



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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, September 20, 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, September 21, 2018.

Current rates as of:

Thursday, September 20, 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
Outright Rates								

CRUDE OIL SPREADS - Outright Rates

LIGHT SWEET OIL NET ENERGY MONTHLY (LSW)

LSW	Spec	Mnths 1-2	Increase	USD	2,420	2,200	2,860	2,600
LSW	Hedge/Member	Mnths 1-2	Increase	USD	2,200	2,200	2,600	2,600

WTI MIDLAND (ARG) VS. WTI TRADE MTH (WTT)

WTT	Spec	Mnth 1	Decrease	USD	3,850	3,500	3,300	3,000
WTT	Hedge/Member	Mnth 1	Decrease	USD	3,500	3,500	3,000	3,000
WTT	Spec	Mnths 3-4	Decrease	USD	2,915	2,650	2,530	2,300
WTT	Hedge/Member	Mnths 3-4	Decrease	USD	2,650	2,650	2,300	2,300
WTT	Spec	Mnths 5-7	Decrease	USD	2,915	2,650	2,530	2,300
WTT	Hedge/Member	Mnths 5-7	Decrease	USD	2,650	2,650	2,300	2,300
WTT	Spec	Mnths 8-15	Increase	USD	1,650	1,500	2,200	2,000
WTT	Hedge/Member	Mnths 8-15	Increase	USD	1,500	1,500	2,000	2,000
WTT	Spec	Mnth 2	Decrease	USD	3,520	3,200	3,080	2,800
WTT	Hedge/Member	Mnth 2	Decrease	USD	3,200	3,200	2,800	2,800

WTI MIDLAND(ARGUS) VS WTI FINCL FUT (FF)

FF	Spec	Mnth1	Decrease	USD	3,740	3,400	3,300	3,000
FF	Hedge/Member	Mnth1	Decrease	USD	3,400	3,400	3,000	3,000
FF	Spec	Mnth 2	Decrease	USD	3,300	3,000	3,080	2,800
FF	Hedge/Member	Mnth 2	Decrease	USD	3,000	3,000	2,800	2,800
FF	Spec	Mnths 3-7	Decrease	USD	2,915	2,650	2,530	2,300
FF	Hedge/Member	Mnths 3-7	Decrease	USD	2,650	2,650	2,300	2,300
FF	Spec	Mths 8-15	Increase	USD	2,145	1,950	2,200	2,000
FF	Hedge/Member	Mths 8-15	Increase	USD	1,950	1,950	2,000	2,000
FF	Spec	Mths 16+	New	USD			1,100	1,000
FF	Hedge/Member	Mths 16+	New	USD			1,000	1,000

ELECTRICITY - Outright Rates

MISO INDIANA HUB 5MW PK CAL-DAY RT (PTD)

PTD	Spec	Days 1-11	Increase	USD	2,200	2,000	2,750	2,500
PTD	Hedge/Member	Days 1-11	Increase	USD	2,000	2,000	2,500	2,500

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
EQUITY INDEX - Outright Rates								
BTIC ON E-MINI COM SERVICES SECTOR (XZT)								
XZT	Spec		Increase	USD	3,080	2,800	3,300	3,000
XZT	Hedge/Member		Increase	USD	2,800	2,800	3,000	3,000
BTIC SP 500 TECHNOLOGY SECTOR TIC (XKT)								
XKT	Spec		Increase	USD	2,860	2,600	3,135	2,850
XKT	Hedge/Member		Increase	USD	2,600	2,600	2,850	2,850
E-MINI COM SELECT SECTOR MARKER (XZI)								
XZI	Spec		Increase	USD	3,080	2,800	3,300	3,000
XZI	Hedge/Member		Increase	USD	2,800	2,800	3,000	3,000
E-MINI COM SERVICES SELECT SECTOR (XAZ)								
XAZ	Spec		Increase	USD	3,080	2,800	3,300	3,000
XAZ	Hedge/Member		Increase	USD	2,800	2,800	3,000	3,000
EMINI SP500-TECHNOLOGY SECTOR INDEX (XAK)								
XAK	Spec		Increase	USD	2,860	2,600	3,135	2,850
XAK	Hedge/Member		Increase	USD	2,600	2,600	2,850	2,850
SP 500 TECHNOLOGY SECTOR SYNTH (1KT)								
1KT	Spec		Increase	USD	2,860	2,600	3,135	2,850
1KT	Hedge/Member		Increase	USD	2,600	2,600	2,850	2,850

