



TO: Clearing Member Firms
Chief Financial Officers
Back Office Managers
Margin Managers

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, October 18, 2018

To receive advanced notification of Performance Bond (margin) changes, through our free automated mailing list, go to

<http://www.cmegroup.com/newsletter/web2lead/web2sf-old.html>

and subscribe to the Performance Bond Rates Advisory Notice listserver.

As per the normal review of market volatility to ensure adequate collateral coverage, the Chicago Mercantile Exchange Inc., Clearing House Risk Management staff approved the performance bond requirements for the following products listed below.

The rates will be effective after the close of business on

Friday, October 19, 2018.

Current rates as of:

Thursday, October 18, 2018.

In this current advisory there are changes to the Short Option Minimum and/or the Volatility Scan Range. Below are descriptions of what each change affects:

The Short Option Minimum (SOM) is a charge that is applied only to portfolios concentrated in short options that do not generate a minimum margin requirement level when margins are calculated using the normal 16 SPAN scenarios. The SOM charge per short calls or short puts is a percentage of the outright margin on one underlying futures contract.

The volatility scan range is the change in implied volatility that is used in each of SPAN's 16 scenarios.

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
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Outright Rates

FX - Outright Rates

BPSF FUTURE (BF)

BF	Spec		Increase	CHF	4,620	4,200	4,950	4,500
BF	Hedge/Member		Increase	CHF	4,200	4,200	4,500	4,500

BRAZILIAN REAL FUTURES (BR)

BR	Spec	Contracts 1-12	Increase	USD	1,650	1,500	1,815	1,650
BR	Hedge/Member	Contracts 1-12	Increase	USD	1,500	1,500	1,650	1,650
BR	Spec	Contracts 13-24	Increase	USD	1,815	1,650	1,980	1,800
BR	Hedge/Member	Contracts 13-24	Increase	USD	1,650	1,650	1,800	1,800

BRITISH POUND FUTURES (BP)

BP	Spec	Month1-3	Increase	USD	1,650	1,500	1,815	1,650
BP	Hedge/Member	Month1-3	Increase	USD	1,500	1,500	1,650	1,650
BP	Spec	Months 4+	Increase	USD	1,650	1,500	1,815	1,650
BP	Hedge/Member	Months 4+	Increase	USD	1,500	1,500	1,650	1,650

E-MICRO CHF/USD FUTURES (MSF)

MSF	Spec	Months 4+	Increase	USD	286	260	330	300
MSF	Hedge/Member	Months 4+	Increase	USD	260	260	300	300

E-MICRO GBP/USD FUTURES (M6B)

M6B	Spec	Month1-3	Increase	USD	165	150	182	165
M6B	Hedge/Member	Month1-3	Increase	USD	150	150	165	165
M6B	Spec	Months 4+	Increase	USD	165	150	182	165
M6B	Hedge/Member	Months 4+	Increase	USD	150	150	165	165

SWISS FRANC FUTURES (SF)

SF	Spec	Months 4+	Increase	USD	2,860	2,600	3,300	3,000
SF	Hedge/Member	Months 4+	Increase	USD	2,600	2,600	3,000	3,000

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
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Outright Rates

NATURAL GAS - Outright Rates

SUMAS BASIS FUT (NK)

NK	Spec	Mnth 1	Increase	USD	715	650	1,243	1,130
NK	Hedge/Member	Mnth 1	Increase	USD	650	650	1,130	1,130
NK	Spec	Mnths 2-5	Increase	USD	550	500	963	875
NK	Hedge/Member	Mnths 2-5	Increase	USD	500	500	875	875
NK	Spec	Mnths 6-14	Increase	USD	363	330	638	580
NK	Hedge/Member	Mnths 6-14	Increase	USD	330	330	580	580
NK	Spec	Mnths 15-34	Increase	USD	363	330	638	580
NK	Hedge/Member	Mnths 15-34	Increase	USD	330	330	580	580
NK	Spec	Mnths 35+	Increase	USD	363	330	638	580
NK	Hedge/Member	Mnths 35+	Increase	USD	330	330	580	580

