### QUARTERLY MARKET IMPACT / TRADING PATTERN REPORT - Q1 2023

PM-SETTLED S&P 500 INDEX OPTIONS

On September 2, 2011, the C2 Options Exchange, Incorporated ("C2") received approval of a proposed rule change to list and trade PM-Settled S&P 500 Index Options that expire on the third Friday of the month on a 14-month pilot basis. Cboe Exchange, Inc. (formerly Chicago Board Options Exchange, Incorporated) ("Cboe Options") became the sole market for PM-Settled S&P 500 Index Options on February 19, 2013. The Exchange has extended the pilot every six months since then.

As part of this pilot program, on a periodic basis Cboe Options will submit reports analyzing volume and open interest for Expiration Friday, PM-Settled S&P 500 Index Option Series ("SPXpm"). Pursuant to the terms of the pilot program, Cboe Options is submitting this interim report to the SEC.

#### Monthly Analysis of Volume & Open Interest:

This interim pilot report data reflects trading activity in SPXpm options during Q1 2023.

#### 1. Monthly volume aggregated for all SPXpm trades

<u>Month</u>	<u>Index</u>	<u>Volume</u>
23-Jan	SPXW	6,419,090
23-Feb	SPXW	6,820,140
23-Mar	SPXW	7,659,486

## 2. Monthly volume for SPXpm trades aggregated by expiration date

<u>Month</u>	Index	Expiration	Volume
23-Jan	SPXW	1/20/2023	4,572,980
23-Jan	SPXW	2/17/2023	905,284
23-Jan	SPXW	3/17/2023	508,552
23-Jan	SPXW	4/21/2023	341,210
23-Jan	SPXW	5/19/2023	64,606
23-Jan	SPXW	6/16/2023	26,458
23-Feb	SPXW	2/17/2023	4,967,590
23-Feb	SPXW	3/17/2023	1,041,944
23-Feb	SPXW	4/21/2023	402,602
23-Feb	SPXW	5/19/2023	251,776
23-Feb	SPXW	6/16/2023	145,006
23-Feb	SPXW	7/21/2023	11,222
23-Mar	SPXW	3/17/2023	5,483,006
23-Mar	SPXW	4/21/2023	1,096,418
23-Mar	SPXW	5/19/2023	518,296
23-Mar	SPXW	6/16/2023	445,080
23-Mar	SPXW	7/21/2023	101,810
23-Mar	SPXW	8/18/2023	14,876

# 3. Monthly volume for individual SPXpm series

See Attached Spreadsheet Tab "SPXpm Monthly Volume by Series"

## 4. Month-end open interest aggregated for all SPXpm series

<u>Month</u>	<u>Index</u>	<u>01</u>
23-Jan	SPXW	650,441
23-Feb	SPXW	698,444
23-Mar	SPXW	655,655

# 5. Month-end open interest for SPXpm series aggregated by expiration date

<u>Month</u>	Index	Expiration	<u>OI</u>
23-Jan	SPXW	2/17/2023	317,012
23-Jan	SPXW	3/17/2023	190,641
23-Jan	SPXW	4/21/2023	105,349
23-Jan	SPXW	5/19/2023	27,224
23-Jan	SPXW	6/16/2023	10,215
23-Feb	SPXW	3/17/2023	374,429
23-Feb	SPXW	4/21/2023	181,978
23-Feb	SPXW	5/19/2023	83,230
23-Feb	SPXW	6/16/2023	53,609
23-Feb	SPXW	7/21/2023	5,198
23-Mar	SPXW	4/21/2023	334,846
23-Mar	SPXW	5/19/2023	153,139
23-Mar	SPXW	6/16/2023	125,329
23-Mar	SPXW	7/21/2023	36,470
23-Mar	SPXW	8/18/2023	5,871

6.	Month-end	open interest	for	· individual SPXpn	n series

See Attached Spreadsheet Tab "SPXpm Month-end OI by Series"