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
METALS - Outright Rates								
ALUMINIUM EURO PREM DUTY-PAID FUT (EDP)								
EDP	Spec	Mth 1	Decrease	USD	880	800	770	700
EDP	Hedge/Member	Mth 1	Decrease	USD	800	800	700	700
EDP	Spec	Mths 2-9	Decrease	USD	880	800	770	700
EDP	Hedge/Member	Mths 2-9	Decrease	USD	800	800	700	700
EDP	Spec	Mths 10+	Decrease	USD	880	800	770	700
EDP	Hedge/Member	Mths 10+	Decrease	USD	800	800	700	700
ALUMINIUM EURO PREM METAL BULLETIN (AEP)								
AEP	Spec	Mth 1	Decrease	USD	770	700	688	625
AEP	Hedge/Member	Mth 1	Decrease	USD	700	700	625	625
AEP	Spec	Mths 2-9	Decrease	USD	770	700	688	625
AEP	Hedge/Member	Mths 2-9	Decrease	USD	700	700	625	625
AEP	Spec	Mths 10+	Decrease	USD	880	800	770	700
AEP	Hedge/Member	Mths 10+	Decrease	USD	800	800	700	700
ALUMINUM JAPAN PREMIUM (PLATTS) FUT (MJP)								
MJP	Spec	Mth 1	Decrease	USD	715	650	633	575
MJP	Hedge/Member	Mth 1	Decrease	USD	650	650	575	575
MJP	Spec	Mths 2-9	Decrease	USD	715	650	633	575
MJP	Hedge/Member	Mths 2-9	Decrease	USD	650	650	575	575
MJP	Spec	Mths 10+	Decrease	USD	715	650	633	575
MJP	Hedge/Member	Mths 10+	Decrease	USD	650	650	575	575
ALUMINUM MW TRANS PREM PLATTS FUT (AUP)								
AUP	Spec	Mth 1	Decrease	USD	1,375	1,250	1,210	1,100
AUP	Hedge/Member	Mth 1	Decrease	USD	1,250	1,250	1,100	1,100
AUP	Spec	Mths 2-12	Decrease	USD	1,375	1,250	1,210	1,100
AUP	Hedge/Member	Mths 2-12	Decrease	USD	1,250	1,250	1,100	1,100
AUP	Spec	Mths 13-21	Decrease	USD	1,485	1,350	1,320	1,200
AUP	Hedge/Member	Mths 13-21	Decrease	USD	1,350	1,350	1,200	1,200
AUP	Spec	22+	Decrease	USD	1,540	1,400	1,375	1,250
AUP	Hedge/Member	22+	Decrease	USD	1,400	1,400	1,250	1,250
NYMEX HOT ROLLED STEEL FUTURES (HR)								
HR	Spec	Mnths 2 - 7	Decrease	USD	715	650	633	575
HR	Hedge/Member	Mnths 2 - 7	Decrease	USD	650	650	575	575
HR	Spec	Mnths 8+	Decrease	USD	935	850	825	750
HR	Hedge/Member	Mnths 8+	Decrease	USD	850	850	750	750
HR	Spec	Mnth 1	Decrease	USD	715	650	633	575
HR	Hedge/Member	Mnth 1	Decrease	USD	650	650	575	575

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

U.S. MIDWEST BUSHELING SCRAP (BUS)

BUS	Spec	Mth 1	Decrease	USD	523	475	468	425
BUS	Hedge/Member	Mth 1	Decrease	USD	475	475	425	425
BUS	Spec	Mths 2-4	Decrease	USD	523	475	468	425
BUS	Hedge/Member	Mths 2-4	Decrease	USD	475	475	425	425
BUS	Spec	Mths 6+	Decrease	USD	550	500	495	450
BUS	Hedge/Member	Mths 6+	Decrease	USD	500	500	450	450