PETROLEUM CRACKS AND SPREADS - Outright Rates

E/W NAPHTHA JAPAN CF VS CRGOES CIF (EWN)

EWN	Spec	Mnths 16+	Increase	USD	1,925	1,750	2,475	2,250
EWN	Hedge/Member	Mnths 16+	Increase	USD	1,750	1,750	2,250	2,250

EUR1%FUEL OIL CARG FOB MED V FOBNWE (ENS)

ENS	Spec	Mnths 13+	Increase	USD	1,320	1,200	1,760	1,600
ENS	Hedge/Member	Mnths 13+	Increase	USD	1,200	1,200	1,600	1,600

REFINED PRODUCTS - Outright Rates

MTBE FOB SINGAPORE (PLATTS) FUTURES (1NM)

1NM	Spec	Mnth 1	New	USD			7,370	6,700
1NM	Hedge/Member	Mnth 1	New	USD			6,700	6,700
1NM	Spec	Mnth 2	New	USD			7,370	6,700
1NM	Hedge/Member	Mnth 2	New	USD			6,700	6,700
1NM	Spec	Mnths 3+	New	USD			7,040	6,400
1NM	Hedge/Member	Mnths 3+	New	USD			6,400	6,400

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
ELECTRICITY - Intra Spreads								
Italian Power Peakload Calendar month futures – Months 4-9 vs 10+ (ITALIAN POWER PEAKLOAD GME CAL FUT)								
ITP	Spec		Increase	EUR	990	900	1,100	1,000
ITP	Hedge/Member		Increase	EUR	900	900	1,000	1,000
Italian Power Peakload Calendar month futures – Months 4-9 vs 4-9 (ITALIAN POWER PEAKLOAD GME CAL FUT)								
ITP	Spec		Increase	EUR	990	900	1,100	1,000
ITP	Hedge/Member		Increase	EUR	900	900	1,000	1,000
INTEREST RATES - Intra Spreads								
2 Year Treasury Note (26) - All Months (2 YEAR TREASURY NOTE FUTURES)								
26	Spec		Decrease	USD	209	190	171	155
26	Hedge/Member		Decrease	USD	190	190	155	155
Ultra Long Bond (UBE) - All Months (LONG TERM U.S. TREASURY BOND FUTURE)								
UBE	Spec		Increase	USD	495	450	605	550
UBE	Hedge/Member		Increase	USD	450	450	550	550
NATURAL GAS - Intra Spreads								
El Paso Natural Gas Co. Permian Basin Basis Swap - All Months (PERMIAN BASIS FUT)								
PM	Spec		Increase	USD	440	400	605	550
PM	Hedge/Member		Increase	USD	400	400	550	550
Houston Ship Channel Basis Swap (Platts IFERC) - All Months (HOUSTON SHIP CHANNEL BASIS FUT)								
NH	Spec		Increase	USD	121	110	143	130
NH	Hedge/Member		Increase	USD	110	110	130	130
PEPL TEXAS/OKLAHOMA (MAINLINE) (NK) - All Months (SUMAS BASIS FUT)								
NK	Spec		Increase	USD	462	420	649	590
NK	Hedge/Member		Increase	USD	420	420	590	590
TETCO STX BASIS (TX) - All Months (TETCO STX BASIS)								
TX	Spec		Increase	USD	275	250	374	340
TX	Hedge/Member		Increase	USD	250	250	340	340
Transco Zone 6 Non-N.Y (Platts IFERC) Basis Swap Futures - All Months (TRANSCO ZONE 6 NON NY BASIS FUT)								
TZ6	Spec		Increase	USD	1,540	1,400	1,870	1,700
TZ6	Hedge/Member		Increase	USD	1,400	1,400	1,700	1,700
PETROLEUM CRACKS AND SPREADS - Intra Spreads								
Gasoline 10 ppm (Platts) FOB MED Crack Spread Swap Futures - All Months (GASOLINE 10 PPM PLATTS FOB CRK SPRD)								
GKS	Spec		Increase	USD	715	650	990	900
GKS	Hedge/Member		Increase	USD	650	650	900	900

