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## DAILY TAQ CLIENT SPECIFICATIONS

Version

3.2

Date

February 28, 2020

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## PREFACE

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### SALES

- [DataSales@nyse.com](mailto:DataSales@nyse.com)

### PRICING AND POLICY GUIDES

- [Historical Market Data Pricing](#)

### CONTRACTS AND LICENSING

Customers must execute the appropriate agreement (Exhibit A and/or NYSE Vendor Agreement) which will be generated upon submission of the online order from the product page for each product on the nyse.com website. Upon the approval, NYSE will issue the credentials for accessing the data. Please allow up to an hour for newly purchased data product(s) from the MFT-Managed File Transfer directory setup to complete. Customers may download the data once and place the data on their internal database for internal users to access the data.

### NOTICES

Self-subscription services are available at <https://www.nyse.com/subscriptions> for the receipt of product news and/or operational status notifications for all proprietary data products.

### REFERENCE

- For additional product information, visit: <https://www.nyse.com/market-data/historical/daily-taq>

### SAMPLE DATA

- Sample data is available on the Public FTP at <ftp.nyxdata.com/Historical%20Data%20Samples/>

### ALTERNATIVE PRODUCTS

For details of related TAQ products and the full range of TAQ offerings, visit: <https://www.nyse.com/market-data/historical>

### SERVICE DESK / TECHNICAL SUPPORT

- Telephone: US +1 212 896 2830
- Email: [support@nyse.com](mailto:support@nyse.com)

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## 1. Introduction

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Daily TAQ (Trades and Quotes) is a set of files that contain all trades and quotes for all issues listed and traded on US regulated exchanges for a single trading day. The Daily TAQ data is derived from the output of the CTA and UTP SIPs (Tape A, Tape B, and Tape C).

The SIP data is published between 4:00am-8:00pm every trading day.

The NYSE Daily TAQ archive goes back to 1993. Historical data is available for download.

Customers can obtain a license to access specified months of historical data, or a license for ongoing access to the current Daily TAQ files. SFTP protocol is required for file transport.

For details, contact [DataSales@theice.com](mailto:DataSales@theice.com)

### 1.1 FILE CONTENT

One day's set of Daily TAQ files includes:

| DAILY TAQ FILE           | CONTENT   |
|--------------------------|---|
| <b>Master File</b>       | Master information for all symbols published by CTA and UTP                                       |
| <b>Trades File</b>       | All trades published by CTS and UTDF  |
| <b>Quotes (26 files)</b> | All quotes published by CQS and UQDF<br>(records are grouped into files alphabetically by symbol) |
| <b>NBBO File</b>         | All National Best Bid and Offer updates published by CQS and UQDF                                 |
| <b>Quote LULD File</b>   | All Limit-up/Limit-down Price Band messages published by CQS and UQDF                             |
| <b>Trade LULD File</b>   | All Limit-up/Limit-down Price Band messages published by CTS and UTDF                             |
| <b>CTA Admin File</b>    | All administrative messages published by CTA  |
| <b>UTP Admin File</b>    | All administrative messages published by UTP  |

#### 1.1.1 Typical File Sizes and Availability

Daily TAQ files are created and become available after the close of US equities markets on the same day.

Guidelines on typical file size and availability are shown in the chart below. File sizes, number of rows, and availability times shown below are estimates based on recent trading volumes. History availability dates are exact.

All times are in US Eastern time.

| DAILY TAQ FILE | FILE SIZE COMPRESSED | TYPICAL NUMBER OF RECORDS | TYPICAL FILE TIME AVAILABILITY | FILE AVAILABILITY DEADLINE | HISTORICAL DATES AVAILABLE |
|----------------|----------------------|---------------------------|--------------------------------|----------------------------|----------------------------|
| Master         | 360 KB               | 8,400                     | 8:30 PM                        | 9:00 PM                    | 1/01/1993 – present        |
| Trades         | 649 MB               | 25 MM                     | 8:30 PM                        | 9:00 PM                    | 1/01/1993 – present        |
| Quotes         | 17 GB                | 682 MM                    | 9:00 PM                        | 2:00 AM                    | 1/1/1993 – present         |
| NBBO           | 2.2 GB               | 114 MM                    | 8:30 PM                        | 11:00 PM                   | 9/10/2003 – present        |
| Trade LULD     | 77 MB                | 6.4 MM                    | 8:30 PM                        | 9:00 PM                    | 4/8/2013 – present         |
| Quote LULD     | 75 MB                | 6.4 MM                    | 8:30 PM                        | 9:00 PM                    | 4/8/2013 – present         |
| CTA Admin      | 70 MB                | 4.03 MM                   | 8:30 PM                        | 9:00 PM                    | 2/28/2011 – present        |
| UTP Admin      | 87 MB                | 2.4 MM                    | 8:30 PM                        | 9:00 PM                    | 2/28/2011 – present        |

### 1.1.2 Availability Notifications

If today's Daily TAQ files are delayed beyond its deadline for whatever reason, a notice will be published to customers no later than 2am.

To register to receive product news and/or operational status notifications for all proprietary data products, visit <https://www.nyse.com/subscriptions>

Trader updates and announcements are available at: <https://www.nyse.com/trader-update/history>.

## 1.2 FILE DELIVERY

The Daily TAQ files can be downloaded via SFTP on the NYSE Managed File Transfer (MFT) Site, <https://mftus.nyx.com/>.

All Daily TAQ files are compressed using gzip.

### 1.2.1 NYSE MFT Directory Structure

Using the NYSE Managed File Transfer infrastructure, Daily TAQ files are accessible as follows:

Access the NYSE MFT portal (<https://mftus.nyx.com/>) with the appropriate credentials, and navigate to the desired path below.

| FILE   | MFT (SFTP) Platform Path   |
|--------|--|
| Master | /EQY_US_ALL_REF_MASTER/EQY_US_ALL_REF_MASTER_yyyy/EQY_US_ALL_REF_MASTE<br>R_yyyyymm/EQY_US_ALL_REF_MASTER_yyyyymmdd.gz<br><br><b>Note: Data also available in the EQY_US_ALL_REF_MASTER_PD from January 4, 2010 - February 28, 2017.</b>   |
| Quotes | SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_yyyy/SPLITS_US_ALL_BBO_yyyyymm/<br>SPLITS_US_ALL_BBO_yyyyymmdd.gz<br><br>Examples:<br><br>/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_2016/SPLITS_US_ALL_BBO_201610/SPLITS_U<br><b>S_ALL_BBO_A_20161029.gz</b><br>/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_yyyy/SPLITS_US_ALL_BBO_yyyyymm/SPLITS_U<br><b>S_ALL_BBO_B_20161029.gz</b><br><br>/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_yyyy/SPLITS_US_ALL_BBO_yyyyymm/SPLITS_U<br><b>S_ALL_BBO_C_20161029.gz</b><br>The .done file (not gzipped) is created on completion of all 26 Daily TAQ Quotes files:<br><br>/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_yyyy/SPLITS_US_ALL_BBO_yyyyymm/SPLITS_U<br><b>S_ALL_BBO_20161029.done</b><br><br><b>Note: Quotes prior to Nov 4, 2016, available in a single file, EQY_US_ALL_BBO</b> |
| Trades | /EQY_US_ALL_TRADE/EQY_US_ALL_TRADE_yyyy/EQY_US_ALL_TRADE_yyyyymm/EQY_US<br>_ALL_TRADE_yyyyymmdd.gz   |
| NBBO   | /EQY_US_ALL_NBBO/EQY_US_ALL_NBBO_yyyy/EQY_US_ALL_NBBO_yyyyymm/EQY_US_  |

| FILE              | MFT (SFTP) Platform Path   |
|-------------------|--|
|                   | <b>ALL_NBBO_yyyyymmdd.gz</b>   |
| <b>Quote LULD</b> | /EQY_US_ALL_BBO_ADMIN/EQY_US_ALL_BBO_ADMIN_yyyy/EQY_US_ALL_BBO_ADMIN_yyyyymm/EQY_US_ALL_BBO_ADMIN_yyyyymmdd.gz         |
| <b>Trade LULD</b> | /EQY_US_ALL_TRADE_ADMIN/EQY_US_ALL_TRADE_ADMIN_yyyy/EQY_US_ALL_TRADE_ADMIN_yyyyymm/EQY_US_ALL_TRADE_ADMIN_yyyyymmdd.gz |
| <b>CTA Admin</b>  | /EQY_US_ALL_ADMIN/EQY_US_ALL_ADMIN_yyyy/EQY_US_ALL_ADMIN_yyyyymm/EQY_US_ALL_ADMIN_CTS_yyyyymmdd.gz                     |
| <b>UTP Admin</b>  | /EQY_US_ALL_ADMIN/EQY_US_ALL_ADMIN_yyyy/EQY_US_ALL_ADMIN_yyyyymm/EQY_US_ALL_ADMIN_UTP_yyyyymmdd.gz                     |

### 1.3 FILE FORMAT

Every Daily TAQ file

- Is in ASCII format
- Is compressed using gzip.
- Starts with a Header Record and ends with a Trailer Record:
  - The Header Record is a pipe-delimited list of the names of all the fields in the data records in this file.
  - The Trailer Record has the same number of pipe-delimited fields as this file's data records:
    - Field 1 The word "END", without quotation marks
    - Field 2 An 8-character date (YYYYMMDD)
    - Field 3 The number of records in this file, not counting the header and trailer
    - Fields 4 to the end are blank (empty)

Every record in a file between the Header and Trailer records

- Represents a single event published by CTA and UTP
- Consists of a sequence of pipe-delimited ASCII fields specified in this document
- Is terminated by a newline character ('\n')

### 1.4 FIELD FORMATS

#### 1.4.1 Symbols

Symbols are expressed in NYSE Symbology, which consists of

Root (6 chars maximum), space, and Suffix (10 chars maximum)

See the [NYSE Symbology Specification](#) for details.

The Master File also includes the symbols in the original formats published by the SIPs. For CTA symbols, see [CTS Binary Output Spec](#) Appendix B. For UTP symbols, see [Nasdaq 5<sup>th</sup> Character Suffix List](#).

Test Symbols are included in the Daily TAQ files. For the identification of Test Symbols, See [CTA Specifications for CTA Symbols](#) and the [NASDAQ-Listed for UTP Test Symbols](#)

### 1.4.2 Prices

Every price field represents a dollar amounts with an optional fractional component. A price consists of up to 14 ASCII numeric characters of whole value (with no leading zeroes), an optional decimal point ('.'), and up to 6 ASCII numeric characters of fraction (with no trailing zeroes). The whole field can be a maximum of 21 characters.

### 1.4.3 Sequence Numbers

For Tape C symbols (published by the UTP SIP), Daily TAQ sequence numbers are typical message sequence numbers as they appear in the UTP feeds, incrementing by 1 with every message.

For Tape A and B symbols (published by the CTA SIP), sequence numbers are derived from two different CTA fields: Block Sequence Number (appearing in the Block Header) and Message ID (appearing in the Message Header). For this reason, sequence numbers for Tape A and B symbols do not increase continuously. The formula for the Daily TAQ Sequence Number is:

$$\text{Daily TAQ Sequence Number} = (\text{CTA Block Sequence Number} * 100) + \text{CTA Message ID}$$

|                           | Example 1 | Example 2 | Example 3 |
|---------------------------|-----------|-----------|-----------|
| CTA block seq num         | 1         | 24        | 4,567     |
| Message ID                | 3         | 39        | 5         |
| Daily TAQ sequence number | 103       | 2,439     | 456,705   |

### 1.4.4 Timestamps

Current timestamps are a fixed length field of ASCII numeric characters in the following format:

*HHMMSSxxxxxxxx*

HHMMSS represents 2-digit values for hours, minutes and seconds since midnight, and the 9 x's represent a nine digit nanosecond value.

### 1.4.5 Timestamp History

The accuracy of timestamps published by the SIPs has improved in steps over time, with CTA and UTP on different schedules from each other. Timestamps in Historical Daily TAQ reflect this evolution. For consumers of historical Daily TAQ, here is the dated change list for SIP timestamps.

*Timestamps are durations since midnight, eg: seconds since midnight, nanoseconds since midnight*



| DATE OF CHANGE     | UTP CHANGES                       | CTA CHANGES                         |
|--------------------|-----------------------------------|-------------------------------------|
| January 1993       | <b>seconds</b> HHMMSS             | <b>seconds</b> HHMMSS               |
| October 2003       | <b>milliseconds</b> HHMMSSxxx     | <b>milliseconds</b> HHMMSSxxx       |
| July 27, 2015      | <b>microseconds</b> HHMMSSxxxxxx  |                                     |
| August 3, 2015     |                                   | <b>microseconds</b> HHMMSSxxxxxx    |
| October 24, 2016   | <b>nanoseconds</b> HHMMSSxxxxxxxx | <b>microseconds</b> HHMMSSxxxxxx000 |
| September 18, 2017 |                                   | <b>nanoseconds</b> HHMMSSxxxxxxxx   |

#### 1.4.6 Blank Fields vs. Space Characters

When a field has no meaningful content, it is generally left blank, meaning there are no characters between the delimiting pipe characters. Occasionally a field has a set of SIP-defined values which includes a space character as a valid value, usually meaning not applicable or normal. In this case, the field will contain a space character (ASCII 0x20) between the delimiting pipe characters.

|       |  |
|-------|--|
| Blank |  |
| Space |  |

#### 1.4.7 Fields from One SIP Only

Certain fields contain data that is only published by one of the two SIPs: ie, published by CTA and not by UTP, or vice-versa. In these cases, the description of the field is marked CTA or UTP as appropriate. Unless otherwise specified, such a field will be blank for records originating with the other SIP.

### 1.5 ABBREVIATIONS

| TERM | MEANING                     |
|------|-----------------------------|
| BBO  | Best Bid and Offer          |
| LULD | Limit Up – Limit Down       |
| MWCB | Market-Wide Circuit Breaker |
| NBB  | National Best Bid           |
| NBO  | National Best Offer         |
| NBBO | National Best Bid and Offer |

## 2. Daily TAQ Master File

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The Daily TAQ Master file contains static security information for all securities traded by participants of CTA and UTP. The Daily TAQ Master File is sorted by symbol.

|   | FIELD NAME                  | MAX SIZE | FORMAT | DESCRIPTION   |
|---|-----------------------------|----------|--------|---|
| 1 | <b>Symbol</b>               | 17       | Symbol | Stock symbol in NYSE format   |
| 2 | <b>Security Description</b> | 500      | Text   | Name of listing. Full name/Security short description   |
| 3 | <b>CUSIP</b>                | 9        | Text   | S&P's CUSIP security identifier.  |
| 4 | <b>Security Type</b>        | 3        | Text   | Identifies the type of the security: <ul style="list-style-type: none"> <li>▪ A = Common Stock</li> <li>▪ B = Preferred Stock</li> <li>▪ C = Warrant</li> <li>▪ D = Rights</li> <li>▪ E = Corporate Bond</li> <li>▪ ETF = Exchange Traded Fund (includes Nasdaq and BATS listed ETPs)</li> <li>▪ ETN = Exchange Traded Note</li> <li>▪ G = Structured Product</li> <li>▪ H = ADR Common</li> <li>▪ I = ADR Preferred</li> <li>▪ J = ADR Warrants</li> <li>▪ K = ADR Rights</li> <li>▪ P = Fund</li> <li>▪ Q = Basket</li> <li>▪ R = Unit</li> <li>▪ S = Liquidating Trust</li> <li>▪ U = Unknown</li> </ul> |
| 5 | <b>SIP Symbol</b>           | 16       | Symbol | Stock Symbol expressed in the format used by the SIP (CTA for Tapes A & B, UTP for Tape C).   |
| 6 | <b>Old Symbol</b>           | 16       | Symbol | If the symbol has changed, contains the previous symbol in NYSE format.<br><br>blank = symbol did not change today  |
| 7 | <b>Test Symbol Flag</b>     | 1        | Text   | Indicates whether the security is a SIP test symbol and not an actual tradable security. <ul style="list-style-type: none"> <li>▪ Y = Test symbol</li> <li>▪ N = Not a test symbol</li> </ul>   |

