Global Foreign Exchange (GFX)
Last Look Practices

Northern Trust conducts foreign exchange (FX) activities on a principal basis and offers trading services in FX instruments including deliverable spot, forward, and swap transactions, and non-deliverable forwards and swaps. Northern Trust trades as principal and makes profits and incurs losses in connection with this activity, which is solely for its own account. As a liquidity provider, Northern Trust will stream prices via electronic platforms in order to provide liquidity in the FX market. While these prices are refreshed frequently, the FX market moves rapidly and prices indicated may not reflect immediate market conditions.

Following a Request for Stream and if a client sends a trade request to Northern Trust via an electronic platform, Northern Trust carries out a validation process to determine whether there have been any intervening price moves, market disruptions, or unusual market conditions since the last price indicated, this validation process is commonly known as 'Last Look'. The purpose is to manage execution risk for Northern Trust or its clients by protecting against trading at stale prices due to latency. Prices streamed by Northern Trust are indicative prices only and represent Northern Trust's willingness to trade at the given price; clients may then request to trade at this price.

Northern Trust's Last Look control is focussed around two key comparisons versus the current market. If a client submits a request to trade at any price that was indicated within the last 30 quote updates, the trade request will be accepted unless the price has moved outside of a symmetrically applied tolerance, which is determined by Northern Trust. This symmetrically applied tolerance refers to the price discrepancy between the requested trade price and the current market price. Symmetrical application means that the rejection logic is applied for price movements in either direction, i.e. there is no decision logic to reject trades based on their profitability for Northern Trust. The symmetrical tolerance may differ between clients due to factors such as, but not limited to, client trading profile or the trading platform leveraged. The symmetrical tolerance level may also be changed at any time in Northern Trust's discretion.

Northern Trust does not apply an additional hold time, or any delay, beyond the time required to confirm the trade request has successfully passed the relevant price and validity checks. Last Look related delays should, under reasonable assumptions of market volatility and processing speeds, take less than 5 milliseconds with the expectation that the vast majority of transactions will be checked within 3 milliseconds. This timeframe is not inclusive of other latencies outside of Northern Trust's control, such as network related delays.

Where a client trade request has been rejected, the client should receive "Rejected at Broker Option" notice through their trading channel.

Northern Trust operates under a defined risk framework, with client dealing subject to review from the trading desk and Northern Trust's Global Foreign Exchange Risk Council, which includes a review of client rejections. Northern Trust has affirmed its commitment to the FX Global Code of Conduct with specific reference to Principles 17, 19, and 20, as they relate to Last Look utilisation.

FREQUENTLY ASKED QUESTIONS (FAQ)

1. **Why does Northern Trust use a Last Look mechanism?**

   a. Latency in price indication exposes Northern Trust and its clients to trading on incorrect pricing. Last Look provides Northern Trust with a final opportunity to accept or reject the request against its quoted price. A trade that falls outside of our maximum price tolerance will be rejected regardless of whether the trade would result in an improved or worse price for the client.

2. **Does Last Look measure price movements in only one direction or is it applied symmetrically?**

   a. Last Look is applied symmetrically, meaning that the logic is applied for price movements in either direction. Northern Trust utilizes last look as a mechanism to verify the validity of a price. This is to protect both our clients and ourselves against stale pricing that provides an inaccurate view of the market and market movements. Northern Trust applies symmetrical verification to ensure transparency and integrity when we reject a trade.

3. **How does Northern Trust utilize the information associated with a submitted trade request?**

   a. In accordance with Northern Trust's internal policies and the FX Global Code, once the intention to deal has been received and the Last Look window has commenced, no information associated with a trade request influences any pricing or hedging activity undertaken prior to the acceptance or rejection of the trade request. During this window, Northern Trust may continue to trade in the market for reasons unrelated to the specific trade request and regardless of potential conflicting interests between such trades, as part of a principally managed trading book. Additionally, the trade request will not be held for any period of time beyond what is required to perform standard Last Look checks. As such and in accordance with the UK Financial Conduct Authority, there is no additional hold time incorporated into the trading process in order to determine profitability. Additionally, in accordance with the FX Global Code, Last Look is not used for purposes of information gathering with no intention to accept the client's request to trade.

4. **Is Last Look applied across all clients?**

   a. Yes. Northern Trust applies Last Look to all clients who receive an electronically generated price.

5. **Do other electronic liquidity providers use Last Look?**

   a. Yes. Last Look is widely used as a risk management practice in the electronic FX trading market.

6. **Are trade requests rejected as a result of Last Look identifiable?**

   a. When a trade request is rejected, the client will receive a notice "Rejected at Broker Option".

7. **Can a trade request be rejected for reasons other than Last Look?**

   a. Yes. All trade requests are subject to pre-trade risk management controls, such as availability of credit, which may cause a trade request to be rejected.

8. **Will Northern Trust disclose to the client their specific Last Look settings?**

   a. Upon request, GFX will provide clients with information specific for their trading workflow as it relates to time delay and price tolerances. Please contact your GFX Sales representative for information regarding information on a rejected trade order.

9. **Can a client opt out of Last Look?**

   a. No. Last Look is applied to all FX trades submitted through a trading platform that receive an electronically generated price.

10. **What trades does Last Look apply to?**

    a. Last Look applies to trades that have been requested as part of the Request For Stream or Request For Quote workflow within trading platforms and also receive an electronically generated principal price. It specifically does not apply to any trades that are considered as orders, including algorithmic execution orders from the Northern Trust Algo Suite.