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
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Intra Spreads

REFINED PRODUCTS - Intra Spreads

(MTBE FOB SINGAPORE (PLATTS) FUTURES)

1NM	Spec		New	USD			1,100	1,000
1NM	Spec		New	USD			1,320	1,200
1NM	Spec		New	USD			2,200	2,000
1NM	Spec		New	USD			2,420	2,200
1NM	Hedge/Member		New	USD			1,000	1,000
1NM	Hedge/Member		New	USD			1,200	1,200
1NM	Hedge/Member		New	USD			2,000	2,000
1NM	Hedge/Member		New	USD			2,200	2,200

Los Angeles CARB Gasoline Swap - All Months (LOS ANGELES CARB GASOLINE FUT)

MH	Spec		Increase	USD	1,870	1,700	2,640	2,400
MH	Hedge/Member		Increase	USD	1,700	1,700	2,400	2,400

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						

CRUDE OIL - Inter-commodity Spread Rates

EUROPEAN 1% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UH - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)

Spread Credit Rate	Decrease	+5:-33	80%	80%	77%	77%
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LIGHT SWEET CRUDE OIL FUTURES (NY-CL, CS, WS) vs NY HEATING OIL (PLATTS) SWAP FUTURES (NY-YF - CME)

Spread Credit Rate	Decrease	+1:-1	70%	70%	60%	60%
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LIGHT, SWEET CRUDE OIL FUTURES (NYM-CL, CS, WS) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% SULFUR (PLATTS) SWAP (NYM-MM - CME)

Spread Credit Rate	Decrease	+1:-1	83%	83%	77%	77%
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WTI MIDLAND (ARGUS) VS. WTI FINANCIAL FUTURES (NY-FF - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)

Spread Credit Rate	New	+1:+1:-1			68%	68%
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WTI MIDLAND (ARGUS) VS. WTI TRADE MONTH FUTURES (NY-WTT - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)

Spread Credit Rate	New	+1:+1:-1			68%	68%
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CRUDE OIL SPREADS - Inter-commodity Spread Rates

WTI MIDLAND (ARGUS) VS. WTI FINANCIAL FUTURES (NY-FF - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)

Spread Credit Rate	New	+1:+1:-1			68%	68%
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WTI MIDLAND (ARGUS) VS. WTI TRADE MONTH FUTURES (NY-WTT - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)