|    | FIELD NAME         | MAX SIZE | FORMAT  | DESCRIPTION  |
|----|--------------------|----------|---------|--|
| 8  | Listed Exchange    | 1        | Text    | Listing exchange of the security. Primary Listing Market codes and description.<br><br>See <a href="#">Participant IDs</a> for codes   |
| 9  | Tape               | 1        | Text    | The tape of this symbol. Valid values: A, B, C   |
| 10 | Unit of Trade      | 3        | Numeric | Minimum incremental size of a trade, in shares.<br><br>Defaulted to 1.   |
| 11 | Round Lot          | 3        | Numeric | The number of shares the security quotes at.<br><br>Valid values: 100,50,10,1  |
| 12 | NYSE Industry Code | 4        | Text    | The issue's industry code. Applies only to NYSE Group Listed securities (NYSE, NYSE American, NYSE Arca, NYSE National, and NYSE Chicago). See <a href="#">NYSE Industry Codes</a> .<br><br>blank = this is a non-NYSE security.   |
| 13 | Shares Outstanding | 10       | Numeric | Total number of shares outstanding for the current day in millions, with no trailing or leading zeroes.  |
| 14 | Halt Delay Reason  | 1        | Text    | Reason for the trading status of this security, such as Trading Halt.<br><br><b>CTA Values</b> <ul style="list-style-type: none"> <li>▪ D = News dissemination</li> <li>▪ I = Order Imbalance</li> <li>▪ M = LULD Trading Pause</li> <li>▪ P = News Pending</li> <li>▪ X = Equipment changeover</li> <li>▪ Y = Sub-Penny Halt</li> <li>▪ 1 = Market-Wide Circuit Breaker Level 1 – Breached</li> <li>▪ 2 = Market-Wide Circuit Breaker Level 2 – Breached</li> <li>▪ 3 = Market-Wide Circuit Breaker Level 3 – Breached</li> <li>▪ blank = Reason Not Available</li> </ul> <b>UTP Values</b> <ul style="list-style-type: none"> <li>▪ A = Halt News Pending</li> <li>▪ B = Halt News Dissemination</li> <li>▪ C = Single Stock Trading Pause In Affect</li> <li>▪ D= Regulatory Halt Extraordinary Market Activity</li> <li>▪ E = Halt ETF</li> <li>▪ F = Trading Halted; For information requested</li> </ul> |

|    | FIELD NAME                       | MAX SIZE | FORMAT  | DESCRIPTION   |
|----|----------------------------------|----------|---------|---|
|    |                                  |          |         | <p>by NASDAQ</p> <ul style="list-style-type: none"> <li>▪ G = Halt Non Compliance</li> <li>▪ H = Halt Filings Not Current</li> <li>▪ I = Halt SEC Trading Suspension</li> <li>▪ J = Halt Regulatory Concern</li> <li>▪ K = Operations Halt, Contact Market Operations</li> <li>▪ L = IPO Issue not yet Trading</li> <li>▪ M = Corporate Action</li> <li>▪ N = Quotation Not Available</li> <li>▪ O = Volatility Trading Pause</li> <li>▪ P = Volatility Trading Pause – Straddle Condition</li> <li>▪ Q = News and Resumption Times</li> <li>▪ R = Single Stock Trading Pause/Quotation-Only Period</li> <li>▪ S = Qualifications Issues Reviewed/Resolved; Quotations/Trading to Resume</li> <li>▪ T = Filing Requirements Satisfied/Resolved; Quotations/Trading To Resume</li> <li>▪ U = Issuer News Not Forthcoming; Quotations/Trading To Resume</li> <li>▪ V = Qualifications Halt ended; maint. Req. met; Resume</li> <li>▪ W = Qualifications Halt Concluded; Filings Met; Quotes/Trades To Resume</li> <li>▪ X = Trade Halt Concluded By Other Regulatory Auth; Quotes/Trades Resume</li> <li>▪ Y = New Issue Available</li> <li>▪ Z = Issue Available</li> <li>▪ 1 = Market Wide Circuit Breaker Halt – Level 1</li> <li>▪ 2 = Market Wide Circuit Breaker Halt – Level 2</li> <li>▪ 3 = Market Wide Circuit Breaker Halt – Level 3</li> <li>▪ 4 = Market Wide Circuit Breaker Halt – Carry over from previous day</li> <li>▪ 5 = Market Wide Circuit Breaker Resumption</li> <li>▪ 6 = IPO security released for quotation</li> <li>▪ 7 = IPO security – positioning window extension</li> <li>▪ blank = Reason Not Available</li> </ul> |
| 15 | <b>Specialist Clearing Agent</b> | 4        | Text    | <p>Specialist Clearing Firm (NYSE, NYSE American).</p> <p>blank = this is a non-NYSE/NYSE American security.</p>  |
| 16 | <b>Specialist Clearing</b>       | 4        | Numeric | <p>For NYSE/NYSE American listings, Specialist Clearing Number (if applicable).</p>   |

|    | FIELD NAME                    | MAX SIZE | FORMAT  | DESCRIPTION  |
|----|-------------------------------|----------|---------|--|
|    | <b>Number</b>                 |          |         | blank = this is a non-NYSE/NYSE American security.   |
| 17 | <b>Specialist Post Number</b> | 2        | Numeric | For NYSE/NYSE American listings, Specialist identifier.<br>blank = this is a non-NYSE/NYSE American security.  |
| 18 | <b>Specialist Panel</b>       | 2        | Text    | For NYSE/NYSE American listings, this symbol's trading floor location.<br>blank = this is a non-NYSE security. |
| 19 | <b>TradedOn NYSE American</b> | 1        | Numeric | Did the issue trade on NYSE American today:<br>■ 0 = No ■ 1 = Yes  |
| 20 | <b>TradedOn Nasdaq OMX BX</b> | 1        | Numeric | Did the issue trade on NASDAQ OMX BX today:<br>■ 0 = No ■ 1 = Yes  |
| 21 | <b>TradedOn NYSE National</b> | 1        | Numeric | Did the issue trade on NYSE National today:<br>■ 0 = No ■ 1 = Yes  |
| 22 | <b>TradedOn FINRA</b>         | 1        | Numeric | Did the issue trade on FINRA today:<br>■ 0 = No ■ 1 = Yes  |
| 23 | <b>TradedOn ISE</b>           | 1        | Numeric | Did the issue trade on ISE today:<br>■ 0 = No ■ 1 = Yes  |
| 24 | <b>TradedOn CBOE EDGA</b>     | 1        | Numeric | Did the issue trade on CBOE EDGA Exchange today:<br>■ 0 = No ■ 1 = Yes   |
| 25 | <b>TradedOn CBOE EDGX</b>     | 1        | Numeric | Did the issue trade on CBOE EDGX Exchange today:<br>■ 0 = No ■ 1 = Yes   |
| 26 | <b>TradedOn NYSE Chicago</b>  | 1        | Numeric | Did the issue trade on NYSE Chicago today:<br>■ 0 = No ■ 1 = Yes   |
| 27 | <b>TradedOn NYSE</b>          | 1        | Numeric | Did the issue trade on NYSE today:<br>■ 0 = No ■ 1 = Yes   |
| 28 | <b>TradedOn NYSE Arca</b>     | 1        | Numeric | Did the issue trade on NYSE Arca today:<br>■ 0 = No ■ 1 = Yes  |

|    | FIELD NAME                  | MAX SIZE | FORMAT  | DESCRIPTION  |
|----|-----------------------------|----------|---------|--|
| 29 | <b>TradedOn Nasdaq</b>      | 1        | Numeric | Did the issue trade on Nasdaq today:<br>■ 0 = No ■ 1 = Yes   |
| 30 | <b>TradedOn CBSX</b>        | 1        | Numeric | Did the issue trade on CBSX today:<br>■ 0 = No ■ 1 = Yes   |
| 31 | <b>TradedOn PSX</b>         | 1        | Numeric | Did the issue trade on NASDAQ OMX PHLX today:<br>■ 0 = No ■ 1 = Yes  |
| 32 | <b>TradedOn CBOE BYX</b>    | 1        | Numeric | Did the issue trade on CBOE BYX today:<br>■ 0 = No ■ 1 = Yes   |
| 33 | <b>TradedOn CBOE BZX</b>    | 1        | Numeric | Did the issue trade on CBOE BZX today:<br>■ 0 = No ■ 1 = Yes   |
| 34 | <b>TradedOn IEX</b>         | 1        | Numeric | Did the issue trade on IEX today:<br>■ 0 = No ■ 1 = Yes  |
| 35 | <b>Tick Pilot Indicator</b> | 1        | Text    | Tick Pilot Securities Group<br><br>■ C = Control Group - business as usual (\$0.01 increments)<br><br>■ 1 = Group 1 Pilot securities in the first test group quoted in \$0.05 increments; trading is business as usual.<br><br>■ 2 = Group 2 - Pilot securities in the second test group quoted in \$0.05 increments; trade in \$0.05 increments except for midpoint liquidity and retail orders.<br><br>■ 3 = Group 3 - Pilot securities in the third test group quote in \$0.05 increments; trade in \$0.05 increments; protection is provided to displayed liquidity over dark liquidity at the same price, known as the "trade at" rule.<br><br>■ blank = Not applicable (not part of the tick pilot program)<br><br>Refer to: <a href="https://www.nyse.com/tick-pilot">https://www.nyse.com/tick-pilot</a> |
| 36 | <b>Effective Date</b>       | 8        | Numeric | The date this security was admitted to trading.<br><br>Format: YYYYMMDD<br><br>Field may be blank in some cases, including symbols admitted before 2012.   |
| 37 | <b>TradedOn LTSE</b>        | 1        | Numeric | Did the issue trade on LTSE today:<br>■ 0 = No ■ 1 = Yes   |

### 3. Daily TAQ Trades File

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Every trade reported to the consolidated tape by all CTA and UTP participants.

The Daily TAQ Trades File is sorted by symbol, time, and message sequence number.

|   | FIELD NAME     | MAX SIZE | FORMAT    | DESCRIPTION   |
|---|----------------|----------|-----------|---|
| 1 | Time           | 15       | Timestamp | Time the trade was published by the SIP   |
| 2 | Exchange       | 1        | Text      | The ID of the exchange where the trade took place<br><br>See <a href="#">Participant IDs</a> for codes  |
| 3 | Symbol         | 17       | Symbol    | Stock symbol  |
| 4 | Sale Condition | 4        | Text      | A special condition associated with the trade. Up to four codes are displayed per trade.<br><br><b>CTA issues</b> <ul style="list-style-type: none"> <li>▪ blank = Regular Trade (no associated conditions)</li> <li>▪ B = Average Price Trade</li> <li>▪ C = Cash Trade (Same Day Clearing)</li> <li>▪ E = Automatic Execution</li> <li>▪ F = Intermarket Sweep Order</li> <li>▪ H = Price Variation Trade</li> <li>▪ I = Odd Lot Trade</li> <li>▪ K = Rule 127 (NYSE only) or<br/>Rule 155 Trade (NYSE American only)</li> <li>▪ L = Sold Last (Late Reporting)</li> <li>▪ M = Market Center Official Close</li> <li>▪ N = Next Day Trade (Next Day Clearing)</li> <li>▪ O = Market Center Opening Trade</li> <li>▪ P = Prior Reference Price</li> <li>▪ Q = Market Center Official Open</li> <li>▪ R = Seller</li> <li>▪ T= Extended Hours Trade</li> <li>▪ U = Extended Hours (Sold Out of Sequence)</li> <li>▪ V = Contingent Trade</li> <li>▪ X = Cross Trade</li> <li>▪ Z = Sold (Out of Sequence)</li> <li>▪ 4 = Derivatively Priced</li> <li>▪ 5 = Market Center Re-Opening Trade</li> <li>▪ 6 = Market Center Closing Trade</li> <li>▪ 7 = Qualified Contingent Trade (from August 3, 2015)</li> <li>▪ 8 = Reserved</li> <li>▪ 9 = Corrected Consolidated Close Price per the Listing Market</li> </ul> |

|   | FIELD NAME                 | MAX SIZE | FORMAT  | DESCRIPTION  |
|---|----------------------------|----------|---------|--|
|   |                            |          |         | <b>UTP issues</b> <ul style="list-style-type: none"> <li>▪ @ = Regular Trade</li> <li>▪ A = Acquisition</li> <li>▪ B = Bunched Trade</li> <li>▪ C = Cash Sale</li> <li>▪ D = Distribution</li> <li>▪ E = Placeholder for future use</li> <li>▪ F = Intermarket Sweep</li> <li>▪ G = Bunched Sold Trade</li> <li>▪ H = Price Variation Trade</li> <li>▪ I = Odd Lot Trade</li> <li>▪ K = Rule 155 Trade (NYSE American Only)</li> <li>▪ L = Sold Last</li> <li>▪ M = Market Center Close Price</li> <li>▪ N = Next Day</li> <li>▪ O = Opening Prints</li> <li>▪ P = Prior Reference Price</li> <li>▪ Q = Market Center Open Price</li> <li>▪ R = Seller</li> <li>▪ S = Split Trade</li> <li>▪ T = Form - T Trade</li> <li>▪ U = Extended Trading Hours</li> <li>▪ V = Stock-Option Trade</li> <li>▪ W = Average Price Trade</li> <li>▪ X = Cross Trade</li> <li>▪ Y = Yellow Flag</li> <li>▪ Z = Sold (Out of Sequence)</li> <li>▪ 1 = Stopped Stock - Regular Trade</li> <li>▪ 4 = Derivatively Priced</li> <li>▪ 5 = Re-opening Prints</li> <li>▪ 6 = Closing Prints</li> <li>▪ 7 = Exempt Qualified Contingent Trade ("QCT")</li> <li>▪ 8 = Placeholder for 611 Exempt</li> <li>▪ 9 = Corrected Consolidated Close (per listing market)</li> </ul> |
| 5 | Trade Volume               | 10       | Numeric | The number of shares traded  |
| 6 | Trade Price                | 21       | Numeric | The share price of this trade  |
| 7 | Trade Stop Stock Indicator | 1        | Text    | <b>CTA</b> <ul style="list-style-type: none"> <li>▪ blank = UTP trade</li> <li>▪ N = Not a Stop Stock trade</li> <li>▪ Y = Stop Stock trade</li> </ul>   |



|    | FIELD NAME                 | MAX SIZE | FORMAT                          | DESCRIPTION  |
|----|----------------------------|----------|---------------------------------|--|
|    |                            |          |                                 | See the Glossary in the <a href="#">CTS Specification</a>  |
| 8  | Trade Correction Indicator | 2        | Numeric                         | <ul style="list-style-type: none"> <li>▪ 00 = Regular trade which was not corrected, changed or signified as cancel or error.</li> <li>▪ 01 = Original trade which was late corrected (This record contains the original time - HHMM and the corrected data for the trade).</li> <li>▪ 07 = Original trade which was later marked as erroneous</li> <li>▪ 08 = Original trade which was later cancelled</li> <li>▪ 10 = Cancel record (This record follows '08' records)</li> <li>▪ 11 = Error record (This record follows '07' records)</li> <li>▪ 12 = Correction record (This record follows '01' records and contains the correction time and the original "incorrect" data). The final correction will be published.</li> </ul> |
| 9  | Sequence Number            | 16       | <a href="#">Sequence Number</a> | Message sequence number  |
| 10 | Trade ID                   | 20       | Text                            | <p>Identifier for tracking Trades. The TradeID is unique per participant per symbol per session within a trading session.</p> <p>For CTA symbols, (Tape A or B) this value is the CTA Participant Reference Number, which can be negative or 0.</p>  |
| 11 | Source of Trade            | 1        | Text                            | <ul style="list-style-type: none"> <li>▪ C = CTA</li> <li>▪ N = UTP</li> </ul>   |
| 12 | Trade Reporting Facility   | 1        | Text                            | <p>The ID of the Trade Reporting Facility (TRF) / Exchange where trade was reported, if applicable. Identifies the Participant with whom a Trade Reporting Facility (TRF) has been formed. In cases of Bonds and Local Issues, which are not eligible for TRF transactions, the TRF Identifier field will be Space-filled.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> <li>▪ blank = The trade was reported directly by the participant</li> <li>▪ B = FINRA / NASDAQ TRF Chicago</li> <li>▪ N = FINRA/ NYSE TRF</li> <li>▪ T = FINRA / NASDAQ TRF Carteret (CTA)</li> <li>▪ Q = FINRA/ NASDAQ TRF Carteret (UTP)</li> <li>▪ Space = Trade originates from FINRA Alternative</li> </ul>                       |

|    | FIELD NAME                               | MAX SIZE | FORMAT                    | DESCRIPTION  |
|----|--|----------|---------------------------|--|
|    |  |          |                           | Display Facility (UTP)<br>See <a href="#">Participant IDs</a> for codes  |
| 13 | Participant Timestamp                    | 15       | <a href="#">Timestamp</a> | Time when the trade was reported to the SIP.   |
| 14 | Trade Reporting Facility (TRF) Timestamp | 15       | <a href="#">Timestamp</a> | A FINRA Alternative Display Facility (ADF) or A FINRA Trade Reporting Facility-provided timest Market-Wide Circuit Breaker Status amp.<br><br><ul style="list-style-type: none"> <li>▪ If from an Exchange or if the FINRA ADF does not have a proprietary quotation feed, then will be set to blank.</li> <li>▪ If the FINRA ADF or a FINRA TRF provides a proprietary feed of its quotation information, then FINRA will publish the time of the quotation.</li> </ul> |
| 15 | Trade Through Exempt Indicator           | 1        | Numeric                   | Denotes whether or not a trade is exempt from Trade Through rules (Rule 611). Used with certain Sale Conditions.<br><br><ul style="list-style-type: none"> <li>▪ 0 = Not a Trade Through</li> <li>▪ 1 = Exempt Trade Through</li> </ul>  |

## 4. Daily TAQ Quotes File

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Every quote reported to the consolidated tape by all CTA and UTP participants.