US MW BUSHELING FERROUS SCRAP SWAP (BUW)

BUW	Spec	Mth 1	Decrease	USD	523	475	468	425
BUW	Hedge/Member	Mth 1	Decrease	USD	475	475	425	425
BUW	Spec	Mths 2-4	Decrease	USD	523	475	468	425
BUW	Hedge/Member	Mths 2-4	Decrease	USD	475	475	425	425
BUW	Spec	Mths 6+	Decrease	USD	550	500	495	450
BUW	Hedge/Member	Mths 6+	Decrease	USD	500	500	450	450

ZINC FUTURES (ZNC)

ZNC	Spec	Mths 1-4	Decrease	USD	3,630	3,300	3,300	3,000
ZNC	Hedge/Member	Mths 1-4	Decrease	USD	3,300	3,300	3,000	3,000
ZNC	Spec	Mths 5-6	Decrease	USD	3,630	3,300	3,300	3,000
ZNC	Hedge/Member	Mths 5-6	Decrease	USD	3,300	3,300	3,000	3,000
ZNC	Spec	Mths 7-12	Decrease	USD	3,630	3,300	3,300	3,000
ZNC	Hedge/Member	Mths 7-12	Decrease	USD	3,300	3,300	3,000	3,000
ZNC	Spec	Mths 13+	Decrease	USD	3,630	3,300	3,300	3,000
ZNC	Hedge/Member	Mths 13+	Decrease	USD	3,300	3,300	3,000	3,000

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

NATURAL GAS - Outright Rates

NGPL MIDCONTINENT BASIS FUT (NL)

NL	Spec	Mnth 1	Increase	USD	231	210	319	290
NL	Hedge/Member	Mnth 1	Increase	USD	210	210	290	290
NL	Spec	Mnth 2	Increase	USD	231	210	319	290
NL	Hedge/Member	Mnth 2	Increase	USD	210	210	290	290
NL	Spec	Mnths 3-6	Increase	USD	231	210	319	290
NL	Hedge/Member	Mnths 3-6	Increase	USD	210	210	290	290
NL	Spec	Mnths 7-12	Increase	USD	231	210	319	290
NL	Hedge/Member	Mnths 7-12	Increase	USD	210	210	290	290
NL	Spec	Mnths 13-25	Increase	USD	231	210	319	290
NL	Hedge/Member	Mnths 13-25	Increase	USD	210	210	290	290
NL	Spec	Mnths 26-49	Increase	USD	231	210	319	290
NL	Hedge/Member	Mnths 26-49	Increase	USD	210	210	290	290
NL	Spec	Mnths 50+	Increase	USD	231	210	319	290
NL	Hedge/Member	Mnths 50+	Increase	USD	210	210	290	290

NGL/PETROCHEMICALS - Outright Rates

MT BELVIEU ETHYLENE IN-WELL(PCW) (MBE)

MBE	Spec	Month 1	Increase	USD	2,420	2,200	2,970	2,700
MBE	Hedge/Member	Month 1	Increase	USD	2,200	2,200	2,700	2,700
MBE	Spec	Months 2+	Increase	USD	2,200	2,000	2,750	2,500
MBE	Hedge/Member	Months 2+	Increase	USD	2,000	2,000	2,500	2,500

MT. BELVIEU ETHYLENE(PCW) FIN FUT (MBN)

MBN	Spec	Mnth 1	Increase	USD	2,420	2,200	3,025	2,750
MBN	Hedge/Member	Mnth 1	Increase	USD	2,200	2,200	2,750	2,750
MBN	Spec	Mnths 2+	Increase	USD	2,420	2,200	3,025	2,750
MBN	Hedge/Member	Mnths 2+	Increase	USD	2,200	2,200	2,750	2,750

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

CRUDE OIL - Intra Spreads

Dubai Crude Butterfly - Distance 1 (DUBAI CRUDE OIL CALENDAR FUT)