#### Monthly Analysis of XSP PM Volume & Open Interest:

#### 7. Monthly volume aggregated for all XSP PM trades

<u>Month</u>	<u>Index</u>	<u>Volume</u>
23-Jan	XSP	279,213
23-Feb	XSP	272,643
23-Mar	XSP	279,684

## 8. Monthly volume for XSP PM trades aggregated by expiration date

See Attached Spreadsheet Tabs "XSP PM Aggreg by Expiration"

## 9. Monthly volume for individual XSP PM series

See Attached Spreadsheet Tabs "XSP Monthly Volume by Series"

## 10. Month-end open interest aggregated for all XSP PM series

<u>Month</u>	<u>Index</u>	<u>OI</u>
23-Jan	XSP	228,715
23-Feb	XSP	243,896
23-Mar	XSP	248,712

### 11. Month-end open interest for XSP PM series aggregated by expiration date

See Attached Spreadsheet Tabs "XSP PM Aggreg by Expiration"

#### 12. Month-end open interest for individual XSP PM series

See Attached Spreadsheet Tab "XSPpm Month-end OI by Series"

## Monthly Analysis of MRUT PM Volume & Open Interest:

## 13. Monthly volume aggregated for all MRUT PM trades

<u>Month</u>	<u>Index</u>	<u>Volume</u>
23-Jan	MRUT	4,592
23-Feb	MRUT	2,968
23-Mar	MRUT	2,001

## 14. Monthly volume for MRUT PM trades aggregated by expiration date

<u>Month</u>	<u>Index</u>	<u>Expiration</u>	<u>Volume</u>
23-Jan	MRUT	1/20/2023	415
23-Jan	MRUT	2/17/2023	647
23-Jan	MRUT	3/17/2023	3,446
23-Jan	MRUT	4/21/2023	15
23-Jan	MRUT	6/16/2023	64
23-Jan	MRUT	9/15/2023	5
23-Feb	MRUT	2/17/2023	232
23-Feb	MRUT	3/17/2023	2,371
23-Feb	MRUT	4/21/2023	216
23-Feb	MRUT	5/19/2023	65
23-Feb	MRUT	6/16/2023	40
23-Feb	MRUT	9/15/2023	44
23-Mar	MRUT	3/17/2023	383
23-Mar	MRUT	4/21/2023	663
23-Mar	MRUT	5/19/2023	274
23-Mar	MRUT	6/16/2023	358
23-Mar	MRUT	9/15/2023	177
23-Mar	MRUT	12/15/2023	146

### 15. Monthly volume for individual MRUT PM series

See Attached Spreadsheet Tabs "Cboe Monthly Volume by Series"

### 16. Month-end open interest aggregated for all MRUT PM series

<u>Month</u>	<u>Index</u>	<u>OI</u>
23-Jan	MRUT	4,015
23-Feb	MRUT	4,407
23-Mar	MRUT	1,346

## 17. Month-end open interest for MRUT PM series aggregated by expiration date

<u>Month</u>	Index	Expiration	<u>OI</u>
23-Jan	MRUT	2/17/2023	375
23-Jan	MRUT	3/17/2023	3,390
23-Jan	MRUT	4/21/2023	15
23-Jan	MRUT	6/16/2023	175
23-Jan	MRUT	9/15/2023	60
23-Feb	MRUT	3/17/2023	3,892
23-Feb	MRUT	4/21/2023	170
23-Feb	MRUT	5/19/2023	55
23-Feb	MRUT	6/16/2023	199
23-Feb	MRUT	9/15/2023	91
23-Mar	MRUT	4/21/2023	509
23-Mar	MRUT	5/19/2023	161
23-Mar	MRUT	6/16/2023	366
23-Mar	MRUT	9/15/2023	170
23-Mar	MRUT	12/15/2023	140

### 18. Month-end open interest for individual MRUT PM series

See Attached Spreadsheet Tab "MRUT Month-end OI by Series"