The Daily TAQ Quotes (BBO) file is sorted by symbol, time, and message sequence number.

|   | FIELD NAME      | MAX SIZE | FORMAT    | DESCRIPTION   |
|---|-----------------|----------|-----------|---|
| 1 | Time            | 15       | Timestamp | Time the quote was published by the SIP   |
| 2 | Exchange        | 1        | Text      | The Exchange that issued the quote.<br><br>See <a href="#">Participant IDs</a> for codes  |
| 3 | Symbol          | 17       | Symbol    | Stock symbol  |
| 4 | Bid Price       | 21       | Numeric   | The highest price any buyer is willing to pay for shares of this security.  |
| 5 | Bid Size        | 10       | Numeric   | The maximum number of shares the highest bidder is willing to buy, in round lots.   |
| 6 | Offer Price     | 21       | Numeric   | The lowest price any seller is willing to take for shares of this security.   |
| 7 | Offer Size      | 10       | Numeric   | The maximum number of shares available at the offer price, in round lots.   |
| 8 | Quote Condition | 1        | Text      | Denotes a particular condition applicable to the quote. Determines whether a quote qualifies for the Best Bid and Best Offer calculation.<br><br>Condition of Quote issued:<br><br>CTA <ul style="list-style-type: none"> <li>▪ Space = Quote Condition Not Applicable</li> <li>▪ A = Slow on the Offer Side</li> <li>▪ B = Slow on the Bid Side</li> <li>▪ C = Closing</li> <li>▪ E = Slow Quote on the Bid due to LRP or GAP Quote</li> <li>▪ F = Slow Quote on the Offer due to LRP or GAP Quote</li> <li>▪ H = Slow Quote on the Bid and Offer Sides</li> <li>▪ L = Closed Market Maker (FINRA)</li> <li>▪ N = Non-Firm Quote</li> <li>▪ O = Opening Quote</li> <li>▪ R = Regular, two-sided open quote (FINRA Open)</li> <li>▪ U = Slow on the Bid and Offer Sides due to</li> </ul> |

|    | FIELD NAME             | MAX SIZE | FORMAT                          | DESCRIPTION   |
|----|------------------------|----------|---------------------------------|---|
|    |                        |          |                                 | <p>Liquidity Replenishment Point(LRP), or GAP Quote</p> <ul style="list-style-type: none"> <li>▪ W = Slow Quote due to a Set Slow list on both the Bid and Offer sides</li> <li>▪ 4 = On Demand Intra-Day Auction</li> </ul> <p>UTP</p> <ul style="list-style-type: none"> <li>▪ A = Manual Ask, automated Bid</li> <li>▪ B = Manual Bid, automated Ask</li> <li>▪ F = Fast Trading</li> <li>▪ H = Manual Bid and Ask</li> <li>▪ I = Order Imbalance</li> <li>▪ L = NBBO Closed Market Maker</li> <li>▪ N = Non-firm quote</li> <li>▪ O = Opening quote automated</li> <li>▪ R = NBBO Regular, two-sided open quote</li> <li>▪ U = Manual Bid and Ask (non-firm)</li> <li>▪ X = Order Influx</li> <li>▪ Y = NBBO Regular – One Sided Quote</li> <li>▪ Z = No Open/no resume</li> <li>▪ 4 = Intraday Auction</li> </ul>  |
| 9  | Sequence Number        | 20       | <a href="#">Sequence Number</a> | Message sequence number.  |
| 10 | National BBO Indicator | 1        | Text                            | <p>The effect this quote has on the NBBO, on any quote appendage published by the SIP, and on the NBBO file. See <b>Appendix G</b> for a complete list of the National BBO Indicator codes.</p> <p>CTA</p> <ul style="list-style-type: none"> <li>▪ A = No Best Bid change, No Best Offer change. New quote does not affect the Best Bid or Best Offer. No appendage is required (formerly '0').</li> <li>▪ G = Quote contains Best Bid, Quote contains Best Offer. New quote is itself the Best Bid and Best Offer. No appendage is required (formerly '1').</li> <li>▪ O= No Best Bid, No Best Offer. There is no Best Bid, and no Best Offer. No appendage is required (formerly '2').</li> <li>▪ T= Best Bid Short Appendage, Best Offer Short Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, a new Best Offer is generated and the new Best Offer information is</li> </ul> |

|    | FIELD NAME                                | MAX SIZE | FORMAT  | DESCRIPTION  |
|----|---|----------|---------|--|
|    |   |          |         | <p>contained in the Best Offer Short Appendage (formerly '6').</p> <ul style="list-style-type: none"> <li>U=Best Bid Long Appendage, Best Offer Long Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Long Appendage (formerly '4').</li> </ul> <p><b>UTP</b></p> <ul style="list-style-type: none"> <li>0 = This quote does not affect the NBBO. No appendage or NBBO record is required.</li> <li>1 = No NBBO (eg outside of market hours). No Appendage or NBBO record is required.</li> <li>2 = Short Form NBBO Appendage – A new NBBO is contained in NBBO file.</li> <li>3 = Long Form NBBO Appendage - A new NBBO is contained in the NBBO File.</li> <li>4 = This quote is itself the new NBBO. No appendage is required but an NBBO record is.</li> </ul> |
| 11 | <b>FINRA BBO (FBBO) Indicator</b>         | 1        | Text    | <p><b>CTA</b></p> <p>Indicates the effect this quote has on the FINRA BBO.</p> <ul style="list-style-type: none"> <li>Space = Not Applicable</li> <li>A = No FINRA BBO change</li> <li>B = FINRA BBO does not exist</li> </ul> <p>For <b>UTP</b>-published messages, this field is blank.</p>  |
| 12 | <b>FINRA ADF MPID Appendage Indicator</b> | 1        | Numeric | <p>Denotes the type of appendage to be included. If the FINRA ADF participant's BBO quotation impacts their single participant at either the Bid or Offer side of their market for the issue, a FINRA ADF MPID Appendage will be added. This appendage will include the ADF's single participant for its best bid and size and/or the ADF's single participant for its best offer and size.</p> <p>FINRA ADF MPID for UTP:</p> <ul style="list-style-type: none"> <li>0 = No ADF MPID changes – Current ADF quote does not affect the FINRA MPID. No</li> </ul>  |

|    | FIELD NAME                       | MAX SIZE | FORMAT | DESCRIPTION   |
|----|----------------------------------|----------|--------|---|
|    |                                  |          |        | <p>appendage.</p> <ul style="list-style-type: none"> <li>▪ 1 = No ADF MPID exists –No appendage.</li> <li>▪ 2 = ADF MPID(s) attached - A new FINRA MPID is contained in the attached appendage.</li> <li>▪ 3 = Not Applicable – Quote originates from a non-FINRA UTP participant . No appendage.</li> </ul>  |
| 13 | Quote Cancel/<br>Correction      | 1        | Text   | <p>Indicates that this record is a cancel or a correction of a previous quote</p> <ul style="list-style-type: none"> <li>▪ blank = Not a Cancel Quote</li> <li>▪ B = Cancel quote/Cancel Price Indication/Cancel Trading Range Indication</li> <li>▪ C = Corrected Price Indication</li> </ul>  |
| 14 | Source of Quote                  | 1        | Text   | <ul style="list-style-type: none"> <li>▪ C = CTA</li> <li>▪ N = UTP</li> </ul>  |
| 15 | Retail Interest Indicator (RPI)  | 1        | Text   | <p>Indicates the presence of Retail Price Improvement (RPI) interest between the Bid and the Offer</p> <ul style="list-style-type: none"> <li>▪ blank = Retail Interest not applicable</li> <li>▪ A = Retail Interest on Bid Quote</li> <li>▪ B = Retail Interest on Offer Quote</li> <li>▪ C = Retail Interest on the Bid and Offer Quotes</li> </ul>  |
| 16 | Short Sale Restriction Indicator | 1        | Text   | <p>Short Sale Restriction status</p> <p>A Short Sale Restriction is to be in effect if a security's price decreases by 10% or more from the previous day's closing price.</p> <p>Once activated, the Short Sale Restriction will remain in effect for the remainder of the day as well as the following day, unless deactivated.</p> <p><b>CTA:</b></p> <ul style="list-style-type: none"> <li>▪ blank = Short Sales Restriction Not in Effect</li> <li>▪ A = Short Sales Restriction Activated</li> <li>▪ C = Short Sales Restriction Continued</li> <li>▪ D = Short Sales Restriction Deactivated</li> <li>▪ E = Short Sales Restriction in Effect</li> </ul> |

|    | FIELD NAME                              | MAX SIZE | FORMAT                    | DESCRIPTION  |
|----|---|----------|---------------------------|--|
|    |   |          |                           | <b>UTP:</b> <ul style="list-style-type: none"> <li>▪ 0 = No Price test in effect</li> <li>▪ 1 = Reg SHO in effect due to an intra-day price drop in security</li> <li>▪ 2 = Reg SHO Restriction remains in effect</li> </ul>   |
| 17 | <b>LULD BBO Indicator</b>               | 1        | Text                      | <ul style="list-style-type: none"> <li>▪ blank = LULD Not Applicable</li> <li>▪ A = Bid Price above Upper Limit Price Band – Bid is Non Executable</li> <li>▪ B = Offer Price below Lower Limit Price Band – Offer is Non-Executable</li> <li>▪ C = Bid Offer outside price band -Non Executable</li> </ul>  |
| 18 | <b>SIP-generated Message Identifier</b> | 1        | Text                      | Originator of the message <ul style="list-style-type: none"> <li>▪ blank = originated from a market participant</li> <li>▪ E = originated from a SIP</li> </ul>  |
| 19 | <b>NBBO LULD Indicator</b>              | 1        | Text                      | LULD Limit Price Band effect on the NBB and NBO <ul style="list-style-type: none"> <li>▪ blank = LULD Not Applicable</li> <li>▪ A = NBB and/or NBO are Executable</li> <li>▪ B = NBB below Lower Band – NBB is Non-Executable</li> <li>▪ C = NBO above Upper Band – NBO is Non-Executable</li> <li>▪ D = NBB below Lower Band and NBO above Upper Band – NBB and NBO are Non-Executable</li> <li>▪ E = NBB equals Upper Band – NBB is in Limit State</li> <li>▪ F = NBO equals Lower Band – NBO is in Limit State</li> <li>▪ G = NBB equals Upper Band and NBO above Upper Band – NBB is in Limit State and NBO is Non-Executable</li> <li>▪ H = NBB below Lower Band and NBO equals Lower Band – NBB is Non-Executable and NBO is in Limit State</li> <li>▪ I = NBB equals Upper Band and NBO equals Lower Band (Crossed - NOT in Limit State)</li> </ul> |
| 20 | <b>Participant Timestamp</b>            | 15       | <a href="#">Timestamp</a> | Time the quote was published by the Participant to the SIP.  |
| 21 | <b>FINRA ADF</b>                        | 15       | <a href="#">Timestamp</a> | A FINRA ADF- or a FINRA TRF-provided timestamp.  |

|           | FIELD NAME  | MAX SIZE | FORMAT | DESCRIPTION  |
|-----------|---|----------|--------|--|
|           | <b>Timestamp</b>                                    |          |        | Blank = From an Exchange or the FINRA ADF or a FINRA TRF Facility does not have a proprietary quote feed   |
| <b>22</b> | <b>FINRA ADF Market Participant Quote Indicator</b> | <b>1</b> | Text   | <p><b>UTP</b> - FINRA ADF Market Participant Quote Indicator representing the Top of book quotations for each FINRA ADF participant</p> <ul style="list-style-type: none"> <li>▪ 0 = This quote is the BBO from the FINRA ADF</li> <li>▪ 1 = This quote is from a single FINRA ADF venue</li> <li>▪ blank = This quote is from CTA or UTP, not from a FINRA ADF</li> </ul> |
| <b>23</b> | <b>Security Status Indicator</b>                    | <b>2</b> | Text   | <p>The Security Status Indicator field is used to report trading suspensions in a security, price indications, trading range indications, LULD Price Bands and Market Wide Circuit Breaker activity.</p> <p>See <b>Appendix H</b> for a complete list of the Security Status Indicator codes.</p>  |



## 5. Daily TAQ NBBO File

The Daily TAQ NBBO file is a record of all quotes that cause the NBBO to change. The file shows the exchange and quote that caused the change and also provides the NBBO and the exchange(s) that is/are currently setting the NBBO.

However, if a quote sets both the National Best Bid and the National Best Offer, that quote is not included in the Daily TAQ NBBO file. These records are found in the TAQ Daily Quote file where the NBBO Indicator is "G" for CTA securities (src = "C") or the NASD Indicator is "4" for UTP securities (src = "N").

The Daily TAQ NBBO File is sorted by symbol, time, and message sequence number.

|   | FIELD           | MAX SIZE | FORMAT                    | DESCRIPTION  |
|---|-----------------|----------|---------------------------|--|
| 1 | Time            | 15       | <a href="#">Timestamp</a> | Time the quote was published by the SIP  |
| 2 | Exchange        | 1        | Text                      | The Exchange that issued the quote<br><br>See <a href="#">Participant IDs</a> for codes  |
| 3 | Symbol          | 17       | <a href="#">Symbol</a>    | Stock symbol   |
| 4 | Bid Price       | 21       | Numeric                   | The highest price any buyer is willing to pay for shares of this security.   |
| 5 | Bid Size        | 10       | Numeric                   | The maximum number of shares the highest bidder is willing to buy, in round lots.  |
| 6 | Offer Price     | 21       | Numeric                   | The lowest price any seller is willing to take for shares of this security.  |
| 7 | Offer Size      | 10       | Numeric                   | The maximum number of shares available at the offer price, in round lots.  |
| 8 | Quote Condition | 1        | Text                      | Special condition applicable to the quote<br><br><b>CTA</b> <ul style="list-style-type: none"> <li>▪ Space = Quote Condition Not Applicable</li> <li>▪ A = Slow on the Offer Side</li> <li>▪ B = Slow on the Bid Side</li> <li>▪ C = Closing</li> <li>▪ E = Slow Quote on the Bid due to LRP or GAP Quote</li> <li>▪ F = Slow Quote on the Offer due to LRP or GAP Quote</li> <li>▪ H = Slow Quote on the Bid and Offer Sides</li> </ul> |

|    | FIELD                  | MAX SIZE | FORMAT                          | DESCRIPTION  |
|----|------------------------|----------|---------------------------------|--|
|    |                        |          |                                 | <ul style="list-style-type: none"> <li>▪ L = Closed Market Maker (FINRA)</li> <li>▪ N = Non-Firm Quote</li> <li>▪ O = Opening Quote</li> <li>▪ R = Regular, two-sided open quote (FINRA Open)</li> <li>▪ U = Slow on the Bid and Offer Sides due to Liquidity Replenishment Point(LRP), or GAP Quote</li> <li>▪ W = Slow Quote due to a Set Slow list on both the Bid and Offer sides</li> <li>▪ 4 = On Demand Intra-Day Auction</li> </ul> <p><b>UTP</b></p> <ul style="list-style-type: none"> <li>▪ A = Manual Ask, automated Bid</li> <li>▪ B = Manual Bid, automated Ask</li> <li>▪ F = Fast Trading</li> <li>▪ H = Manual Bid and Ask</li> <li>▪ I = Order Imbalance</li> <li>▪ L = NBBO Closed Market Maker</li> <li>▪ N = Non-firm quote</li> <li>▪ O = Opening quote automated</li> <li>▪ R = NBBO Regular, two-sided open quote</li> <li>▪ U = Manual Bid and Ask (non-firm)</li> <li>▪ X = Order Influx</li> <li>▪ Y = NBBO Regular – One Sided Quote</li> <li>▪ Z = No Open/no resume</li> <li>▪ 4 = Intraday Auction</li> </ul> |
| 9  | Sequence Number        | 20       | <a href="#">Sequence Number</a> | Message sequence number.   |
| 10 | National BBO Indicator | 1        | Text                            | <p>Indicates the affect the new quote has on the NBBO. Denotes the type of appendage to be included. See <b>Appendix G</b> for a complete list of the National BBO Indicator.</p> <p><b>CTA - NBBO Indicator:</b></p> <ul style="list-style-type: none"> <li>▪ T = Best Bid Short Appendage, Best Offer Short Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, a new Best Offer is generated and the new Best Offer</li> </ul>  |

|    | FIELD                           | MAX SIZE | FORMAT  | DESCRIPTION   |
|----|---------------------------------|----------|---------|---|
|    |                                 |          |         | <p>information is contained in the Best Offer Short Appendage (formerly "6").</p> <ul style="list-style-type: none"> <li>U = Best Bid Long Appendage, Best Offer Long Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Long Appendage (formerly "4").</li> </ul> <p><b>UTP</b> - NBBO Appendage Indicator:</p> <ul style="list-style-type: none"> <li>2 = Short Form NBBO Appendage Attached – A new NBBO was generated as a result of the UTP participant's quote update and the new information is contained in the short form appendage (NBBO File)</li> <li>3 = Long Form of NBBO Appendage - A new NBBO was generated as a result of the UTP participant's quote update and the new BBO information is contained in the Long NBBO appendage (NBBO File).</li> </ul> <p>See <a href="#">UTP Specification</a></p> |
| 11 | <b>FINRA BBO Indicator</b>      | 1        | Text    | <p><b>CTA</b></p> <p>FINRA BBO Indicator indicates the effect this quote has on the FINRA BBO:</p> <ul style="list-style-type: none"> <li>Space = Not Applicable</li> <li>A = No FINRA BBO change</li> <li>B = FINRA BBO does not exist</li> </ul> <p>See <a href="#">CTA Specifications</a></p>  |
| 12 | <b>FINRA ADF MPID Indicator</b> | 1        | Numeric | <p><b>UTP</b></p> <p>Denotes the type of appendage to be included. If the FINRA ADF participant's BBO quotation impacts their single participant at either the Bid or Offer side of their</p>   |