DC	Spec		New	USD			72	65
DC	Hedge/Member		New	USD			65	65

Dubai Crude Butterfly - Distance 1 (MINI DUBAI CRUDE OIL (PLATTS) FUT)

DBL	Spec		New	USD			7	7
DBL	Hedge/Member		New	USD			7	7

Dubai Crude Butterfly - Distance 2 (DUBAI CRUDE OIL CALENDAR FUT)

DC	Spec		New	USD			110	100
DC	Hedge/Member		New	USD			100	100

Dubai Crude Butterfly - Distance 2 (MINI DUBAI CRUDE OIL (PLATTS) FUT)

DBL	Spec		New	USD			11	10
DBL	Hedge/Member		New	USD			10	10

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
DME Products - Intra Spreads								
Dubai Crude Butterfly - Distance 1 (DUBAI CRUDE OIL (PLATTS))								
DCD	Spec		New	USD			72	65
DCD	Hedge/Member		New	USD			65	65
Dubai Crude Butterfly - Distance 2 (DUBAI CRUDE OIL (PLATTS))								
DCD	Spec		New	USD			110	100
DCD	Hedge/Member		New	USD			100	100
Oman Crude Butterfly - Distance 2 (DME OMAN CRUDE OIL)								
OQ	Spec		New	USD			110	100
OQ	Hedge/Member		New	USD			100	100
Oman Crude Butterfly - Distance 2 (OMAN CRUDE FINANCIAL)								
ZG	Spec		New	USD			110	100
ZG	Hedge/Member		New	USD			100	100
Oman Crude Butterfly - Distance 2 (OMAN CRUDE OIL TAM FUT)								
OQB	Spec		New	USD			110	100
OQB	Hedge/Member		New	USD			100	100
Oman Crude Butterfly - Distance 2 (OMAN CRUDE OIL TAM MARKER SYN)								
OQ1	Spec		New	USD			110	100
OQ1	Hedge/Member		New	USD			100	100
Oman Crude Butterfly- Distance 1 (DME OMAN CRUDE OIL)								
OQ	Spec		New	USD			66	60
OQ	Hedge/Member		New	USD			60	60
Oman Crude Butterfly- Distance 1 (OMAN CRUDE FINANCIAL)								
ZG	Spec		New	USD			66	60
ZG	Hedge/Member		New	USD			60	60
Oman Crude Butterfly- Distance 1 (OMAN CRUDE OIL TAM FUT)								
OQB	Spec		New	USD			66	60
OQB	Hedge/Member		New	USD			60	60
Oman Crude Butterfly- Distance 1 (OMAN CRUDE OIL TAM MARKER SYN)								
OQ1	Spec		New	USD			66	60
OQ1	Hedge/Member		New	USD			60	60

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
EQUITY INDEX - Intra Spreads								
E-Mini S&P Midcap 400 (MD) - Months 1 vs 3+ (BTIC E-MINI S&P MIDCAP 400 FUT)								
EMT	Spec		Increase	USD	253	230	385	350
EMT	Hedge/Member		Increase	USD	230	230	350	350
E-Mini S&P Midcap 400 (MD) - Months 1 vs 3+ (EMINI MIDCAP FUTURES)								
ME	Spec		Increase	USD	253	230	385	350
ME	Hedge/Member		Increase	USD	230	230	350	350
E-Mini S&P Midcap 400 (MD) - Months 1 vs 3+ (E-MINI S&P MIDCAP 400 SYNT MARKER)								
ETT	Spec		Increase	USD	253	230	385	350
ETT	Hedge/Member		Increase	USD	230	230	350	350
E-Mini S&P Midcap 400 (MD) - Months 2 vs 3+ (BTIC E-MINI S&P MIDCAP 400 FUT)								
EMT	Spec		Increase	USD	253	230	385	350
EMT	Hedge/Member		Increase	USD	230	230	350	350
E-Mini S&P Midcap 400 (MD) - Months 2 vs 3+ (EMINI MIDCAP FUTURES)								
ME	Spec		Increase	USD	253	230	385	350
ME	Hedge/Member		Increase	USD	230	230	350	350
E-Mini S&P Midcap 400 (MD) - Months 2 vs 3+ (E-MINI S&P MIDCAP 400 SYNT MARKER)								
ETT	Spec		Increase	USD	253	230	385	350
ETT	Hedge/Member		Increase	USD	230	230	350	350
S&P 500/Citigroup Growth Index - All Months (BTIC S&P 500 / GROWTH)								
SGT	Spec		Increase	USD	1,320	1,200	1,980	1,800
SGT	Hedge/Member		Increase	USD	1,200	1,200	1,800	1,800
S&P 500/Citigroup Growth Index - All Months (S&P 500 / GROWTH SYNT MARKER)								
TGT	Spec		Increase	USD	1,320	1,200	1,980	1,800
TGT	Hedge/Member		Increase	USD	1,200	1,200	1,800	1,800

