

EXHIBIT 3SPY Option Position Limit Pilot Program Report

The Exchange previously established a pilot program that eliminated position and exercise limits for physically-settled options on the SPDR S&P 500 ETF (“SPY Pilot Program”).¹ Subsequently, the Exchange filed to extend the SPY Pilot Program, most recently until July 12, 2016.² In connection with extending the SPY Pilot Program, the Exchange stated that it would prepare another Pilot Report in support of a proposal to extend the SPY Pilot Program, adopt the SPY Pilot Program on a permanent basis or terminate the SPY Pilot Program. The Pilot Report would be submitted within thirty (30) days before the end of the extension and would cover the period since the previous extension. The Pilot Report would detail the size and different types of strategies employed with respect to positions established as a result of the elimination of position limits in SPY options. In addition, the Pilot Report would note whether any problems resulted due to the no limit approach and any other information that may be useful in evaluating the effectiveness of the SPY Pilot Program. The Pilot Report would compare the impact of the SPY Pilot Program, if any, on the volumes of SPY options and the volatility in the price of the underlying SPY shares, particularly at expiration. In preparing the report the Exchange would utilize various data elements such as volume and open interest. In addition the Exchange would make available to Commission staff data elements relating to the effectiveness of the SPY Pilot Program.

While the below pilot analysis considers various data points in assessing the SPY

¹ See Securities Exchange Act Release No. 67937 (September 27, 2012), 77 FR 60489 (October 3, 2012) (SR-CBOE-2012-091).

² See Securities Exchange Act Release No. 70878 (November 14, 2013), 78 FR 69737 (November 20, 2013) (SR-CBOE-2013-106). See also Securities Exchange Act Release No. 74149 (January 27, 2015), 80 FR 5606 (February 2, 2015) (SR-CBOE-2015-008). See also Securities Exchange Act Release No. 75381 (July 7, 2015), 80 FR 40111 (July 13, 2015) (SR-CBOE-2015-065).

Pilot Program, it does not identify other market influences that may have impacted the data over time, including without limitation, overall fluctuations in market volatility and price movements in the S&P 500 Index component securities from which SPY is derived.

Impact on SPY volumes and volatility

To assess the impact of the SPY Pilot Program on SPY option volumes, the Exchange compared SPY option monthly volume during January 2013 through December 2013 (the “Pre-Pilot period”) to monthly volume during June 2015 through April 2016 (the “Pilot period”) (see Table 1 and Table 2).³ Pre-Pilot Period over Pilot Period, average monthly volume in SPY options increased 17.9%.

TABLE 1: Comparison of SPY Options Volume Pre-Pilot vs Pilot

| | Pre-Pilot | Pilot |
|--|------------------|--------------|
| Average Monthly Volume | 99,383,292 | 117,154,971 |
| Average Monthly Customer ⁴ Volume | 36,277,013 | 42,508,955 |
| Median Monthly Volume | 93,783,943 | 113,990,439 |
| Median Monthly Customer Volume | 33,951,894 | 42,642,883 |

³ The Exchange established the SPY Pilot Program in September 2012; however, not all self-regulatory organizations (“SROs”) had adopted similar rules eliminating position and exercise limits for SPY options when the Exchange sought to renew the SPY Pilot Program in November 2013. It was not until January 2014 that all relevant SROs adopted similar rules eliminating position and exercise limits for SPY options. For this reason, the Exchange is using the time period from January 2013 to December 2013 to assess Pre-Pilot Program activity and the time period since the previous extension of June 2015 to April 2016 to assess SPY Pilot Program activity.

⁴ Customer volume as reported by activity clearing in the customer range at The OCC.

TABLE 2: Change in SPY Options Volume Pre-Pilot vs Pilot

| | |
|--|--------|
| % Change In Average Monthly Volume Pilot vs Pre-Pilot | 17.9 % |
| % Change in Average Monthly Customer Volume Pilot vs Pre-Pilot | 17.2 % |
| % Change in Median Monthly Volume Pilot vs Pre-Pilot | 21.5 % |
| % Change in Median Monthly Customer Volume Pilot vs Pre-Pilot | 25.6 % |

The Exchange also compared SPY options open interest during the Pilot and Pre-Pilot periods (see Table 3 and Table 4). Average daily open interest of SPY option contracts decreased by 3.8% during the Pilot period.