|    | FIELD                          | MAX SIZE | FORMAT  | DESCRIPTION  |
|----|--------------------------------|----------|---------|--|
|    |                                |          |         | <p>market for the issue, a FINRA ADF MPID Appendage will be added. This appendage will include the ADF's single participant for its best bid and size and/or the ADF's single participant for its best offer and size.</p> <p>FINRA ADF MPID for UTP:</p> <ul style="list-style-type: none"> <li>▪ 0 = No ADF MPID changes – Current ADF quote does not affect the FINRA MPID. No appendage.</li> <li>▪ 1 = No ADF MPID exists – No appendage.</li> <li>▪ 2 = ADF MPID(s) attached - A new FINRA MPID is contained in the appendage.</li> <li>▪ 3 = Not Applicable – Quote originates from a UTP participant other than the FINRA. No appendage.</li> </ul> <p>See <a href="#">UTP Specification</a></p> |
| 13 | Quote Cancel/Correction        | 1        | Text    | <p>Indicates that this record is a cancel or a correction of a previous quote.</p> <p><b>CTA only:</b></p> <ul style="list-style-type: none"> <li>▪ blank = Not a Cancel Quote</li> <li>▪ B = Cancel quote, Cancel Price Indication, or Cancel Trading Range Indication</li> <li>▪ C = Corrected Price Indication</li> </ul>   |
| 14 | Source of Quote                | 1        | Text    | <p>Originating SIP of this message</p> <ul style="list-style-type: none"> <li>▪ C = CTA</li> <li>▪ N = UTP</li> </ul>  |
| 15 | Best Bid Quote Condition       | 1        | Text    | See <a href="#">Quote Condition Codes</a> for valid values   |
| 16 | Best Bid Exchange              | 1        | Text    | <p>The Exchange associated with the Best Bid</p> <p>See <a href="#">Participant IDs</a> for codes</p>  |
| 17 | Best Bid Price                 | 21       | Numeric | The Best Bid Price on a consolidated basis   |
| 18 | Best Bid Size                  | 10       | Numeric | The Bid Size associated with the Best Bid Price on a consolidated basis, in units of trade   |
| 19 | Best Bid FINRA Market Maker ID | 4        | Text    | Best Bid FINRA Market Maker ID (Long Appendage)  |

|    | FIELD                            | MAX SIZE | FORMAT  | DESCRIPTION  |
|----|----------------------------------|----------|---------|--|
| 20 | Best Offer Quote Condition       | 1        | Text    | See <a href="#">Quote Condition Codes</a> for valid values   |
| 21 | Best Offer Exchange              | 1        | Text    | The Exchange associated with the Best Offer:<br>See <a href="#">Participant IDs</a> for codes  |
| 22 | Best Offer Price                 | 21       | Numeric | The Best Offer Price on a consolidated basis   |
| 23 | Best Offer Size                  | 10       | Numeric | The Offer Size associated with the Best Bid Price, in units of trade   |
| 24 | Best Offer FINRA Market Maker ID | 4        | Text    | Best Offer FINRA Market Maker ID (Long Appendage)  |
| 25 | LULD BBO Indicator               | 1        | Text    | Indicates whether the participant quote is executable due to the price bands for the issue. <ul style="list-style-type: none"> <li>▪ blank = LULD Not Applicable</li> <li>▪ A = Bid Price above Upper Limit Price Band –Bid is Non-Executable</li> <li>▪ B = Offer Price below Lower Limit Price Band – Offer is Non-Executable</li> <li>▪ C = Bid and Offer outside price band - not executable</li> </ul>  |
| 26 | NBBO LULD Indicator              | 1        | Text    | LULD Limit Price Band effect on the NBB and NBO <ul style="list-style-type: none"> <li>▪ blank = LULD Not Applicable</li> <li>▪ A = NBB and/or NBO are Executable</li> <li>▪ B = NBB below Lower Band – NBB is Non-Executable</li> <li>▪ C = NBO above Upper Band – NBO is Non-Executable</li> <li>▪ D = NBB below Lower Band and NBO above Upper Band – NBB and NBO are Non-Executable</li> <li>▪ E = NBB equals Upper Band – NBB is in Limit State</li> <li>▪ F = NBO equals Lower Band – NBO is in Limit State</li> <li>▪ G = NBB equals Upper Band and NBO above Upper Band – NBB is in Limit State and NBO is Non-Executable</li> <li>▪ H = NBB below Lower Band and NBO equals Lower Band – NBB is Non-Executable and NBO is in Limit State</li> <li>▪ I = NBB equals Upper Band and NBO equals Lower Band (Crossed - NOT in Limit State)</li> </ul> |
| 27 | SIP-generated Message            | 1        | Text    | Valid values: <ul style="list-style-type: none"> <li>▪ E = originated from a SIP (CTA or UTP)</li> </ul>   |

|    | FIELD                     | MAX SIZE | FORMAT                    | DESCRIPTION   |
|----|---------------------------|----------|---------------------------|---|
|    | Identifier                |          |                           | <ul style="list-style-type: none"> <li>blank = originated from a participant</li> </ul>   |
| 28 | Participant Timestamp     | 15       | <a href="#">Timestamp</a> | Timestamp when this quote was submitted to the SIP  |
| 29 | FINRA ADF Timestamp       | 15       | <a href="#">Timestamp</a> | <p>The time when FINRA ADF or FINRA TRF published this quote to its proprietary feed.</p> <p>blank = this quote is from an Exchange or the FINRA ADF or FINRA TRF Facility does not have a proprietary quotation feed</p>   |
| 30 | Security Status Indicator | 2        | Text                      | <p>The Security Status Indicator field is used to report trading suspensions in a security, price indications, trading range indications, LULD Price Bands and Market Wide Circuit Breaker activity. When the Security Status Indicator is provided, the Quote Condition field must be space filled. If the Security Status Indicator is populated with either a regulatory or a non-regulatory status (other than Market Wide Circuit Breaker Levels), it will result in the NBBO being recalculated excluding the Participant from the NBBO if that Participant was part or all of the NBBO.</p> <p>See <b>Appendix H</b> for a complete list of the Security Status Indicator codes.</p> |

## 6. Daily TAQ Quote LULD File

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All Limit-up/Limit-down Price Band messages published by CQS and UQDF.

The Daily TAQ Quote LULD File is sorted by time.

|   | FIELD                     | MAX SIZE | FORMAT                    | DESCRIPTION   |
|---|---------------------------|----------|---------------------------|---|
| 1 | Time                      | 15       | <a href="#">Timestamp</a> | Time this message was published by the SIP  |
| 2 | Sequence Number           | 20       | Numeric                   | Message sequence number   |
| 3 | Source                    | 1        | Text                      | <ul style="list-style-type: none"> <li>▪ C = CTA</li> <li>▪ N = UTP</li> </ul>  |
| 4 | Symbol                    | 17       | <a href="#">Symbol</a>    | Stock symbol  |
| 5 | LULD Price Band Indicator | 1        | Text                      | <p>The LULD Price Band Indicator denotes the event that initiated the price band message being disseminated.</p> <p><b>UTP</b></p> <ul style="list-style-type: none"> <li>▪ A = Opening Update</li> <li>▪ B = Intra-Day Update</li> <li>▪ C = Restated Value</li> <li>▪ D = Suspended during trading halt or trading pause</li> <li>▪ E = Re-Opening Update</li> <li>▪ F = Outside price band rule hours</li> <li>▪ X = Auction extension (Auction Collar message)</li> <li>▪ blank = None provided</li> </ul> <p><b>CTA</b></p> <ul style="list-style-type: none"> <li>▪ X = Auction extension (Auction Status message)</li> <li>▪ blank = All other events</li> </ul> |
| 6 | Low Price                 | 21       | Numeric                   | <p>If LULD Price Band Indicator = X, Low Price is the Lower Auction Collar Price for this security, otherwise it is the LULD Lower Limit Price Band.</p> <p>Note that Price Bands are 0 during trading pauses.</p>  |
| 7 | High Price                | 21       | Numeric                   | <p>If LULD Price Band Indicator = X, High Price is the Upper Auction Collar Price for this security, otherwise it is the LULD Upper Limit Price Band.</p> <p>Note that Price Bands are 0 during trading pauses.</p>   |

|    | FIELD                      | MAX SIZE | FORMAT  | DESCRIPTION   |
|----|----------------------------|----------|---------|---|
| 8  | <b>NBBO LULD Indicator</b> | 1        | Text    | <p>LULD Limit Price Band effect on the NBB and NBO</p> <ul style="list-style-type: none"> <li>• blank = LULD Not Applicable</li> <li>• A = NBB and/or NBO are Executable</li> <li>• B = NBB below Lower Band – NBB is Non-Executable</li> <li>• C = NBO above Upper Band – NBO is Non-Executable</li> <li>• D = NBB below Lower Band and NBO above Upper Band – NBB and NBO are Non-Executable</li> <li>• E = NBB equals Upper Band – NBB is in Limit State</li> <li>• F = NBO equals Lower Band – NBO is in Limit State</li> <li>• G = NBB equals Upper Band and NBO above Upper Band – NBB is in Limit State and NBO is Non-Executable</li> <li>• H = NBB below Lower Band and NBO equals Lower Band – NBB is Non-Executable and NBO is in Limit State</li> <li>• I = NBB equals Upper Band and NBO equals Lower Band (Crossed - NOT in Limit State)</li> </ul> |
| 9  | <b>Reference Price</b>     | 21       | Numeric | If LULD Price Band Indicator = X, this field is the Auction Collar Reference Price, otherwise it is blank.  |
| 10 | <b>Num Extensions</b>      | 3        | Numeric | If LULD Price Band Indicator = X, this field is the number of extensions the current auction has received, otherwise, it is blank.  |



## 7. Daily TAQ Trade LULD File

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All Limit-up/Limit-down Price Band messages published by CTS and UTDF.

The Daily TAQ Trade LULD File is sorted by time.

|   | FIELD                     | MAX SIZE | FORMAT                    | DESCRIPTION  |
|---|---------------------------|----------|---------------------------|--|
| 1 | Time                      | 15       | <a href="#">Timestamp</a> | Time of message published by the SIP   |
| 2 | Sequence Number           | 20       | Numeric                   | The Message Sequence Number  |
| 3 | Source                    | 1        | Text                      | <ul style="list-style-type: none"> <li>▪ C = CTA</li> <li>▪ N = UTP</li> </ul>   |
| 4 | Symbol                    | 17       | <a href="#">Symbol</a>    | Stock symbol   |
| 5 | Low Price                 | 21       | Numeric                   | <p>If LULD Price Band Indicator = X, Low Price is the Lower Auction Collar Price for this security, otherwise it is the LULD Lower Limit Price Band.</p> <p>Note that Price Bands are 0 during trading pauses.</p>   |
| 6 | High Price                | 21       | Numeric                   | <p>If LULD Price Band Indicator = X, High Price is the Upper Auction Collar Price for this security, otherwise it is the LULD Upper Limit Price Band.</p> <p>Note that Price Bands are 0 during trading pauses.</p>  |
| 7 | LULD Price Band Indicator | 1        | Text                      | <p><b>CTA:</b></p> <p>Identifies the LULD action (e.g., Price Bands, Consolidated Quotation system NBBO Limit State Entered/Exited) related to a security</p> <ul style="list-style-type: none"> <li>▪ blank = LULD Not Applicable</li> <li>▪ A = LULD Price Band</li> <li>▪ B = Republished LULD Price Band</li> <li>▪ C = NBB Limit State Entered</li> <li>▪ D = NBB Limit State Exited</li> <li>▪ E = NBO Limit State Entered</li> <li>▪ F = NBO Limit State Exited</li> <li>▪ G = NBB and NBO Limit State Entered</li> <li>▪ H = NBB and NBO Limit State Exited</li> <li>▪ I = NBB Limit State Entered and NBO Limit State Exited</li> <li>▪ J = NBB Limit State Exited and NBO Limit State Entered</li> </ul> |

|   | FIELD           | MAX SIZE | FORMAT  | DESCRIPTION  |
|---|-----------------|----------|---------|--|
|   |                 |          |         | <ul style="list-style-type: none"> <li>▪ X = Auction extension (Auction Status message)</li> </ul> <p><b>UTP:</b></p> <p>Denotes the event that initiated the price band message being disseminated.</p> <ul style="list-style-type: none"> <li>▪ A = Opening Update</li> <li>▪ B = Intra-Day Update</li> <li>▪ C = Restated Value</li> <li>▪ D = Suspended during trading halt or trading pause</li> <li>▪ E = Re-Opening Update</li> <li>▪ F = Outside price band rule hours</li> <li>▪ X = Auction extension (Auction Collar message)</li> <li>▪ blank = None provided</li> </ul> |
| 8 | Reference Price | 21       | Numeric | If LULD Price Band Indicator = X, this field is the Auction Collar Reference Price, otherwise it is blank.   |
| 9 | Num Extensions  | 3        | Numeric | If LULD Price Band Indicator = X, this field is the number of extensions the current auction has received, otherwise, it is blank.   |

## 8. Daily TAQ CTA Admin File

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Administrative messages disseminated by CTA.

The Daily TAQ CTA Admin File is sorted by Symbol, Time and Message sequence number.

|   | FIELD                  | MAX SIZE | FORMAT                          | DESCRIPTION   |
|---|------------------------|----------|---------------------------------|---|
| 1 | Timestamp              | 15       | <a href="#">Timestamp</a>       | Time of message published by the SIP  |
| 2 | Symbol                 | 17       | <a href="#">Symbol</a>          | Stock symbol  |
| 3 | Message Category       | 1        | Text                            | <ul style="list-style-type: none"> <li>M = Market Status</li> </ul>   |
| 4 | Message Type           | 1        | Text                            | If Message Category = M, this field contains <ul style="list-style-type: none"> <li>K = Market-Wide Circuit Breaker Decline Level Status</li> <li>L = Market-Wide Circuit Breaker Status</li> </ul>   |
| 5 | Sequence Number        | 20       | <a href="#">Sequence Number</a> | Message Sequence Number   |
| 6 | Participant Identifier | 1        | Text                            | Participant ID of the Exchange or SIP that initiated the message. See <a href="#">Participant IDs</a> for codes.  |
| 7 | Participant Timestamp  | 15       | <a href="#">Timestamp</a>       | Participant-provided timestamp (Timestamp 1)  |
| 8 | Financial Status       | 1        | Text                            | The financial status of the security. <ul style="list-style-type: none"> <li>0 = Not Bankrupt / Not Below Continuing Listing Standards/Not Late Filing/ Not Creations Suspended (for Exchange Traded Products) / Not Redemptions Suspended (for Exchange Traded Products) / Not Liquidation (for Exchange Traded Products)</li> <li>1 = Bankrupt</li> <li>2 = Below Continuing Listing Standards (For NYSE, NYSE American &amp; Regional Listings)</li> <li>3 = Bankrupt &amp; Below Continuing Listing Standards (For NYSE, NYSE American &amp; Regional Listings)</li> <li>4 = Late Filing</li> <li>5 = Bankrupt &amp; Late Filing</li> <li>6 = Below Continuing Listing Standards &amp; Late Filing (For NYSE, NYSE American &amp; Regional</li> </ul> |

|    | FIELD           | MAX SIZE | FORMAT | DESCRIPTION   |
|----|-----------------|----------|--------|---|
|    |                 |          |        | <p>Listings)</p> <ul style="list-style-type: none"> <li>▪ 7 = Bankrupt, Below Continuing Listing Standards &amp; Late Filing (For NYSE, NYSE American &amp; Regional Listings)</li> <li>▪ 8 = Creations Suspended (for Exchange Traded Products)</li> <li>▪ 9 = Redemptions Suspended (for Exchange Traded Products)</li> <li>▪ A = Liquidation (for Exchange Traded Products)</li> </ul>   |
| 9  | Reserved        | 1        | Text   | blank (ignore any content)  |
| 10 | Security Status | 1        | Text   | <p>The trading status applicable to this transaction.</p> <ul style="list-style-type: none"> <li>▪ 2 = Trading Halt</li> <li>▪ 3 = Resume</li> <li>▪ 5 = Price Indication</li> <li>▪ 6 = Trading Range Indication</li> <li>▪ 7 = Market Imbalance Buy</li> <li>▪ 8 = Market Imbalance Sell</li> <li>▪ 9 = Market On Close Imbalance Buy</li> <li>▪ A = Market On Close Imbalance Sell</li> <li>▪ B = Reserved</li> <li>▪ C = No Market Imbalance</li> <li>▪ D = No Market On Close Imbalance</li> <li>▪ E = Short Sale Restriction</li> <li>▪ F = LULD</li> </ul>                 |
| 11 | Halt Reason     | 1        | Text   | <p>The reason for the Trading Halt. See Appendix B in the <a href="#">CTA Specifications</a> for definition of values.</p> <ul style="list-style-type: none"> <li>▪ space = not applicable</li> <li>▪ D = News Dissemination</li> <li>▪ I = Order Imbalance</li> <li>▪ M = LULD Trading Pause</li> <li>▪ P = News Pending</li> <li>▪ X = Operational</li> <li>▪ Y = Sub-Penny Trading</li> <li>▪ 1 = Market-Wide Circuit Breaker Level 1 – Breached</li> <li>▪ 2 = Market-Wide Circuit Breaker Level 2 – Breached</li> <li>▪ 3 = Market-Wide Circuit Breaker Level 3 –</li> </ul> |