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
S&P 500/Citigroup Growth Index - All Months (S&P/ CITIGROUP GROWTH INDEX FUTURES)								
SG	Spec		Increase	USD	1,320	1,200	1,980	1,800
SG	Hedge/Member		Increase	USD	1,200	1,200	1,800	1,800
FREIGHT - Intra Spreads								
Freight Route TC12 (Baltic) Swap Futures - All Months (FREIGHT ROUTE TC12 (BALTIC) FUT)								
FRS	Spec		Increase	USD	660	600	1,100	1,000
FRS	Hedge/Member		Increase	USD	600	600	1,000	1,000
Freight Route TC6 (Baltic) Swap Futures - All Months (FREIGHT ROUTE TC6 (BALTIC) FUT)								
TC6	Spec		Increase	USD	330	300	440	400
TC6	Hedge/Member		Increase	USD	300	300	400	400
Tanker Route TD7 North Sea to Europe - All Months (TD7 NORTH SEA TO CONTINENT 80K MT)								
TK	Spec		Increase	USD	660	600	990	900
TK	Hedge/Member		Increase	USD	600	600	900	900
NGL/PETROCHEMICALS - Intra Spreads								
Mont Belvieu Isobutane (OPIS) Swap - Mnth 1 and 2 vs. All Months (MT BELVIEU ISO BUTANE 5 DEC. S)								
8I	Spec		Increase	USD	1,540	1,400	2,200	2,000
8I	Hedge/Member		Increase	USD	1,400	1,400	2,000	2,000
Mont Belvieu Isobutane (OPIS) Swap - Mnth 1 vs. 2 (MT BELVIEU ISO BUTANE 5 DEC. S)								
8I	Spec		Increase	USD	1,650	1,500	2,530	2,300
8I	Hedge/Member		Increase	USD	1,500	1,500	2,300	2,300