Spread Credit Rate	New	+1:+1:-1			68%	68%
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SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
EQUITY INDEX - Inter-commodity Spread Rates						
E-MINI NASDAQ-100 FUTURES (NQ - CME) vs 30 DAY FED FUNDS FUTURES (41 - CME)						
Spread Credit Rate	Decrease	+1:+20	25%	25%	0%	0%
Spread Credit Rate	Decrease	+1:+16	25%	25%	0%	0%
Spread Credit Rate	Decrease	+1:+10	25%	25%	0%	0%
Spread Credit Rate	Decrease	+1:+8	25%	25%	0%	0%
E-MINI DOW (\$5) FUTURES (YM - CME) vs DJ US REAL ESTATE INDEX (JR - CME)						
Spread Credit Rate	Increase	+1:-2	30%	30%	40%	40%
E-MINI DOW (\$5) FUTURES (YM - CME) vs S&P SELECT SECTOR - MATERIALS (XAB - CME)						
Spread Credit Rate	Decrease	-2:+3	74%	74%	65%	65%
E-MINI FTSE 100 INDEX (GBP) FUTURES (FT1 - CME) vs NASDAQ-100 (ND - CME)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	40%	40%
E-MINI NASDAQ BIOTECHNOLOGY (BQ - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)						
Spread Credit Rate	Increase	+1:-1	45%	45%	65%	65%
E-MINI NASDAQ-100 FUTURES (NQ - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Decrease	+1:+3	35%	35%	20%	20%
E-MINI NASDAQ-100 FUTURES (NQ - CME) vs 5-YEAR T-NOTE (25 - CME)						
Spread Credit Rate	Decrease	+1:+6	35%	35%	20%	20%
E-MINI NASDAQ-100 FUTURES (NQ - CME) vs E-MINI DOW (\$5) FUTURES (YM - CME)						
Spread Credit Rate	Decrease	+5:-3	64%	64%	60%	60%
E-MINI NASDAQ-100 FUTURES (NQ - CME) vs S&P 500 VALUE (SU - CME)						
Spread Credit Rate	Decrease	+5:-1	50%	50%	45%	45%
E-MINI REAL ESTATE SELECT SECTOR FUTURES (XAR - CME) vs S&P SELECT SECTOR - INDUSTRIAL (XAI - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	25%	25%
E-MINI RUSSELL 1000 GROWTH INDEX FUTURES (RSG - CME) vs S&P 500 (SP - CME)						
Spread Credit Rate	Decrease	+10:-1	85%	85%	80%	80%
E-MINI RUSSELL 1000 INDEX FUTURES (RS1 - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)						
Spread Credit Rate	Decrease	+2:-1	85%	85%	80%	80%
E-MINI RUSSELL 2000 INDEX FUTURES (RTY - CME) vs NIKKEI 225 YEN-BASED (N1 - CME)						
Spread Credit Rate	Decrease	+3:-2	65%	65%	55%	55%
EMINI SP 500 CONS STAPLES SECTOR IX (XAP) vs E-MINI SP500 CONS DISCRET SECTOR IX (XAY)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	50%	50%
EMINI SP 500 ENERGY SECTOR INDEX (XAE) vs EMINI SP500- HEALTH CARE SECT INDEX (XAV)						
Spread Credit Rate	Increase	+1:-1	45%	45%	55%	55%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
EMINI SP 500 ENERGY SECTOR INDEX (XAE) vs EMINI SP500-INDUSTRIAL SECTOR INDEX (XAI)						
Spread Credit Rate	Decrease	+1:-2	60%	60%	50%	50%
EMINI SP500 MATERIALS SECTOR INDEX (XAB) vs EMINI SP500- HEALTH CARE SECT INDEX (XAV)						
Spread Credit Rate	Decrease	+1:-1	65%	65%	55%	55%
EURODOLLAR (ED - CME) Tier 1 vs S&P 500 (SP - CME)						
Spread Credit Rate	Decrease	+110:+1	20%	20%	0%	0%
EURODOLLAR (ED - CME) Tier 10 vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+40:+1	20%	20%	30%	30%
EURODOLLAR (ED - CME) Tier 11 vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+40:+1	20%	20%	30%	30%
EURODOLLAR (ED - CME) Tier 2 vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+80:+1	20%	20%	30%	30%
EURODOLLAR (ED - CME) Tier 3 vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+60:+1	20%	20%	30%	30%
EURODOLLAR (ED - CME) Tier 4 vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+45:+1	20%	20%	30%	30%
EURODOLLAR (ED - CME) Tier 5 vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+45:+1	20%	20%	30%	30%
EURODOLLAR (ED - CME) Tier 6 vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+40:+1	20%	20%	30%	30%
EURODOLLAR (ED - CME) Tier 7 vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+40:+1	20%	20%	30%	30%
EURODOLLAR (ED - CME) Tier 8 vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+40:+1	20%	20%	30%	30%
EURODOLLAR (ED - CME) Tier 9 vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+40:+1	20%	20%	30%	30%