|    | FIELD       | MAX SIZE | FORMAT                | DESCRIPTION  |
|----|-------------|----------|-----------------------|--|
|    |             |          |                       | Breached   |
| 12 | Reserved    | 1        | Text                  | <ul style="list-style-type: none"> <li>ASCII '0' (ignore any content)</li> </ul>   |
| 13 | Reserved    | 1        | Text                  | <ul style="list-style-type: none"> <li>ASCII '0' (ignore any content)</li> </ul>   |
| 14 | Last Price  | 21       | <a href="#">Price</a> | Last Price   |
| 15 | Reserved    | 1        | Numeric               | <ul style="list-style-type: none"> <li>blank</li> </ul>  |
| 16 | Upper Price | 21       | <a href="#">Price</a> | <p>Upper price band value for a security.</p> <ul style="list-style-type: none"> <li>This field = the LULD upper limit price band when Security Status field = F (LULD) and LULD Indicator field = A or B (LULD Price Bands)</li> <li>This field = the Indication High Price when Security Status field = 5 (Price Indication)</li> <li>This field is blank when no LULD Price Bands or Price Indications are in effect for this security</li> </ul> |
| 17 | Lower Price | 21       | <a href="#">Price</a> | <p>Lower price band value for a security.</p> <ul style="list-style-type: none"> <li>This field = the LULD lower limit price band when Security Status field = F (LULD) and LULD Indicator field = A or B (LULD Price Bands)</li> <li>This field = the Indication Low Price when Security Status field = 5 (Price Indication)</li> </ul> <p>This field is blank when no LULD Price Bands or Price Indications are in effect for this security</p>    |
| 18 | Buy Volume  | 10       | Numeric               | <p>The reported imbalance of buy orders without matching sell orders for this security and Participant. See Appendix B for Market Imbalance and Market on Close Imbalance (MOC) definitions.</p> <p>See Appendix B in the <a href="#">CTA Specifications</a> for definition of values.</p>   |
| 19 | Sell Volume | 10       | Numeric               | <p>The reported imbalance of sell orders without matching buy orders for this security and Participant. See Appendix B for Market Imbalance and Market on Close Imbalance (MOC) definitions.</p> <p>See Appendix B in the <a href="#">CTA Specifications</a> for definition</p>  |

|    | FIELD                            | MAX SIZE | FORMAT | DESCRIPTION  |
|----|----------------------------------|----------|--------|--|
|    |                                  |          |        | of values.   |
| 20 | Short Sale Restriction Indicator | 1        | Text   | <p>Identifies whether a Short Sale Restriction is in effect for a security. A Short Sale Restriction goes into effect if a security's price decreases by 10% or more from the previous day's closing price. Once activated, the Short Sale Restriction remains in effect for the remainder of the day as well as the following day, unless deactivated.</p> <ul style="list-style-type: none"> <li>▪ blank = Short Sales Restriction Not in Effect</li> <li>▪ A = Short Sales Restriction Activated</li> <li>▪ C = Short Sales Restriction Continued</li> <li>▪ D = Short Sales Restriction Deactivated</li> <li>▪ E = Short Sales Restriction in Effect</li> </ul>  |
| 21 | LULD Indicator                   | 1        | Text   | <p>Identifies the LULD action related to a security (e.g., Price Bands, NBBO Limit State Entered/Exited).</p> <p>When this field = A or B, the price band values will be contained in the Upper Price and Lower Price fields.</p> <ul style="list-style-type: none"> <li>▪ blank = LULD Not Applicable</li> <li>▪ A = LULD Price Band</li> <li>▪ B = Republished LULD Price Band</li> <li>▪ C = NBB Limit State Entered</li> <li>▪ D = NBB Limit State Exited</li> <li>▪ E = NBO Limit State Entered</li> <li>▪ F = NBO Limit State Exited</li> <li>▪ G = NBB and NBO Limit State Entered</li> <li>▪ H = NBB and NBO Limit State Exited</li> <li>▪ I = NBB Limit State Entered and NBO Limit State Exited</li> <li>▪ J = NBB Limit State Exited and NBO Limit State Entered</li> </ul> |
| 22 | MWCB Decline Level 1             | 12       | Text   | <p>The daily Level 1 MWCB trigger value (7% of the Previous Close of the S&amp;P 500 Value)</p> <p>An index value (not a price) with implied 2 decimal places.</p>   |
| 23 | MWCB Decline Level 2             | 12       | Text   | <p>The daily Level 1 MWCB trigger value (13% of the Previous Close of the S&amp;P 500 Value)</p> <p>An index value (not a price) with implied 2 decimal places.</p>  |

|    | FIELD                       | MAX SIZE | FORMAT | DESCRIPTION  |
|----|-----------------------------|----------|--------|--|
| 24 | <b>MWCB Decline Level 3</b> | 12       | Text   | The daily Level 1 MWCB trigger value (20% of the Previous Close of the S&P 500 Value)<br><br>An index value (not a price) with implied 2 decimal places.   |
| 25 | <b>MWCB Status</b>          | 1        | Text   | Set to non-blank when the MWCB threshold level that has been breached.<br><br>Each Level will be disseminated only once during the trading day, unless a Level is breached as a result of erroneous activity. The most recently disseminated breached Level will be in effect.<br><br>Valid values: 1, 2, 3<br><br>Blank = no MWCB level has been breached |
| 26 | <b>Message Text</b>         | 1,000    | Text   | Text of the administrative message   |

## 9. Daily TAQ UTP Admin File

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Administrative messages disseminated by UTP .

The Daily TAQ UTP Admin file is sorted by Symbol, Time and Message sequence number.

|   | FIELD                        | MAX SIZE | FORMAT                          | DESCRIPTION  |
|---|------------------------------|----------|---------------------------------|--|
| 1 | Timestamp                    | 15       | <a href="#">Timestamp</a>       | Time of message published by the SIP   |
| 2 | Symbol                       | 17       | <a href="#">Symbol</a>          | Stock symbol   |
| 3 | Message Category             | 1        | Text                            | <ul style="list-style-type: none"> <li>A = Administrative</li> </ul>   |
| 4 | Message Type                 | 1        | Text                            | Valid values for UTP: <ul style="list-style-type: none"> <li>A = General Administrative</li> <li>B = Issue Symbol Directory</li> <li>C = Market Wide Circuit Breaker Decline</li> <li>D = Market Wide Circuit Breaker Status</li> <li>H = CROSS SRO Trading Action</li> <li>K = Market Center Trading Action</li> <li>P = Limit Up –Limit Down Price Band</li> <li>V = Reg SHO Short Sale Restriction Indicator</li> </ul> |
| 5 | Sequence Number              | 20       | <a href="#">Sequence Number</a> | Message Sequence Number  |
| 6 | Market Center OriginatorID   | 1        | Text                            | The ID of the UTP participant that originated the message.<br><br>See <a href="#">Participant IDs</a> for codes  |
| 7 | Sub-Market Center Identifier | 1        | Text                            | The ID of the originating market center of a FINRA reported trading action.<br><br>See <a href="#">Participant IDs</a> for codes <ul style="list-style-type: none"> <li>blank = No sub-market; Message originates from FINRA Alternative Display Facility.</li> </ul>  |
| 8 | Participant Timestamp        | 15       | <a href="#">Timestamp</a>       | Participant-provided timestamp (Timestamp 1)   |
| 9 | Financial Status Indicator   | 1        | Text                            | Identifies the financial status of this security: <ul style="list-style-type: none"> <li>C = Creations and/or Redemptions Suspended for Exchange Traded Product</li> </ul>   |



|    | FIELD                            | MAX SIZE | FORMAT          | DESCRIPTION  |
|----|----------------------------------|----------|-----------------|--|
|    |                                  |          |                 | <ul style="list-style-type: none"> <li>▪ D = Deficient: Issuer Failed to Meet NASDAQ Continued Listing Requirements</li> <li>▪ E = Delinquent: Issuer Missed Regulatory Filing Deadline</li> <li>▪ Q = Bankrupt: Issuer Has Filed for Bankruptcy</li> <li>▪ N = Normal (Default): Issuer Is NOT Deficient, Delinquent, or Bankrupt</li> <li>▪ G = Deficient and Bankrupt</li> <li>▪ H = Deficient and Delinquent</li> <li>▪ J = Delinquent and Bankrupt</li> <li>▪ K = Deficient, Delinquent, and Bankrupt</li> <li>▪ blank = no value provided</li> </ul> |
| 10 | Short Sale Threshold Indicator   | 1        | Text            | Short Sales Threshold Indicator: <ul style="list-style-type: none"> <li>▪ Y= Issue is restricted</li> <li>▪ N = Issue is not restricted</li> <li>▪ blank = Threshold Indicator Not Available</li> </ul>  |
| 11 | Short Sale Restriction Indicator | 1        | Numeric         | Identifies the Reg SHO short sale price test status for a NASDAQ-listed issue at the time of dissemination: <ul style="list-style-type: none"> <li>▪ 0 = No Price test in effect</li> <li>▪ 1 = Reg SHO in effect due to an intraday price drop in security</li> <li>▪ 2 = Reg SHO Restriction remains in effect</li> </ul>  |
| 12 | Trading Action Code              | 1        | Text            | Trade Action Code <ul style="list-style-type: none"> <li>▪ H = Trading Halt</li> <li>▪ Q = Quotation Resumption</li> <li>▪ T = Trading Resumption</li> <li>▪ P = Volatility Trading Pause</li> <li>▪ Z = Regular Trading In Effect</li> <li>▪ blank = no value provided</li> </ul>   |
| 13 | Trading Action Sequence Number   | 21       | Sequence Number | UTP Trading Action Sequence Number   |
| 14 | Trading Action                   | 15       | Timestamp       | Timestamp of when the action occurred  |

|    | FIELD                 | MAX SIZE | FORMAT | DESCRIPTION  |
|----|-----------------------|----------|--------|--|
|    | Timestamp             |          |        |  |
| 15 | Trading Action Reason | 6        | Text   | <p>Trading Action Reason Code for UTP:</p> <ul style="list-style-type: none"> <li>▪ A = Halt News Pending</li> <li>▪ B = Halt News Dissemination</li> <li>▪ C = Single Stock Trading Pause In Affect</li> <li>▪ D = Regulatory Halt Extraordinary Market Activity</li> <li>▪ E = Halt ETF</li> <li>▪ F = Trading Halted; For information requested by NASDAQ</li> <li>▪ G = Halt Not Compliance</li> <li>▪ H = Halt Filings Not Current</li> <li>▪ I = Halt Trading Suspension</li> <li>▪ J = Halt Regulatory Concern</li> <li>▪ K = Operations Halt, Contact Market Operations</li> <li>▪ L = IPO Issue not yet Trading</li> <li>▪ M = Corporate Action</li> <li>▪ N = Quotation Not Available</li> <li>▪ O = Volatility Trading Pause</li> <li>▪ P = Volatility Trading Pause – Straddle Condition</li> <li>▪ Q = News and Resumption Times</li> <li>▪ R = Single Stock Trading Pause/Quotation-Only Period</li> <li>▪ S = Qualifications Issues Reviewed/Resolved; Quotations/Trading to Resume</li> <li>▪ T = Filing Requirements Satisfied/Resolved; Quotations/Trading To Resume</li> <li>▪ U = Issuer News Not Forthcoming; Quotations/Trading To Resume</li> <li>▪ V = Qualifications Halt ended; maint. Req. met; Resume</li> <li>▪ W = Qualifications Halt Concluded; Filings Met; Quotes/Trades To Resume</li> <li>▪ X = Trade Halt Concluded By Other Regulatory Auth,; Quotes/Trades Resume</li> <li>▪ Y = New Issue Available</li> <li>▪ Z = Issue Available</li> <li>▪ A1 = Market Wide Circuit Breaker Halt – Carry over from previous day</li> <li>▪ A2 = Market Wide Circuit Breaker Resumption</li> <li>▪ A3 = IPO security released for quotation</li> </ul> |

|    | FIELD                              | MAX SIZE | FORMAT  | DESCRIPTION   |
|----|------------------------------------|----------|---------|---|
|    |                                    |          |         | <ul style="list-style-type: none"> <li>▪ A4 = IPO security – positioning window extension</li> <li>▪ 1 = Market Wide Circuit Breaker Halt – Level 1</li> <li>▪ 2 = Market Wide Circuit Breaker Halt – Level 2</li> <li>▪ 3 = Market Wide Circuit Breaker Halt – Level 3</li> <li>▪ blank = Reason not provided</li> </ul>   |
| 16 | <b>LULD Lower Limit Price Band</b> | 21       | Numeric | The lower band price for this security. During a trading pause, this field = 0.   |
| 17 | <b>LULD Upper Limit Price Band</b> | 21       | Numeric | The upper band price for this security. During a trading pause, this field = 0.   |
| 18 | <b>LULD Price Band Indicator</b>   | 1        | Text    | Indicates the event that initiated this price band message: <ul style="list-style-type: none"> <li>▪ A = Opening Update</li> <li>▪ B = Intra-Day Update</li> <li>▪ C = Restated Value</li> <li>▪ D = Suspended during trading halt or trading pause</li> <li>▪ E = Re-Opening Update</li> <li>▪ F = Outside price band rule hours</li> <li>▪ blank = None provided</li> </ul> |
| 19 | <b>MWCB Decline Level 1</b>        | 12       | Text    | Informs participants and the UTP data recipients what the daily MWCB breach points are set to for the current trading day. MWCB Decline Level 1 Breached (7% of the Previous Close of the S&P 500 Value)  |
| 20 | <b>MWCB Decline Level 2</b>        | 12       | Text    | MWCB Decline Level 2 Breached (13% of the Previous Close of the S&P 500 Value)  |
| 21 | <b>MWCB Decline Level 3</b>        | 12       | Text    | MWCB Decline Level 3 Breached (20% of the Previous Close of the S&P 500 Value)  |
| 22 | <b>MWCB Status</b>                 | 1        | Numeric | Informs participants and the UTP data recipients when a MWCB has breached one of the established levels. The MWCB Status message will be generated once for each level if the S&P 500 declines past the established breaker decline level for the trading day.  |

|    | FIELD        | MAX SIZE | FORMAT | DESCRIPTION  |
|----|--------------|----------|--------|--|
|    |              |          |        | <ul style="list-style-type: none"><li>▪ 1 = MWCB Level 1</li><li>▪ 2 = MWCB Level 2</li><li>▪ 3 = MWCB Level 3</li></ul> |
| 23 | Message Text | 1,000    | Text   | Text of the administrative message   |

## 10. APPENDIX A: BBO QUALIFYING CONDITIONS

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Quote conditions that are eligible to be the best bid or offer.

