange may also designate Contracts and contract months where Futures Participants may execute trades at a premium or discount to the Daily Settlement Price. When designating such Contracts and contract months the Exchange may limit the permissible trading range around the Daily Settlement Price within which trades may be executed. The Exchange may vary this trading range at any time with immediate effect. TAS trades are executed on the NFX Platform at a price of zero representing the Daily Settlement Price.

For those Contracts and contract months where it is permitted to trade at a premium or discount to the Daily Settlement Price, the price of such settlement trades will be prefixed by a plus or minus sign as appropriate. For example, settlement trades executed at +1 cent will be at a premium of one cent to the settlement price while those executed at -1 cent will be at a discount of one cent to the settlement price.

For those TAS Combos, only Intra‐Commodity spreads are permitted. TAS Combo Orders may be priced in increments (plus or minus) of up to 10 minimum trading increments from the Daily Settlement Price Commodity Futures Trading Commission for the second Contract. A TAS Combo Order executed at a zero differential will be filled and cleared at the Daily Settlement Price for the trading day for both legs of the Time Spread. The first leg of the Time Spread is priced at the Daily Settlement Price, as applicable, for that contract month. The second leg of the Time Spread is priced at the Daily Settlement Price, as applicable, for that contract minus the allowable TAS price increment traded, except in circumstances where the traded TAS price is the actual settlement or market price of the contract.

After the Exchange has determined the Daily Settlement Prices of the associated underlying Futures contracts; the Exchange shall enter a reversing trade (to offset the exact initial trade at settlement transaction) and then an overtaking trade that is equal to the sum of the initial trade at settlement trade and the Daily Settlement Price for the relevant underlying Futures contract. Only the overtaking trade will be sent to OCC for clearing.

Trade Cancellations

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Order Price Limit Protection

In order to prevent erroneous transactions that might occur due to fat finger pricing or manifest errors, NFX will implement the price limit structure described below.

There are no price limits during the Pre-Open Session and the Uncross. However, throughout the Open Session, Price Limits for all products will be calculated from a Reference Price within the same margin allowed above and below the Reference Price. The Exchange will set the applicable price margin above and below the Reference Price for each Contract.

During the Pre-Open Session, Price Limits will not be activated. The Reference Price is based on the logic detailed below:

At the commencement of the Open Session, the reference price shall be:

(1) the prior Daily Settlement Price for the Contract, or

(2) in the event there is no prior Daily Settlement Price for the Contract, if the Contract is cash settled by reference to the price of a contract traded on another venue (the “Reference Contract”), the most recent Daily Settlement Price of the Reference Contract, or

(3) in the event the prior Daily Settlement Price is not reflective of the current market for either the Contract or the Reference Contract, a price determined by the Exchange to be a fair and reasonable reflection of the current market (“Reference Price”).

Thereafter, the Reference Price shall be the most recent bid or offer (other than a FOK or IOC bid or offer) in the Contract, provided that the bid (offer) is higher (lower) than the current Reference Price, unless such bid (offer) resulted in an execution, in which case the new Reference Price shall be the last execution price. If the order that caused the price limit to move is subsequently canceled, the price limit change imposed by the order will be reverted and price limits will be updated accordingly.

 \*\*\*\*\*Market Makers

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### Mass Quote Function

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### Mass Quote Protection

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# Order types and Time Conditions

* 1. **Order Types**

The following Order types, time-in-force and time conditions are available for all Products:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Order Types | DAY (Good-for-Day) | GTC (Good-till-Cancel) | GTD (Good-till-Date) | FOK (Fill-or-Kill) | IOC (Immediate-or-Cancel) |
| Market Order |  |  |  | X | X |
| Limit Order | X | X | X | X | X |
| Market-to-Limit Order | X | X | X | X | X |
| Stop Order | X | X | X | X | X |
| Stop Limit Order | X | X | X | X | X |
| Iceberg Order | X | X | X | X | X |
| Trading at Settlement | X |  |  |  |  |
| Combination Order | X | X | X |  |  |
|  |  |  |  |  |  |
| Linked Orders | X |  |  | X | X |

1. **Market Orders**

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1. **Limit Order**

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1. **Market-to-Limit Order**

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1. **Stop Order**

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1. **Stop Limit Order**

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1. **Iceberg Order**

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1. **Trading at Settlement Order**

There are two types of TAS Order, a TAS Single Order and a TAS Combo Order (collectively “TAS Orders”). The Exchange will designate the Contracts in which TAS transactions are permitted in accordance with this Rule. TAS trades are not permitted on the Last Trading Day in any Contract Expiry, or for any trade date which is a U.S. federal holiday even if the Exchange is open for trading. TAS transactions are not permitted in any Options, Combination Order or EFRP transactions.

A TAS Single Order is an Order to buy or sell a stated quantity of the relevant Contract at a price expressed as a differential (which may be zero) above or below the Daily Settlement Price for the Contract on the trade date on which the TAS Single Order is executed. The term trade date means the day on which the TAS transaction occurred, except that the trade date in respect of trades effected in a Trading Session beginning on one calendar day and ending on the next calendar day shall be deemed to be the calendar day on which the Trading Session ends. TAS Single Orders may be priced in increments (plus or minus) of up to 10 minimum trading increments from the Daily Settlement Price. A TAS Single Order executed at a zero differential will be filled and cleared at the Daily Settlement Price for the trading day. TAS Single Orders do not trade in the Combination Order Book.

A TAS Combo Order is an Order to buy or sell a stated quantity of the relevant Intra‐Commodity Spread (“Time Spread”) at a price expressed as a differential (which may be zero) above or below the Daily Settlement Price for the second Contract on the trading day on which the TAS Combo Order is executed. TAS Combo Orders may not trade as Inter‐Commodity Spreads. TAS Combo Orders may be priced in increments (plus or minus) of up to 10 minimum trading increments from the Daily Settlement Price for the second Contract. A TAS Combo Order executed at a zero differential will be filled and cleared at the Daily Settlement Price for the trading day for both legs of the Time Spread. The first leg of the Time Spread is priced at the Daily Settlement Price, as applicable, for that contract month. The second leg of the Time Spread is priced at the Daily Settlement Price, as applicable, for that contract minus the allowable TAS price increment traded, except in circumstances where the traded TAS price is the actual settlement or market price of the contract.

1. **Combination Order**

A “Combination Order” means an Order to simultaneously buy and/or sell at least two contracts in one or more Contracts in a form accommodated by the Trading System (except for TAS Combos which are limited to Intra-Commodity Spreads). All legs of a Combination Order are acquired simultaneously and must be for the same account or accounts with the same beneficial ownership. The Exchange will accept a Combination Order of up to four legs into the Trading System (except for TAS Combos). Combination Orders may execute against other Combination Orders. Combination Orders shall not update the prices of the respective legs of such Combination Orders in their respective Order Book. The Exchange will disseminate Combination Orders through ITCH and FIX protocols. These types of Orders may also be referred to as “Strategies.” Orders are permitted in Combination Order Books. The following order types may be Combination Orders: Market Orders, Limit Orders and Market-to-Limit Orders, Iceberg Orders, and TAS Orders.

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