EURODOLLAR (ED - CME) vs E-MINI DOW (\$5) FUTURES (YM - CME)						
Spread Credit Rate	Decrease	+19:+1	25%	25%	0%	0%
EURODOLLAR (ED - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)						
Spread Credit Rate	Decrease	+20:+1	20%	20%	0%	0%
Spread Credit Rate	Decrease	+15:+1	20%	20%	0%	0%
Spread Credit Rate	Decrease	+11:+1	20%	20%	0%	0%
Spread Credit Rate	Decrease	+8:+1	20%	20%	0%	0%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
FTSE EMERGING INDEX FUTURES (EI - CME) vs S&P 500 (SP - CME)						
Spread Credit Rate	Decrease	+65:-1	35%	35%	30%	30%
NIKKEI 225 DOLLAR-BASED (NK - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)						
Spread Credit Rate	Decrease	+2:-5	52%	52%	50%	50%
S&P Midcap 400 (MD) vs. S&P 500 Stock Index (SP)						
Spread Credit Rate	Decrease	+5:-2	80%	80%	70%	70%
S&P SELECT SECTOR - ENERGY (XAE - CME) vs E-MINI DOW (\$5) FUTURES (YM - CME)						
Spread Credit Rate	Increase	+1:-1	52%	52%	65%	65%
S&P SELECT SECTOR - FINANCIAL (XAF - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)						
Spread Credit Rate	Decrease	+1:-1	65%	65%	55%	55%
S&P SELECT SECTOR - INDUSTRIAL (XAI - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)						
Spread Credit Rate	Decrease	+6:-5	65%	65%	55%	55%
U.S. TREASURY BOND (17 - CME) vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+20:+3	20%	20%	35%	35%
ULTRA 10-YEAR U.S. TREASURY NOTE FUTURES (TN - CME) vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+25:+2	25%	25%	35%	35%
ULTRA LONG TREASURY BOND (UBE - CME) vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+5:+1	20%	20%	35%	35%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
INTEREST RATES - Inter-commodity Spread Rates						
10 Year Treasury Note (21) vs. Eurodollar (ED) Tier 01						
Spread Credit Rate	Decrease	+2:-5	45%	45%	40%	40%
10 Year Treasury Note (21) vs. Eurodollar (ED) Tier 02						
Spread Credit Rate	Decrease	+2:-5	60%	60%	55%	55%
10 Year Treasury Note (21) vs. Eurodollar (ED) Tier 03						
Spread Credit Rate	Decrease	+2:-5	80%	80%	75%	75%
10 Year Treasury Note (21) vs. Fed Funds (41) Tier 2 (Months 2-4)						
Spread Credit Rate	Increase	+1:-2	35%	35%	40%	40%
2 Year Treasury Note (26) vs. Eurodollar (ED) Tier 01						
Spread Credit Rate	Decrease	+2:-3	50%	50%	45%	45%
Fed Funds (CBOT) (41) Tier 1 [contract 1] vs. Eurodollar (ED) Tier 1 [contracts 1-4]						
Spread Credit Rate	Increase	+3:-5	45%	45%	55%	55%
Fed Funds (CBOT) (41) Tier 1 [contract 1] vs. Eurodollar (ED) Tier 4 [contracts 13-16]						
Spread Credit Rate	Increase	+3:-5	30%	30%	35%	35%
Fed Funds (CBOT) (41) Tier 1 [contract 1] vs. Eurodollar (ED) Tier 5 [contracts 17-20]						
Spread Credit Rate	Increase	+3:-5	35%	35%	45%	45%
Fed Funds (CBOT) (41) Tier 1 [contract 1] vs. Eurodollar (ED) Tier 6 [contracts 21-24]						
Spread Credit Rate	Increase	+3:-5	40%	40%	45%	45%
Fed Funds (CBOT) (41) Tier 1 [contract 1] vs. Eurodollar (ED) Tier 7 [contracts 25-28]						
Spread Credit Rate	Increase	+3:-5	40%	40%	45%	45%
Fed Funds (CBOT) (41) Tier 1 [contract 1] vs. Eurodollar (ED) Tier 8 [contracts 29-32]						
Spread Credit Rate	Increase	+3:-5	40%	40%	45%	45%
Fed Funds (CBOT) (41) Tier 1 [contract 1] vs. Eurodollar (ED) Tier 9 [contracts 33-36]						
Spread Credit Rate	Increase	+3:-5	40%	40%	45%	45%
Fed Funds (CBOT) (41) Tier 2 [contracts 2-4] vs. Eurodollar (ED) Tier 1 [contracts 1-4]						
Spread Credit Rate	Increase	+3:-5	45%	45%	55%	55%
Fed Funds (CBOT) (41) Tier 3 [contracts 5-12] vs. Eurodollar (ED) Tier 1 [contracts 1-4]						
Spread Credit Rate	Increase	+3:-5	45%	45%	55%	55%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
Fed Funds (CBOT) (41) Tier 4 [contracts 13-24] vs Eurodollar (ED) Tier 2 [contracts 5-8]						
Spread Credit Rate	Increase	+3:-5	60%	60%	65%	65%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 1 [contracts 1-4]						
Spread Credit Rate	Decrease	+3:-5	40%	40%	35%	35%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 10 [contracts 37-40]						