**Source:** [CTA Specifications](#)

| CODE | BBO QUALIFYING QUOTE CONDITIONS                                   |
|------|---|
| A    | Slow Quote on the Offer Side                                      |
| B    | Slow Quote on the Bid Side  |
| H    | Slow Quote on the Bid and Offer Sides                             |
| O    | Opening Quote   |
| R    | Regular Quote (FINRA –Market Marker Open)                         |
| W    | Slow Quote due to a Set Slow list on both the Bid and Offer sides |

## 11. APPENDIX B: NYSE STOCK SYMBOL SUFFIXES

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| SUFFIX | DESCRIPTION  |
|--------|--|
| <v>    | <v> represents a character; Series (or Class) A-T & V-Z<br>Example: ZZZ A is the same as ZZZ.A   |
| <v>CL  | Series (or Class) A-T & V-Z Called.<br>Example: ZZZ ACL is the same as ZZZ.A.CL  |
| <v>CV  | Series (or Class) A-T & V-Z Convertible.<br>Example: ZZZ ACV is the same as ZZZ.A.CV   |
| <v>WI  | Series (or Class) A-T & V-Z When Issued.<br>Example: ZZZ AWI is the same as ZZZ.Aw   |
| CL     | Called.<br>Example: ZZZ CL is the same as ZZZ.CL   |
| CT     | Certificates.<br>Example: ZZZ CT is the same as ZZZ.CT   |
| CV     | Convertible.<br>Example: ZZZ CV is the same as ZZZ.CV (ZZZ.CV)   |
| CVR    | Contingent Value Right.<br>Example: ZZZ CVR is the same as<br>ZZZ.CVR  |
| CVCL   | Convertible Called.<br>Example: ZZZ CVCL is the same as ZZZ.CV.CL  |
| DP     | Amount of most-recent dividend to go "ex-distribution".<br>Example: ZZZ DP is the same as ZZZ.DP   |
| DV     | Accumulated dividend per share, net of expenses, through and including the previous day's close of trading.<br>Example: ZZZ DV is the same as ZZZ.DV |
| EC     | Emerging Company Marketplace.<br>Example: ZZZ EC is the same as ZZZ.EC   |
| EU     | Estimated cash amount for creation unit.<br>Example: ZZZ EU is the same as ZZZ.EU  |

|                      |  |
|----------------------|--|
| <b>FN</b>            | Foreign News.<br>Example: ZZZ FN is the same as ZZZ.F.N  |
| <b>ID</b>            | Index – differentiates an index from a stock with the same root symbol.<br>Example: III ID is the same as III.ID                                       |
| <b>IV</b>            | Intra-day Net Asset Value per share.<br>Example: ZZZ IV is the same as ZZZ.IV  |
| <b>NV</b>            | Net Asset Value per share, as of the close on the previous trading day.<br>Example: ZZZ NV is the same as ZZZ.NV                                       |
| <b>PP</b>            | Partial Paid.<br>Example: ZZZ PP is the same as ZZZ.PP   |
| <b>PTCL</b>          | Part Called.<br>Example: ZZZ PTCL is the same as ZZZ.PT.CL   |
| <b>PR</b>            | Preferred. Example: ZZZ PR is the same as ZZZp   |
| <b>PR&lt;v&gt;</b>   | <v> represents a character; Preferred Series A-T & V-Z. Example: ZZZ PRA is the same as ZZZpA ZZZ, PRB is the same as ZZZpB                            |
| <b>PR&lt;v&gt;CL</b> | <v> represents a character; Preferred Series A-T & V-Z Called. Example: ZZZ PRACL is the same as ZZZpA.CL ZZZ, PRBCL is the same as ZZZpB.CL           |
| <b>PR&lt;v&gt;CV</b> | <v> represents a character; Preferred Series A-T & V-Z Convertible. Example: ZZZ PRACV is the same as ZZZpA.CV ZZZ, PRBCV is the same as ZZZpB.CV      |
| <b>PR&lt;v&gt;WI</b> | <v> represents a character; Preferred Series A-T & V-Z When Issued. Example: ZZZ PRAWI is the same as ZZZpAw ZZZ, PRBWI is the same as ZZZpBw          |
| <b>PRWI</b>          | Preferred When Issued. Example: ZZZ PRWI is the same as ZZZpw  |
| <b>PRCL</b>          | Preferred Called. Example: ZZZ PRCL is the same as ZZZp.CL   |
| <b>PRCV</b>          | Preferred Convertible. Example: ZZZ PRCV is the same as ZZZp.CV  |
| <b>PRWD</b>          | Preferred When Distributed. Example: ZZZ PRWD is the same as ZZZp.WD   |
| <b>PRC&lt;v&gt;</b>  | Indicates Class A; could also be B-K and M-S; Second Category of Preferred.<br>Example: ZZZ PRCA is the same as ZZZpCA ZZZ, PRCB is the same as ZZZpCB |
| <b>RT</b>            | Rights. Example: ZZZ R is the same as ZZZr   |
| <b>RWI</b>           | Rights When Issued. Example: ZZZ RWI is the same as ZZZrw  |
| <b>SC</b>            | Small Corporate Offering Registration. Example: ZZZ SC is the same as ZZZ.SC   |

|                    |  |
|--------------------|--|
| <b>SP</b>          | Special. Example: ZZZ SP is the same as ZZZ.SP   |
| <b>SD</b>          | Stamped. Example: ZZZ SD is the same as ZZZ.SD   |
| <b>SO</b>          | Current Shares Outstanding, in thousands. Example: ZZZ SO is the same as ZZZ.SO  |
| <b>TC</b>          | Total cash amount per creation unit, in thousands. Example: ZZZ TC is the same as ZZZ.TC   |
| <b>TT</b>          | Tier II Securities. Example: ZZZ TT is the same as ZZZ.TT  |
| <b>U</b>           | Units (a combination of securities composed of two or more of warrants, common stocks, preferred stocks and/or bonds). Example: ZZZ U is the same as ZZZ.U   |
| <b>VR</b>          | Variable Common Rights. Example: ZZZ VR is the same as ZZZ.VR  |
| <b>WD</b>          | When Distributed. Example: ZZZ WD is the same as ZZZ.WD  |
| <b>WI</b>          | When Issued. Example: ZZZ WI is the same as ZZZw   |
| <b>WS</b>          | Warrants. Example: ZZZ WS is the same as ZZZ.WS  |
| <b>WWS</b>         | With Warrants. Example: ZZZ WWS is the same as ZZZ.W.WS  |
| <b>WS&lt;v&gt;</b> | Warrants Series <v>; Series A-T & V-Z. Example: ZZZ WSA is the same as ZZZ.WSA   |
| <b>WSWI</b>        | Warrants When Issued   |
| <b>Called</b>      | An issue being redeemed by its issuing corporation under definite conditions before maturity.  |
| <b>Certificate</b> | A negotiable certificate representing deposit of stock with a pending change in its condition.   |
| <b>Convertible</b> | A preferred share which its owner may convert into common stock or another security, usually in the same company, in accordance with the terms of issue.   |
| <b>Preferred</b>   | A class of stock with priority over common stock in regard to earnings and/or liquidations.  |
| <b>Rights</b>      | Represents the privilege to subscribe (in proportion to the number of shares owned) to new or additional securities, usually at or below the current market price. Rights ordinarily have market values of their own and are traded actively. In most cases they must be exercised within a relatively short period of time. |
| <b>Stamped</b>     | Indicates rights and privileges different from securities of the same issue, class, or series not stamped.   |



|                         |  |
|-------------------------|--|
| <b>Warrant</b>          | A certificate giving its holder the right to purchase securities at a stipulated price, either within a specified time limit or in perpetuity.   |
| <b>When Distributed</b> | A short form of “when, as, and if distributed” (see ‘When Issued’).  |
| <b>When Issued</b>      | A short form of “when, as, and if issued”; indicates a transaction in a security authorized for issuance, but not yet issued. All “When Issued” transactions are on an “if” basis, to be settled if and when the actual security is issued.                                      |
| <b>With Warrants</b>    | A security with a warrant attached that entitles the holder to purchase another security at stipulated price(s), either within a specified time or in perpetuity. Warrants may be immediately detachable from their underlying securities or detachable after specified periods. |
| <b>Without Warrants</b> | A security from which the warrant(s) has been removed.   |

## 12. APPENDIX C: NASDAQ STOCK SYMBOL SUFFIXES

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**Source: NASDAQ Website**

[http://www.nasdaqtrader.com/content/technicalsupport/specifications/dataproducts/nasdaqfift\\_hcharactersuffixlist.pdf](http://www.nasdaqtrader.com/content/technicalsupport/specifications/dataproducts/nasdaqfift_hcharactersuffixlist.pdf) or <http://www.nasdaq.com/reference/glossary.stm>

| SUFFIX | DESCRIPTION  |
|--------|--|
| A      | Class A  |
| B      | Class B  |
| C      | Issuer qualification exception – the issuer has been granted a continuance in NASDAQ under an exception to the qualification standards for a limited period. |
| D      | New  |
| E      | Delinquent in required filings with the SEC  |
| F      | Foreign  |
| G      | First convertible bond   |
| H      | Second convertible bond, same company  |
| I      | Third convertible bond, same company   |
| J      | Voting   |
| K      | Nonvoting  |
| L      | Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units   |
| M      | Fourth preferred, same company   |
| N      | Third preferred, same company  |
| O      | Second preferred, same company   |
| P      | First preferred, same company  |
| Q      | Bankruptcy - the issuer is involved in bankruptcy proceedings.   |
| R      | Rights   |
| S      | Shares of beneficial interest  |
| T      | With warrants or with rights   |

|          |  |
|----------|--|
| <b>U</b> | Units  |
| <b>V</b> | When-issued and when-distributed   |
| <b>W</b> | Warrants   |
| <b>Y</b> | ADR (American Depositary Receipt)  |
| <b>Z</b> | Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units |

### 13. APPENDIX D: Quote Condition Codes

---

Valid values for all Quote Condition fields

#### CTA

| CODE         | Description  |
|--------------|--|
| <b>Space</b> | Quote Condition Not Applicable. When Quote Condition is space filled, the Security Status Indicator field must contain a value other than space. |
| <b>A</b>     | Slow Quote on the Offer Side(Eligible for BBO)   |
| <b>B</b>     | Slow Quote on the Bid Side(Eligible for BBO)   |
| <b>C</b>     | Closing(Not eligible for BBO)  |
| <b>E</b>     | Slow Quote on the Bid due to LRP or GAP Quote(Only Offer Side is eligible for BBO)   |
| <b>F</b>     | Slow Quote on the Offer due to LRP or GAP Quote(Only Bid Side is eligible for BBO)   |
| <b>H</b>     | Slow Quote on the Bid and Offer Sides(Eligible for BBO)  |
| <b>L</b>     | Closed Market Maker (FINRA)(Not eligible for BBO)  |
| <b>N</b>     | Non-Firm Quote(Not eligible for BBO)   |
| <b>O</b>     | Opening Quote (Eligible for BBO)   |
| <b>R</b>     | Regular (FINRA Open) (Eligible for BBO)  |
| <b>U</b>     | Slow Quote Due to Liquidity Replenishment Point (LRP), or Gap Quote on Both the Bid and Offer Sides(Not Eligible for BBO)                        |
| <b>W</b>     | Slow Quote due to a Set Slow List on Both the Bid and Offer Sides (Eligible for BBO)   |
| <b>4</b>     | On Demand Intra-Day Auction(Not eligible for BBO)  |

**UTP**

| <b>CODE</b> | <b>Description</b>  |
|-------------|---|
| <b>A</b>    | Manual Ask, automated Bid (Quote is NBBO eligible)          |
| <b>B</b>    | Manual Bid, automated Ask (Quote is NBBO eligible)          |
| <b>F</b>    | Fast Trading  |
| <b>H</b>    | Manual Bid and Ask (Quote is NBBO eligible)                 |
| <b>I</b>    | Order Imbalance   |
| <b>L</b>    | NBBO Closed Market Maker                                    |
| <b>N</b>    | Non-firm quote  |
| <b>O</b>    | Opening quote automated (Quote is NBBO eligible)            |
| <b>R</b>    | NBBO Regular, two-sided open quote (Quote is NBBO eligible) |
| <b>U</b>    | Manual Bid and Ask (non-firm)                               |
| <b>X</b>    | Order influx  |
| <b>Y</b>    | NBBO Regular - One Sided Quote (Quote is NBBO eligible)     |
| <b>Z</b>    | No open/no resume   |
| <b>4</b>    | Intraday Auction  |

## 14. APPENDIX E: NYSE INDUSTRY CODES

| INDUSTRY GROUP | SECTOR                                   | DIVISION                                    | CODE |
|----------------|--|---|------|
| Industrials    |  |   | 100  |
|                | Aerospace                                |   | 102  |
|                |  | Aircraft                                    | 102A |
|                |  | Parts and Equipment                         | 102B |
|                | Business Supplies and Services           |   | 104  |
|                |  | Machines and Equipment<br>(Excl. Computers) | 104A |
|                |  | Supplies                                    | 104B |
|                |  | Services                                    | 104C |
|                | Chemicals                                |   | 106  |
|                |  | Diversified Chemicals                       | 106A |
|                |  | Specialized                                 | 106B |
|                | Computers, Data Processing               |   | 108  |
|                |  | Computer Systems                            | 108A |
|                |  | Data Processing, Software                   | 108B |
|                |  | Peripheral Devices and Supplies             | 108C |
|                | Construction                             |   | 110  |
|                |  | Residential                                 | 110A |
|                |  | Industrial                                  | 110B |
|                |  | Cement                                      | 110C |
|                |  | Lumber, Wood                                | 110D |
|                | Other Building Materials and<br>Products | 110E  |      |

|                                       |      |
|---------------------------------------|------|
| Electrical Equipment                  | 112  |
| Electronics                           | 114  |
| Semi Conductors and Other Components  | 114A |
| Telecommunications Equipment          | 114B |
| Test, Control Instruments and Systems | 114C |
| Other Systems and Equipment           | 114D |
| Environmental Control                 | 116  |
| Foods, Beverages                      | 118  |
| Beverages                             | 118A |
| Branded Food Products                 | 118B |
| Processing and Production             | 118C |
| Wholesalers                           | 118D |
| Health and Beauty Products            | 120  |
| Personal Health Products              | 120A |
| Toiletries, Cosmetics, Perfumes       | 120B |
| Health Care Services                  | 122  |
| Equipment and Supplies                | 122A |
| Health Care Facilities                | 122B |
| Household Goods                       | 124  |
| Appliances                            | 124A |
| Furnishings and Fixtures              | 124B |
| Housekeeping Products                 | 124C |
| House-wares                           | 124D |

|                                    |                                   |      |
|------------------------------------|-----------------------------------|------|
| Industrial Machinery and Equipment |                                   | 126  |
|                                    | Heavy Machinery                   | 126A |
|                                    | Machine Tools                     | 126B |
|                                    | Measuring and Control Devices     | 126C |
|                                    | Transmissions and Engines         | 126D |
|                                    | Other Industrial Equipment        | 126E |
| Lodging, Restaurants               |                                   | 128  |
|                                    | Hotels, Motels                    | 128A |
|                                    | Restaurants                       | 128B |
| Mining, Refining, Fabricating      |                                   | 130  |
|                                    | Aluminum                          | 130A |
|                                    | Coal                              | 130B |
|                                    | Gold, Silver                      | 130C |
|                                    | Steel, Iron                       | 130D |
|                                    | Other Non-Ferrous Metals          | 130E |
| Motor Vehicles                     |                                   | 132  |
|                                    | Auto and Truck                    | 132A |
|                                    | Parts and Equipment               | 132B |
| Oil and Gas                        |                                   | 134  |
|                                    | Crude Production                  | 134A |
|                                    | Contract Drilling, Exploration    | 134B |
|                                    | Integrated Domestic Refiners      | 134C |
|                                    | Integrated International Refiners | 134D |
|                                    | Non-Integrated Refiners           | 134E |
|                                    | Services and Equipment            | 134F |



|  |                                  |   |      |
|--|----------------------------------|---|------|
|  | Packaging                        | 136   |      |
|  |                                  | Glass   | 136A |
|  |                                  | Metal   | 136B |
|  |                                  | Paper   | 136C |
|  |                                  | Other   | 136D |
|  | Paper Production                 | 138   |      |
|  | Pharmaceuticals                  | 140   |      |
|  | Publishing                       | 142   |      |
|  |                                  | Newspaper Chains                                  | 142A |
|  |                                  | Magazines   | 142B |
|  |                                  | Books   | 142C |
|  | Recreation Services and Products | 144   |      |
|  |                                  | Broadcasting                                      | 144A |
|  |                                  | Gaming Operations and Services                    | 144B |
|  |                                  | Leisure Time Products                             | 144C |
|  |                                  | Motion Pictures, Entertainment                    | 144D |
|  |                                  | Services  |      |
|  |                                  | Outdoor Recreational Vehicles<br>and<br>Equipment | 144E |
|  | Retail Trade                     | 146   |      |
|  |                                  | Department Store Chains                           | 146A |
|  |                                  | Discount Variety Chains                           | 146B |
|  |                                  | Drug Store Chains                                 | 146C |
|  |                                  | Supermarkets, Food Stores                         | 146D |
|  |                                  | Hardware, Furniture Stores                        | 146E |

|                       |                               |                              |      |
|-----------------------|-------------------------------|------------------------------|------|
|                       |                               | Specialty Apparel Ships      | 146F |
|                       |                               | Other Retail Operations      | 146G |
|                       | Textiles, Apparel             |                              | 148  |
|                       |                               | Textile and Mill Products    | 148A |
|                       |                               | Clothing Companies           | 148B |
|                       |                               | Shoes                        | 148C |
|                       | Tires, Rubber                 |                              | 150  |
|                       | Tobacco                       |                              | 152  |
|                       | Wholesalers, Distributors     |                              | 154  |
|                       |                               | Consumer Products (Non-Food) | 154A |
|                       |                               | Industrial Products          | 154B |
|                       | Multi-Industry                |                              | 170  |
|                       | Other                         |                              | 180  |
|                       |                               | Manufacturing                | 180A |
|                       |                               | Services                     | 180B |
| <b>Transportation</b> |                               |                              | 200  |
|                       | Air                           |                              | 202  |
|                       |                               | Passenger Airlines           | 202A |
|                       |                               | Freight Airlines             | 202B |
|                       | Rail                          |                              | 204  |
|                       | Trucking                      |                              | 206  |
|                       | Other Transportation Services |                              | 208  |
| <b>Utilities</b>      |                               |                              | 300  |
|                       | Electric Services             |                              | 302  |
|                       | Gas Services                  |                              | 304  |

|                   |  |      |
|-------------------|--|------|
|                   | Distribution and Integrated Natural Gas Cos. | 304A |
|                   | Natural Gas Transmission Companies           | 304B |
|                   | Other Gas Services                           | 304C |
|                   | Telecommunications                           | 306  |
|                   | Water Supply Companies                       | 308  |
|                   | Multi-Service Companies                      | 310  |
| <b>Financials</b> |  | 400  |
|                   | Banks  | 402  |
|                   | Multinational                                | 402A |
|                   | Regional                                     | 402B |
|                   | Savings and Loan Associations                | 402C |
|                   | Brokerage Services                           | 404  |
|                   | Closed-End Investment Companies              | 406  |
|                   | Bond Funds                                   | 406A |
|                   | Stock Funds                                  | 406B |
|                   | Specialty Funds                              | 406C |
|                   | Finance Companies                            | 408  |
|                   | Insurance                                    | 410  |
|                   | Brokers, Agents                              | 410A |
|                   | Carriers                                     | 410B |
|                   | Trusts                                       | 412  |
|                   | Real Estate Investment Trusts (REITS)        | 412A |

|  |                                |                   |      |
|--|--------------------------------|-------------------|------|
|  |                                | Oil Royalty Trust | 412B |
|  |                                | Other Trusts      | 412C |
|  | RealEstate                     |                   | 414  |
|  | Diversified Financial Services |                   | 416  |