TABLE 3: Comparison of Daily SPY Options Open Interest Pre-Pilot vs Pilot

| | Pre-Pilot | Pilot |
|-----------------------------|------------|------------|
| Average Daily Open Interest | 20,969,374 | 20,164,095 |
| Median Daily Open Interest | 20,929,733 | 20,014,473 |

TABLE 4: Change in Daily SPY Options Open Interest Pre-Pilot vs Pilot

| | |
|--|-------|
| % Change in Average Daily Open Interest Pilot vs Pre-Pilot | -3.8% |
| % Change in Median Daily Open Interest Pilot vs Pre-Pilot | -4.4% |

To assess the impact of the SPY Pilot Program on volatility in SPY shares, the Exchange looked at the reported opening and closing prices for SPY during the Pre-Pilot and Pilot periods. Using the reported opening and closing prices, the Exchange calculated the maximum and minimum closing prices, daily close-to-close volatility and daily close-to-open volatility for SPY for each period.⁵ The Exchange then grouped the results by the first 3 trading days of each month and the 3 trading days up

⁵ Close-to-close volatility is calculated by taking the standard deviation of daily close-to-close price returns and multiplying that value by the square root of 252. Close-to-open volatility is calculated by taking the standard deviation of daily close-to-next day open price returns and multiplying that value by the square root of 252.

to and including expiration days. By comparing the different measures of price variability during the Pre-Pilot and Pilot periods for regular trading days and expiration days the data shows an overall increase in volatility during the SPY Pilot Program compared to the Pre-Pilot Period. While the data does show an increase in volatility during the Pilot Period leading up to and including expiration, volatility during expiration remained relatively low at 11.67%. The results are shown in Table 5 and Table 6 below.

TABLE 5: SPY Price Movement

| | Pre-Pilot Period | Pilot Period | % Change |
|--------------------------------|-------------------------|---------------------|-----------------|
| Max | 184.69 | 212.78 | 15.21% |
| Min | 145.55 | 182.86 | 25.63% |
| Volatility (close-to-close) | 11.10% | 17.24% | 55.28% |
| Volatility (close-to-open) | 6.50% | 12.42% | 91.05% |

TABLE 6: Expiration Day Effects

| | Pre-Pilot Period | | | Pilot Period | | |
|--------------------------------|----------------------------------|--------------------------------|-----------------|----------------------------------|--------------------------------|-----------------|
| | First 3 Days of the Month | 3 Days up to Expiration | % Change | First 3 Days of the Month | 3 Days up to Expiration | % Change |
| Volatility (close-to-close) | 12.39% | 13.75% | 10.91% | 17.72% | 20.79% | 17.34% |
| Volatility (close-to-open) | 7.99% | 5.80% | -27.34% | 12.46% | 11.67% | -6.35% |

Finally, to assess the impact of the SPY Pilot Program on strategy orders traded at the Exchange, the Exchange looked at the Average Number of Complex Trades per Day and the Average Complex Volume per Day in SPY. In both instances the number of trades and volume increased by a substantive percentage, indicating that market participants

potentially found greater liquidity and improved price discovery.

TABLE 7: Strategy Orders

| | Pre-Pilot Period | Pilot Period | % Change |
|----------------------------------|-------------------------|---------------------|-----------------|
| Average Number of Trades per Day | 1,094 | 2,230 | 103.8% |
| Median Number of Trades per Day | 978 | 1,972 | 101.6% |
| Average Volume per Day | 99,069 | 119,655 | 20.8% |
| Median Volume per Day | 86,454 | 104,535 | 20.9% |

Conclusion

The Exchange believes that there is evidence to support a continuation of the SPY Pilot Program at this time. The Exchange's study does not reveal any adverse consequences to volatility or changes in open interest due to the SPY Pilot Program. With respect to volume, the SPY Pilot Program has potentially proven to be beneficial to market participants, as demonstrated by the increase in SPY Complex Volume and SPY Complex Trades per Day during the SPY Pilot vs Pre-Pilot Period.