Spread Credit Rate	Increase	+3:-5	60%	60%	70%	70%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 11 [contracts 41-44]						
Spread Credit Rate	Increase	+3:-5	60%	60%	70%	70%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 2 [contracts 5-8]						
Spread Credit Rate	Increase	+3:-5	50%	50%	55%	55%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 3 [contracts 9-12]						
Spread Credit Rate	Increase	+3:-5	65%	65%	75%	75%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 4 [contracts 13-16]						
Spread Credit Rate	Increase	+3:-5	65%	65%	75%	75%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 5 [contracts 17-20]						
Spread Credit Rate	Increase	+3:-5	65%	65%	75%	75%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 6 [contracts 21-24]						
Spread Credit Rate	Increase	+3:-5	65%	65%	75%	75%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 7 [contracts 25-28]						
Spread Credit Rate	Increase	+3:-5	65%	65%	75%	75%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 8 [contracts 29-32]						
Spread Credit Rate	Increase	+3:-5	60%	60%	70%	70%
Fed Funds (CBOT) (41) Tier 5 [contracts 25+] vs Eurodollar (ED) Tier 9 [contracts 33-36]						
Spread Credit Rate	Increase	+3:-5	60%	60%	70%	70%
U.S. TREASURY BOND (17 - CME) vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+20:+3	20%	20%	35%	35%
ULTRA 10-YEAR U.S. TREASURY NOTE FUTURES (TN - CME) vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+25:+2	25%	25%	35%	35%
ULTRA LONG TREASURY BOND (UBE - CME) vs S&P 500 (SP - CME)						
Spread Credit Rate	Increase	+5:+1	20%	20%	35%	35%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
REFINED PRODUCTS - Inter-commodity Spread Rates						
EUROPEAN 1% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UH - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+5:-33	80%	80%	77%	77%
LIGHT SWEET CRUDE OIL FUTURES (NY-CL, CS, WS) vs NY HEATING OIL (PLATTS) SWAP FUTURES (NY-YF - CME)						
Spread Credit Rate	Decrease	+1:-1	70%	70%	60%	60%
LIGHT, SWEET CRUDE OIL FUTURES (NYM-CL, CS, WS) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% SULFUR (PLATTS) SWAP (NYM-MM - CME)						
Spread Credit Rate	Decrease	+1:-1	83%	83%	77%	77%
MTBE FOB SINGAPORE (PLATTS) FUTURES (NY-1NM - CME) vs EUROPEAN NAPHTHA (PLATTS) CALENDAR SWAP FUTURES (NY-UN - CME)						
Spread Credit Rate	New	+10:-1			40%	40%
MTBE FOB SINGAPORE (PLATTS) FUTURES (NY-1NM - CME) vs GASOLINE EURO-BOB OXY (ARGUS) NWE BARGES SWAP FUTURES (NY-7H - CME)						
Spread Credit Rate	New	+10:-1			35%	35%
MTBE FOB SINGAPORE (PLATTS) FUTURES (NY-1NM - CME) vs JAPAN C&F NAPHTHA (PLATTS) SWAP FUTURES (NY-JA - CME)						
Spread Credit Rate	New	+10:-1			30%	30%
Spread Credit Rate	New	+10:-1			40%	40%
MTBE FOB SINGAPORE (PLATTS) FUTURES (NY-1NM - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)						
Spread Credit Rate	New	+1:-1			40%	40%
MTBE FOB SINGAPORE (PLATTS) FUTURES (NY-1NM - CME) vs SINGAPORE MOGAS 92 UNLEADED (PLATTS) SWAP FUTURES (NY-1N - CME)						
Spread Credit Rate	New	+1:-1			50%	50%
Spread Credit Rate	New	+1:-1			45%	45%
MTBE FOB SINGAPORE (PLATTS) FUTURES (NY-1NM - CME) vs SINGAPORE MOGAS 95 UNLEADED (PLATTS) SWAP FUTURES (NY-V0 - CME)						
Spread Credit Rate	New	+1:-1			40%	40%
MTBE FOB SINGAPORE (PLATTS) FUTURES (NY-1NM - CME) vs SINGAPORE MOGAS 97 UNLEADED (PLATTS) SWAP FUTURES (NY-X0 - CME)						
Spread Credit Rate	New	+1:-1			40%	40%
Spread Credit Rate	New	+1:-1			55%	55%
MTBE FOB SINGAPORE (PLATTS) FUTURES (NY-1NM - CME) vs SINGAPORE NAPHTHA (PLATTS) SWAP FUTURES (NY-SP - CME)						
Spread Credit Rate	New	+1:-1			50%	50%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	<u>Tier Description</u>	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
Short Option Minimum (SOM) Rate						
REFINED PRODUCTS - Short Option Minimum (SOM) Rate						
MTBE FOB SINGAPORE (PLATTS) FUTURES (1NM) - SOM						
Clearing Member Rate		New			66.000	60.000