## 15. APPENDIX F: PARTICIPANT IDs

In this table, the Participant ID is 1 byte alphabetic character field, which identifies the Exchange or Participant that initiated the message:

| CODE | Description   |
|------|---|
| A    | NYSE American, LLC (NYSE American)                          |
| B    | NASDAQ OMX BX, Inc. (NASDAQ OMX BX)                         |
| C    | NYSE National, Inc (NYSE National)                          |
| D    | FINRA Alternative Display Facility (ADF)                    |
| I    | International Securities Exchange, LLC (ISE)                |
| J    | Cboe EDGA Exchange (Cboe EDGA)                              |
| K    | Cboe EDGX Exchange (Cboe EDGX)                              |
| L    | Long-Term Stock Exchange, Inc. (LTSE)                       |
| M    | Chicago Stock Exchange, Inc. (NYSE Chicago)                 |
| N    | New York Stock Exchange, LLC (NYSE)                         |
| P    | NYSE Arca, Inc. (NYSE Arca)                                 |
| S    | Consolidated Tape System (CTS)                              |
| T    | NASDAQ Stock Market, LLC (in Tape A, B securities) (NASDAQ) |
| Q    | NASDAQ Stock Exchange, LLC (in Tape C securities)           |
| V    | The Investors' Exchange, LLC (IEX)                          |
| W    | Chicago Broad Options Exchange, Inc.(CBSX)                  |
| X    | NASDAQ OMX PSX, Inc. (NASDAQ OMX PSX)                       |
| Y    | Cboe BYX Exchange, Inc (Cboe BYX)                           |
| Z    | Cboe BZX Exchange, Inc (Cboe BZX)                           |

## 16. APPENDIX G: National BBO Indicator Codes

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Valid values for all National BBO Indicator Codes

### CTA

**\*Indicator Codes to be used in the future.**

| CODE          | Description  |
|---------------|--|
| <b>Space*</b> | Indicates that the new quote did not meet the BBO requirements. This quote is not included in the BBO.   |
| <b>A</b>      | No Best Bid change, No Best Offer change. New quote does not affect the Best Bid or Best Offer. No appendage is required (formerly '0').   |
| <b>B*</b>     | No Best Bid change, Quote contains Best Offer. New quote does not affect the Best Bid, but is the Best Offer. No appendage is required.  |
| <b>C*</b>     | No Best Bid Change, Best Offer Short Appendage. New quote does not affect the Best Bid, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Short Appendage. |
| <b>D*</b>     | No Best Bid Change, Best Offer Long Appendage. New quote does not affect the Best Bid, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Long Appendage.   |
| <b>E*</b>     | No Best Bid Change, No Best Offer. New quote does not affect the Best Bid, and there is no Best Offer. No appendage is required.   |
| <b>F*</b>     | Quote contains Best Bid, No Best Offer Change. New quote is itself the Best Bid, but does not affect the Best Offer. No appendage is required.   |
| <b>G</b>      | Quote contains Best Bid, Quote contains Best Offer. New quote is itself the Best Bid and Best Offer. No appendage is required (formerly '1').  |
| <b>H*</b>     | Quote contains Best Bid, Best Offer Short Appendage. New quote is itself the Best Bid, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Short Appendage.  |

|           |   |
|-----------|---|
| <b>I*</b> | Quote contains Best Bid, Best Offer Long Appendage. New quote is itself the Best Bid, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Long Appendage.   |
| <b>J*</b> | Quote contains Best Bid, No Best Offer. New quote is itself the Best Bid, and there is no Best Offer. No appendage is required.   |
| <b>K*</b> | No Best Bid, No Best Offer Change. There is no Best Bid, and the quote does not affect the Best Offer. No appendage is required.  |
| <b>L*</b> | No Best Bid, Quote contains Best Offer. There is no Best Bid, and the quote is itself the Best Offer. No appendage is required.   |
| <b>M*</b> | No Best Bid, Best Offer Short Appendage. There is no Best Bid, a new Best Offer is generated and the new Best Offer is contained in the Best Offer Short Appendage.   |
| <b>N*</b> | No Best Bid, Best Offer Long Appendage. There is no Best Bid, a new Best Offer is generated and the new Best Offer is contained in the Best Offer Long Appendage.   |
| <b>O</b>  | No Best Bid, No Best Offer. There is no Best Bid, and no Best Offer. No appendage is required (formerly '2').   |
| <b>P*</b> | Best Bid Short Appendage, No Best Offer Change. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, but the quote does not affect the Best Offer.  |
| <b>Q*</b> | Best Bid Long Appendage, No Best Offer Change. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, but the quote does not affect the Best Offer.  |
| <b>R*</b> | Best Bid Short Appendage, Quote contains Best Offer. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, and the quote is the Best Offer.  |
| <b>S*</b> | Best Bid Long Appendage, Quote contains Best Offer. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, and the quote is the Best Offer.  |
| <b>T</b>  | Best Bid Short Appendage, Best Offer Short Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, a new Best Offer is generated and the new Best Offer information is contained in the |

|           |  |
|-----------|--|
|           | Best Offer Short Appendage (formerly '6').   |
| <b>U</b>  | Best Bid Long Appendage, Best Offer Long Appendage. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, a new Best Offer is generated and the new Best Offer information is contained in the Best Offer Long Appendage (formerly '4'). |
| <b>V*</b> | Best Bid Short Appendage, No Best Offer. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Short Appendage, and there is no Best Offer.  |
| <b>W*</b> | Best Bid Long Appendage, No Best Offer. A new Best Bid is generated and the new Best Bid information is contained in the Best Bid Long Appendage, and there is no Best Offer.  |

**\*Indicator Codes to be used in the future**

**UTP**

| <b>CODE</b> | <b>Description</b>   |
|-------------|--|
| <b>0</b>    | This quote does not affect the NBBO. No appendage or NBBO record is required.      |
| <b>1</b>    | No NBBO (e.g. outside of market hours). No Appendage or NBBO record is required.   |
| <b>2</b>    | Short Form NBBO Appendage – A new NBBO is contained in NBBO file.                  |
| <b>3</b>    | Long Form NBBO Appendage - A new NBBO is contained in the NBBO File.               |
| <b>4</b>    | This quote is itself the new NBBO. No appendage is required but an NBBO record is. |



## 17. APPENDIX H: Security Status Indicator Codes

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### CTA

| CODE  | Description  |
|-------|--|
| Space | Security Status Indicator Not Applicable. When Security Status Indicator is space filled, the Quote Condition field must contain a value other than space. |
| D     | News Dissemination   |
| G     | Trading Range Indication   |
| I     | Order Imbalance  |
| M     | Limit-Up-Limit Down (LULD) Trading Pause   |
| P     | News Pending   |
| T     | Resume   |
| X     | Equipment Changeover   |
| Y     | Sup-Penny Trading  |
|       |  |
| 0     | Limit Up-Limit Down (LULD) Price Band  |
| 1     | Market-Wide Circuit Breaker Level 1 - Breached   |
| 2     | Market-Wide Circuit Breaker Level 2 - Breached   |
| 3     | Market-Wide Circuit Breaker Level 3 – Breached   |
| 9     | Republished Limit Up-Limit Down (LULD) Price Band  |

### UTP

| CODE | Description                          |
|------|--------------------------------------|
| A    | Halt News Pending                    |
| B    | Halt News Dissemination              |
| C    | Single Stock Trading Pause In Affect |

|          |   |
|----------|---|
| <b>D</b> | Regulatory Halt Extraordinary Market Activity                         |
| <b>E</b> | Halt ETF  |
| <b>F</b> | Trading Halted; For information requested by NASDAQ                   |
| <b>G</b> | Halt Not Compliance   |
| <b>H</b> | Halt Filings Not Current  |
| <b>I</b> | Halt Trading Suspension   |
| <b>J</b> | Halt Regulatory Concern   |
| <b>K</b> | Operations Halt, Contact Market Operations                            |
| <b>L</b> | IPO Issue not yet Trading   |
| <b>M</b> | Corporate Action  |
| <b>N</b> | Quotation Not Available   |
| <b>O</b> | Volatility Trading Pause  |
| <b>P</b> | Volatility Trading Pause – Straddle Condition                         |
| <b>Q</b> | News and Resumption Times   |
| <b>R</b> | Single Stock Trading Pause/Quotation-Only Period                      |
| <b>S</b> | Qualifications Issues Reviewed/Resolved; Quotations/Trading to Resume |
| <b>T</b> | Filing Requirements Satisfied/Resolved; Quotations/Trading To Resume  |
| <b>U</b> | Issuer News Not Forthcoming; Quotations/Trading To Resume             |
| <b>V</b> | Qualifications Halt ended; maint. Req. met; Resume                    |
| <b>W</b> | Qualifications Halt Concluded; Filings Met; Quotes/Trades To Resume   |
| <b>X</b> | Trade Halt Concluded By Other Regulatory Auth,; Quotes/Trades Resume  |
| <b>Y</b> | New Issue Available   |
| <b>Z</b> | Issue Available   |

|              |   |
|--------------|---|
| <b>A1</b>    | Market Wide Circuit Breaker Halt – Carry over from previous day |
| <b>A2</b>    | Market Wide Circuit Breaker Resumption                          |
| <b>A3</b>    | IPO security released for quotation                             |
| <b>A4</b>    | IPO security – positioning window extension                     |
| <b>1</b>     | Market Wide Circuit Breaker Halt – Level 1                      |
| <b>2</b>     | Market Wide Circuit Breaker Halt – Level 2                      |
| <b>3</b>     | Market Wide Circuit Breaker Halt – Level 3                      |
| <b>Blank</b> | Reason not provided   |

## 18. APPENDIX I: Determining NBBO from the Consolidated Quote Files

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Calculating the National Best Bid and National Best Offer (NBBO) at any time requires a simple merge of the Consolidated Quote and Consolidated NBBO files. The Consolidated Quote file contains all quote from each exchange. However, not every quote updates the NBBO.

The basic methodology is to capture all quotes from the Consolidated Quote file where the exchange's quote represents both the national best bid and the national best offer:

1. All quotes where the source is "C" (Tape A and Tape B), use quotes where the NBBO indicator = "G".
2. All quotes where the source is "N" (Tape C), use quotes where the NASD indicator = "4".

Merge these results with all records from the Consolidated NBBO file, using these fields:

- National best bid exchange
- National best bid
- National best offer exchange
- National best offer

Please note that the Consolidated NBBO file also includes the quote from the exchange that resulted in the NBBO changing, but this may not represent the NBB or the NBO.

This methodology does not allow you to determine the total number of round lots across all exchanges at the best price. To calculate that, you would need to find all exchanges that have a best bid or best offer in the Consolidated Quote file that matches the national best bid (offer) price and add up the bid (offer) sizes for those quotes from the individual exchange quotes.

## 19. Document History

| VERSION | DATE       | CHANGE DESCRIPTION  |
|---------|------------|---|
| 1.0     | 07/07/2011 | Approved version for release  |
| 1.0a    | 07/26/2011 | Updated exchange codes  |
| 1.0b    | 07/28/2011 | Added Appendix D (NYSE Industry Codes)  |
| 1.0c    | 12/07/2011 | Updated description of "CUSIP" fields<br>Updated Exchange codes<br>Amended "Alternative Products" section   |
| 1.0d    | 02/16/2012 | Added exchange codes '12' (BATS), '13' (Direct Edge A), '14' (Direct Edge X) and '15' (BATS Y)  |
| 1.1     | 06/13/2012 | Updated references to NYSE MKT  |
| 1.2     | 07/24/2012 | Added the 'Retail Interest Indicator (RPI)' field to the Daily Quotes File<br>Document rebranded with new NYSE Technologies template  |
| 1.3     | 09/11/2012 | Updated description of values for the Sale Condition field in Daily Trades File   |
| 1.4     | 09/20/2012 | Updated description of CUSIP field values in Table 3 (Daily TAQ Master File Data Fields)  |
| 1.5     | 12/21/2012 | Added LULD BBO Indicator(CQS), LULD BBO Indicator (UTP), FINRA ADF MPID Indicator and SSR Indicator to the BBO file<br><br>Added LULD NBBO Indicator(CQS) and LULD NBBO Indicator (UTP) to the NBBO file. Changes applicable only to files with a .new suffix until February 1, 2013. Changes applicable to standard files from February 4, 2013. |
|         | 01/21/2013 | Update to MarketMaker description for Quotes and NBBO   |
| 1.6     | 04/04/2013 | Added new Daily Quotes Admin Message file and Daily Trades Admin Message file to the product to capture LULD Price Bands  |
| 1.7     | 05/10/2013 | Corrected errors in Daily TAQ Master File Beta Data Fields field descriptions   |
|         | 05/16/2013 | Minor change to field naming in Master file description   |

| VERSION    | DATE       | CHANGE DESCRIPTION   |
|------------|------------|--|
|            | 06/03/2013 | Added section with link to previous versions.  |
|            | 08/06/2013 | Clarification on Trade, Quote and NBBO timestamps. Updated UTP Sale Condition codes.   |
| <b>1.8</b> | 12/02/2013 | Added new fields and modified existing fields, in response to LULD pilot review, to Daily Quotes, Daily Trades, Quote Admin Message and Trade Admin Message files  |
|            | 12/02/2013 | Changed definition of Sale Condition codes 'I' and '9' (change effective from December 9 <sup>th</sup> , 2013)   |
| <b>1.9</b> | 01/15/2014 | Amended the RECORD SIZE (BYTES) fields for TAQ Master, TAQ Quotes and TAQ NBBO in section 1.4.1. File Details  |
| <b>2.0</b> | 05/02/2014 | Source-Listed Exchange and Symbol Compressed fields updated to align with client specification.  |
| <b>2.1</b> | 06/01/2015 | Changed definition of Sale Condition code 'V' (change effective from July 30th 2015 to August 3 <sup>rd</sup> 2015) from Stock Option Trade to Contingent Trade.<br><br>Reference: <a href="https://www.ctaplan.com/index">https://www.ctaplan.com/index</a>   |
| <b>2.1</b> | 06/01/2015 | Updated description of Sale Condition code '7' (change effective from July 30th 2015 to August 3 <sup>rd</sup> 2015) from Reserved to Qualified Contingent Trade.<br><br>Reference: <a href="https://www.ctaplan.com/index">https://www.ctaplan.com/index</a>  |
| <b>2.1</b> | 06/01/2015 | Effective change for the SIP (NMS) Consolidated Tape System (CTS) and Consolidated Quotation System (CQS) on August 3 <sup>rd</sup> 2015. Effective change for the (UTP) NASDAQ on July 27 <sup>th</sup> 2015: <ul style="list-style-type: none"> <li>• A modified Timestamp from a 9-character field for milliseconds (HHMMSSXXX) to an expanded 12 character field for microseconds (HHMMSSXXXXXX) on the Daily TAQ Quotes, Daily TAQ Trades, Daily TAQ NBBO, Daily TAQ Quote Admin Message LULD and Daily TAQ Trade Admin LULD Message.</li> <li>• The inclusion in the Daily TAQ Quotes, Daily TAQ Trades and Daily TAQ NBBO of a new Participant Timestamp field, represented as a 12 character field for microseconds (HHMMSSXXXXXX), that will be used by the Participants to provide the Participant Timestamp in terms of the number of microseconds since midnight Eastern Time (ET).</li> <li>• The addition of a Regional Reference Number (RRN) representing the RRN transaction ID provided by the Participant on the Daily TAQ Quotes, Daily TAQ Trades and Daily TAQ NBBO.</li> <li>• The inclusion in the Daily TAQ Quotes, Daily TAQ Trades and Daily TAQ</li> </ul> |

| VERSION | DATE       | CHANGE DESCRIPTION  |
|---------|------------|---|
|         |            | NBBO of Trade Reporting Facility (TRF), represented as a 12 character field for microseconds (HHMMSSXXXXXX), will be used by the TRFs to provide the TRF Timestamp in terms of the number of microseconds since midnight Eastern Time (ET).   |
| 2.2     | 04/29/2016 | Effective change on October 10, 2016 for UTP Binary Migration and format changes for all Daily TAQ files (Daily TAQ Master, Daily TAQ Master Beta, Daily TAQ Quotes, Daily TAQ Trades, Daily TAQ NBBO, Daily TAQ Quote Admin Message LULD, Daily TAQ Trade Admin Message LULD, Daily TAQ UTP Admin Message, Daily TAQ CTA Admin Message). The change are outlined as follows:   |
|         | 04/29/2016 | Consolidation of the Daily TAQ Master and Daily TAQ Master Beta files to create a new Daily TAQ Master with the inclusion of the Tick Pilot Securities Group Indicator to reflect that a security is part of the SEC Tick Pilot Program. Reference <a href="https://www.nyse.com/tick-pilot">https://www.nyse.com/tick-pilot</a> .  |
|         | 04/29/2016 | Inclusion of specifications for the Daily TAQ CTA Administrative Message and the Daily TAQ UTP Administrative Message files. These files provide trading administrative actions such as Opening Delay, Trading Halt, Trading Resumption, Price Indication, Financial Status Indicator, etc.   |
|         | 04/29/2016 | Addition of APPENDIX E: Participant ID Codes with Participant ID 'V' - The Investors' Exchange (IEX).   |
|         | 04/29/2016 | A format change for all Daily TAQ files (Daily TAQ Master, Daily TAQ Quotes, Daily TAQ Trades, Daily TAQ NBBO, Daily TAQ Quote Admin Message LULD, Daily TAQ Trade Admin Message LULD, Daily TAQ UTP Admin Message, Daily TAQ CTA Administrative Message from fixed length, zip uncompressed format to a pipe-delimited format compressed, using gzip.  |
|         | 04/29/2016 | The revised Header Row identifies the name of each column in the file. The new Trailer Row in a pipe-delimited format indicating the "END" of the Record with an eight-character date (YYYYMMDD) and Record Count (the number of records) stored in each file   |
|         | 04/29/2016 | Daily TAQ files made available on a new MFT-Managed File Transfer infrastructure for current files (revolving five days' worth of data). Each file is delivered in a pipe-delimited format compressed, using gzip. Daily TAQ files made available on <a href="ftp2.nyxdata.com">ftp2.nyxdata.com</a> (T+3) and further back history of Daily TAQ files can be accessed from <a href="ftp2.nyxdata.com">ftp2.nyxdata.com</a> per customers' entitlement. |
|         | 04/29/2016 | The Field Order denotes the order each field appear in each record. A Field Terminator '\n' added to indicate the end of the record.  |

| VERSION | DATE       | CHANGE DESCRIPTION   |
|---------|------------|--|
|         | 04/29/2016 | A modified Timestamp from a 12 character field for microseconds (HHMMSSXXXXXX) to a 15 character field for nanoseconds (HHMMSSXXXXXXXXXX) on the Daily TAQ Master, Daily TAQ Quotes, Daily TAQ Trades, Daily TAQ NBBO, Daily TAQ Quote Admin Message LULD, Daily TAQ Trade Admin Message LULD, Daily TAQ UTP Admin Message, and Daily TAQ CTA Administrative Message. For UTP, nanoseconds timestamp provided by the SIP. For CTA, microseconds timestamp provided by the SIP appended with three trailing zeroes.   |
|         | 04/29/2016 | The Participant Timestamp (timestamp 1) field changed from a 12 character field for microseconds (HHMMSSXXXXXX) to a 15 character field for nanoseconds (HHMMSSXXXXXXXXXX) on the Daily TAQ Quotes, Daily TAQ Trades, Daily TAQ NBBO, Daily TAQ UTP Admin Message, and Daily TAQ CTA Administrative Message. For UTP, nanoseconds timestamp provided by the SIP. For CTA, microseconds timestamp provided by the SIP appended with three trailing zeroes.  |
|         | 04/29/2016 | The Trade Reporting Facility (TRF) Timestamp 2 field changed from a 12 character field for microseconds (HHMMSSXXXXXX) to a 15 character field for nanoseconds (HHMMSSXXXXXXXXXX) on the Daily TAQ Quotes, Daily TAQ Trades and Daily TAQ NBBO files. For UTP, nanoseconds timestamp provided by the SIP. For CTA, microseconds timestamp provided by the SIP appended with three trailing zeroes.   |
|         | 04/29/2016 | On the Daily TAQ Quote file, the Trade Reporting Facility (TRF) Timestamp field renamed FINRA ADF Timestamp. See <a href="#">CTA Specifications</a> and <a href="#">UTP Specification</a>  |
|         | 04/29/2016 | <p>The Bid Price and Offer Price changed in Daily TAQ files from an 11 character to a 21 character maximum field size. For CTA, allow up to 12 characters. For UTP, allow up to 21 characters. Each price field excludes leading and trailing zeroes. The fields containing prices are:</p> <p>Daily TAQ Quotes file - Bid Price, and Offer Price</p> <p>Daily TAQ Trades - Trade Price, Bid Price, and Offer Price</p> <p>Daily TAQ NBBO file - Bid Price, Offer Price, Best Bid Price, and Best Offer Price</p> <p>Daily Trade Admin Message LULD - LULD Upper Limit Price Band, and LULD Upper Limit Price Band</p> <p>Daily TAQ Quote Admin Message LULD - LULD Upper Limit Price Band, and LULD Upper Limit Price Band</p> <p>Daily TAQ UTP Admin Message-Last Price, Upper Limit Price Band, Lower Limit</p> |



| VERSION | DATE       | CHANGE DESCRIPTION   |
|---------|------------|--|
|         |            | Price Band<br><br>Daily TAQ CTA Administrative Message- Upper Limit Price Band, Lower Limit Price Band   |
|         | 04/29/2016 | The field changed for the Bid Size and Offer Size from 7 characters to 10 characters in the Daily TAQ Quotes, Daily TAQ Trades, and Daily TAQ NBBO files. For CTA, allow up to 7 characters. For UTP, allow up to 10 characters.<br><br>Daily TAQ Quotes and Daily TAQ Trades - Bid Size, and Offer Size<br><br>Daily TAQ NBBO file- Bid Size, Offer Size, Best Bid Size, and Best Offer Size  |
|         | 04/29/2016 | The Message Sequence Number field changed from 16 bytes to a maximum file size of 20 characters on the Daily TAQ Quotes file, Daily TAQ Trades, Daily TAQ NBBO file, Daily Trade Admin Message LULD, Daily TAQ Quote Admin Message LULD, Daily TAQ UTP Admin Message, and Daily TAQ CTA Admin Message. For UTP, allow up to 20 characters for the Message Sequence Number. The Message Sequence Number excludes leading zeroes.  |
|         | 04/29/2016 | The removal of the Regional Reference Number (RRN) for CTA or Participant Token field in UTP on the Daily TAQ Quotes, Daily TAQ Trades and Daily TAQ NBBO files.   |
|         | 04/29/2016 | A new field, FINRA ADF Market Participant Quote Indicator, added in the Daily TAQ Quote file. It represents a quote from a single ATS in the FINRA ADF. For FINRA quotes that do not affect the NBBO or FINRA BBO, a FINRA ADF Market Participant Quotation Message Indicator will be sent. (UTP Quote Feed Only). With the removal of OTC Montage Data Feed (OMDF), FINRA ADF Participant quotes will be included in UQDF Top of book quotations for each FINRA ADF participant, disseminated on a separate data feed (OMDF). UTP data feed recipients that wish to receive the individual. Reference <a href="#">UTP Specification</a> |
|         | 04/29/2016 | The Trade Volume maximum size changed from 9 to 10 characters on the Daily TAQ Trade file. For CTA, allow up to 9 characters. For UTP, allow up to 10 characters.  |
|         | 04/29/2016 | For the Trade Sequence Number for UTP on the Daily TAQ Trades file, allow up to 12 characters. For CTA, allow up to 16 characters. This field excludes Leading zeroes.   |
|         | 04/29/2016 | The Quote Condition '4' = On Demand Intra-Day Auction added on the Daily TAQ Quotes and Daily TAQ NBBO files.  |
|         | 04/29/2016 | The Trade Through Exempt Indicator (TTE) added on the Daily TAQ Trade file. It denotes whether or not a trade through is exempt. When used jointly with  |

| VERSION     | DATE       | CHANGE DESCRIPTION   |
|-------------|------------|--|
|             |            | certain Sale Conditions, the TTE will more fully describe the characteristics of a particular trade. Reference <a href="#">CTA Specification</a> and <a href="#">UTP Specification</a>   |
|             | 04/29/2016 | The Participant Listing Market Participant Identifier (PLMPID) added on the Daily TAQ Trades file. The PLMPID identifies when a participant trades a Tape B security and shows which regional exchange is the listing market.  |
|             | 04/29/2016 | The addition of the FINRA ADF MPID Indicator on the Daily TAQ NBBO file. If the FINRA ADF participant's BBO quotation impacts their single participant at either the Bid or Offer side of their market for the issue, a FINRA ADF MPID Appendage will be added to the original short- or long-form message. This appendage will include the ADF's single participant for its best bid and size and/or the ADF's single participant for its best offer and size. Within the Quotation message, the FINRA ADF MPID Indicator will denote the type of appendage to be included. Refer <a href="#">UTP Specification</a> |
|             | 04/29/2016 | The Best Bid MM Location (Best Bid NASDAQ Market Maker geographic location, Long Appendage) and Best Bid MM Desk Location (Best Bid NASDAQ Market Maker desk location, Long Appendage) are no longer used. These fields were removed on the Daily TAQ NBBO file. Reference <a href="#">UTP Specification</a>   |
|             | 04/29/2016 | The Best Offer MM Location (Best Offer NASDAQ Market Maker geographic location, Long Appendage) and Best Offer MM Desk Location (Best Offer NASDAQ Market Maker desk location, Long Appendage) are no longer used. These fields were removed on the Daily TAQ NBBO file. Reference <a href="#">UTP Specification</a>   |
| <b>2.2a</b> | 7/6/2016   | Added the Trade ID on the Daily TAQ Trades file as an identifier for tracking trades across corrections and cancels.   |
|             | 7/6/2016   | Added instructions and file directory for accessing Daily TAQ files on the MFT-Managed File Transfer Infrastructure (mftus.nyx.com) using SFTP (current last 5days worth's of data). Daily TAQ files made available on a new MFT-Managed File Transfer infrastructure for current files (revolving five days' worth of data). Each file is delivered in a pipe-delimited format compressed, using gzip. Daily TAQ files made available on <a href="#">ftp2.nyxdata.com</a> (T+3) and further back history of Daily TAQ files can be accessed from <a href="#">ftp2.nyxdata.com</a> per customers' entitlement.       |
|             | 7/6/2016   | A file naming convention change for Daily TAQ Quotes (BBO) file from a single file to 26 splits alphabetical files. Daily TAQ Quotes file name and location changed<br><br>From:<br>/EQY_US_ALL_BBO/EQY_US_ALL_BBO_yyy/EQY_US_ALL_BBO_yyyymm/EQY_  |

| VERSION     | DATE      | CHANGE DESCRIPTION  |
|-------------|-----------|---|
|             |           | <p>US_ALL_BBO_yyyymmdd.zip</p> <p>To: MFT (Uploaded Daily):</p> <p>/DAILYTAQ/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_[A-Z]_yyymmdd.gz</p> <p>To: FTP2 (Uploaded on T+3 basis):</p> <p>/SPLITS_US_ALL_BBO/SPLITS_US_ALL_BBO_yyyy/SPLITS_US_ALL_BBO_yyyymm/SPLITS_US_ALL_BBO_[A-Z]_yyymmdd.gz</p> <p>Includes a .done file to indicate the last file that uploaded for that day.</p>  |
|             | 7/6/2016  | Effective October 24, 2016 NYSE MKT will cease trading of Nasdaq-listed symbols when the legacy UTP SIP technology protocol is sunset.  |
| <b>3.0</b>  | 4/17/2017 | <p>Complete re-write of the spec. Support for CTA binary formats.</p> <p>CTA timestamps are in nanoseconds since midnight</p> <p>CTA sequence numbers based on Block Seq Num &amp; Msg Seq Num, per CTA</p> <p>CTA eliminated Due to Related Security and In View of Common processing</p> <ul style="list-style-type: none"> <li>Fields 12 &amp; 13 of CTA Admin File became reserved fields</li> <li>Quote conditions J, K, Q, S, and V are eliminated</li> </ul> <p>.TEST removed from Appendix B - CTA introduced dedicated test symbols</p> <p>Master File, SIP Symbol field - CTA changed symbol delimiter from '/' to '.'</p> <p>CTA Admin file, Currency Indic and Status Indic fields became reserved fields</p> <p>NBBO File, NBBO Quote Condition field became 2 fields: Best Bid Quote Condition and Best Offer Quote Condition</p> <p>Master File, CTA Symbol field renamed SIP Symbol</p> <p>Master File added new field 36 named Effective Date</p> <p>CTA Admin File, field 16 &amp; 17 renamed to Upper Price and Lower Price</p> <p>Quotes field 19, NBBO field 26, Quote LULD field 8 renamed NBBO LULD Indic</p> <p>Quotes and NBBO files: Finra BBO Indic field has revised values per CTA</p> <p>CTA Admin file, Message Category field: values E and F are removed</p> <p>CTA Admin file, Message Type field: value S is removed</p> <p>Changed Quote and Trade LULD files to Support CTA Auction Status message</p> <ul style="list-style-type: none"> <li>Added value X to LULD Price Band Indicator</li> <li>LULD Limit Price Band fields <ul style="list-style-type: none"> <li>Renamed Lower Price and Upper Price</li> <li>Meaning changed when LULD Price Band Indicator = X</li> </ul> </li> <li>Added Reference Price and Num Extensions field</li> </ul> |
| <b>3.0a</b> | 6/29/2017 | <p>Symbol field revised from 16 to 17 max size in all files</p> <p>In section 1.4.1 corrected the symbol format</p>   |

| VERSION | DATE      | CHANGE DESCRIPTION  |
|---------|-----------|---|
| 3.0b    | 8/29/2017 | <p>Changed the National BBO Indicator for CTA from numeric to alpha values in the Quotes (BBO). For a transitional period, only the below new NBBO Indicator Codes will be disseminated on October 30, 2017 in the Daily TAQ Quotes file.</p> <ul style="list-style-type: none"> <li>• A = formerly '0'</li> <li>• G = formerly '1'</li> <li>• O = formerly '2'</li> <li>• T = formerly '6' Short Appendage</li> <li>• U = formerly '4' Long Appendage</li> </ul> <p>All other Indicator Codes will be made available in the future. See Appendix G for a complete list of National BBO Indicator Codes.</p>          |
| 3.0b    | 8/29/2017 | <p>Changed the National BBO Indicator for CTA from numeric to alpha values in the NBBO files. For a transitional period, only the new NBBO Indicator Codes will be disseminated and reflected in the NBBO file effective on October 30, 2017. The new values are:</p> <ul style="list-style-type: none"> <li>• T = formerly '6' Short Appendage</li> <li>• U = formerly '4' Long Appendage</li> </ul> <p>Indicator Codes G and O may be added to the NBBO file in the future. All other Indicator Codes will be made available in the future. See Appendix G for a complete list of National BBO Indicator Codes.</p> |
| 3.0b    | 8/29/2017 | <p>Updated the Quote Condition values for CTA and UTP in the Quotes (BBO) and NBBO files. Added new Quote Condition value of "Space". Repositioned Quote Conditions 'D, G, I, M, P, T, X, Y, Z, 0, 1, 2 and 3' in the Security Status field (some of which in different values).</p>  |
| 3.0b    | 8/29/2017 | <p>Added new Security Status Indicator field at the end of Quotes and NBBO files with some of previous Quote Conditions 'D, G, I, M, P, T, X, Y, Z, 0, 1, 2 and 3'.</p>   |
| 3.0b    | 8/29/2017 | <p>Added Appendix H for the new Security Status Indicator Codes.</p> <p>Added Appendix G for the National BBO Indicator Codes.</p> <p>Renamed Appendix G from the Document History to contain the National BBO Indicator Codes.</p> <p>Repositioned the Document History to Appendix I.</p>   |
| 3.0c    | 11/2/2017 | <p>Updated "Effective Date" field description to mention that field may be blank</p> <p>Redefined "blank" within the CTA context for "Sale Condition" field</p>   |

| VERSION | DATE       | CHANGE DESCRIPTION  |
|---------|------------|---|
| 3.0d    | 5/1/2019   | <p>Updated description of Participant IDs.</p> <p>Updated description from FTP to NYSE MFT platform.</p> <p>Modified Trade Reporting Facility IDs in the Trades File in support of the second Trade Reporting Facility (TRF) by FINRA/Nasdaq.</p> <p>Updated the Halt Reason for 'X' from Equipment Changeover to Operational.</p> <p>Updated the Daily TAQ NBBO File to exclude 'G' and '4'.</p> |
| 3.1     | 02/26/2020 | <p>Added Long-Term Stock Exchange, Inc. (LTSE) Participant ID 'L' - Industry Activation Effective 04/17/2020</p> <p>Modified Chicago Stock Exchange, Inc. (CHX) to NYSE Chicago, Inc.</p>   |
| 3.2     | 03/02/2020 | <p>Added Support for CTA: CQS and CTS Migration to new Pillar SIP Platform - Effective 07/13/2020</p> <ul style="list-style-type: none"> <li>• Eliminated Security Status for Opening Delay and No Open/No Resume</li> <li>• Eliminated Category A Message Type H Message in the Daily TAQ CTA Admin Message</li> </ul>   |