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	<u>Tier Description</u>	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
Volatility Scan (volScan) Rate						

REFINED PRODUCTS - Volatility Scan (volScan) Rate

MTBE FOB SINGAPORE (PLATTS) FUTURES (1NM) - volScan

Clearing Member Rate	Mnth 1	New				20.000%
Clearing Member Rate	Mnth 2	New				20.000%

Rate Type	<u>Tier Description</u>	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
Volatility Scan (volScan) Rate						

Interest Rates - Volatility Scan Up (volScan) Rate – SPAN Scenarios 15/16 Volatility Up Shock

FED FUND FUTURES (CME-41) - volScan

Clearing Member Rate	Mnth 1	Increase		0%		40%
Clearing Member Rate	Mnth 2-4	Increase		0%		35%
Clearing Member Rate	Mnth 5+	Increase		0%		25%

EURODOLLAR FUTURES (CME-ED) - volScan

Clearing Member Rate	Mnth 1-3	Increase		0%		35%
Clearing Member Rate	Mnth 4-6	Increase		0%		20%
Clearing Member Rate	Mnth 7-9	Increase		0%		18%
Clearing Member Rate	Mnth 10+	Increase		0%		15%

2-Year T-Note Futures (CBT-26) - volScan

Clearing Member Rate	Mnth 1+	Increase		0%		30%
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5-Year T-Note Futures (CBT-25) - volScan

Clearing Member Rate	Mnth 1+	Increase		0%		30%
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10-Year T-Note Futures (CBT-21) - volScan

Clearing Member Rate	Mnth 1+	Increase		0%		30%
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U.S. Treasury Bond Futures (CBT-17) - volScan

Clearing Member Rate	Mnth 1+	Increase		0%		25%
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Ultra 10-Year T-Note Futures (CBT-TN) - volScan

Clearing Member Rate	Mnth 1+	Increase		0%		30%
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Ultra U.S. Treasury Bond Futures (CBT-UBE) - volScan

Clearing Member Rate	Mnth 1+	Increase		0%		25%
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