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
FX - Inter-commodity Spread Rates						
JAPANESE YEN (JY - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	New	+1:-1			45%	45%
JAPANESE YEN (JY - CME) vs 2-YEAR T-NOTE (26 - CME)						
Spread Credit Rate	New	+2:-1			30%	30%
JAPANESE YEN (JY - CME) vs 5-YEAR T-NOTE (25 - CME)						
Spread Credit Rate	New	+1:-1			30%	30%
JAPANESE YEN (JY - CME) vs U.S. TREASURY BOND (17 - CME)						
Spread Credit Rate	New	+1:-1			45%	45%
JAPANESE YEN (JY - CME) vs ULTRA 10-YEAR U.S. TREASURY NOTE FUTURES (TN - CME)						
Spread Credit Rate	New	+1:-1			45%	45%
JAPANESE YEN (JY - CME) vs ULTRA LONG TREASURY BOND (UBE - CME)						
Spread Credit Rate	New	+3:-2			50%	50%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Tier Description	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
Volatility Scan (volScan) Rate						
Agriculture - Volatility Scan Up (volScan) Rate – SPAN Scenarios 15/16 Volatility Up Shock						
FEEDER CATTLE FUTURES (CME-FC) - volScan						
Clearing Member Rate	Mnth 1	Increase		0%		16%
Clearing Member Rate	Mnth 2+	Increase		0%		13%
LIVE CATTLE FUTURES (CME-LC) - volScan						
Clearing Member Rate	Mnth 1	Increase		0%		16%
Clearing Member Rate	Mnth 2	Increase		0%		14%
Clearing Member Rate	Mnth 3+	Increase		0%		10%
LEAN HOG FUTURES (CME-LN) - volScan						
Clearing Member Rate	Mnth 1	Increase		0%		55%
Clearing Member Rate	Mnth 2	Increase		0%		14%
Clearing Member Rate	Mnth 3	Increase		0%		9%
Clearing Member Rate	Mnth 4	Increase		0%		7%
Clearing Member Rate	Mnth 5+	Increase		0%		6%
MILK CLASS III FUTURES (CME-DA) - volScan						
Clearing Member Rate	Mnth 1	Increase		0%		25%
Clearing Member Rate	Mnth 2-5	Increase		0%		20%
Clearing Member Rate	Mnth 6+	Increase		0%		15%
MILK CLASS IV FUTURES (CME-DK) - volScan						
Clearing Member Rate	Mnth 1	Increase		0%		35%
Clearing Member Rate	Mnth 2-5	Increase		0%		25%
Clearing Member Rate	Mnth 6+	Increase		0%		10%
DRY WHEY FUTURES (CME-DY) - volScan						
Clearing Member Rate	Mnth 1-2	Increase		0%		35%
Clearing Member Rate	Mnth 3-12	Increase		0%		20%
Clearing Member Rate	Mnth 13+	Increase		0%		15%
CASH SETTLED BUTTER FUTURES (CME-CB) - volScan						
Clearing Member Rate	Mnth 1	Increase		0%		30%
Clearing Member Rate	Mnth 2-4	Increase		0%		25%
Clearing Member Rate	Mnth 5+	Increase		0%		15%
CASH SETTLED CHEESE FUTURES (CME-CSC) - volScan						
Clearing Member Rate	Mnth 1	Increase		0%		25%
Clearing Member Rate	Mnth 2-4	Increase		0%		20%
Clearing Member Rate	Mnth 5+	Increase		0%		15%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Tier Description	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
Volatility Scan (volScan) Rate						
CRUDE OIL SPREADS - Volatility Scan (volScan) Rate						
WTI MIDLAND (ARGUS) VS. WTI FINANCIAL FUTURES (FF, FFO) - volScan						
Clearing Member Rate	Mths 16+	New				10.000%
ELECTRICITY - Volatility Scan (volScan) Rate						
PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (4S, JOA, L1, PMA) - volScan						
Clearing Member Rate	Mth 1	Increase		20.000%		25.000%
NATURAL GAS - Volatility Scan (volScan) Rate						
HENRY HUB NATURAL GAS FUTURES (HHE, HHQ, KD, LN, LNW, MNG, NG, NGT, ON, ONW, U01, U02, U03, U04, U05, U06, U07, U08, U09, U10, U11, U12, U13, U14, U15, U16, U17, U18, U19, U20, U21, U22, U23, U24, U25, U26, U27, U28, U29, U30, U31) - volScan						
Clearing Member Rate	Mnth1	Increase		21.000%		23.000%
Clearing Member Rate	Mnth2	Increase		9.000%		11.000%
Clearing Member Rate	Mnth3	Increase		9.000%		11.000%
Clearing Member Rate	Mnth4	Increase		8.000%		10.000%
Clearing Member Rate	Mnth5	Increase		8.000%		10.000%
HENRY HUB NATURAL GAS PENULTIMATE FINANCIAL FUTURES (E7, HH, HP, NP, QG) - volScan						
Clearing Member Rate	Mnth1	Increase		21.000%		23.000%
Clearing Member Rate	Mnth2	Increase		9.000%		11.000%
Clearing Member Rate	Mnth3	Increase		9.000%		11.000%
Clearing Member Rate	Mnth4	Increase		8.000%		10.000%
Clearing Member Rate	Mnth5	Increase		8.000%		10.000%
NYMEX NATURAL GAS (H.HUB LTD) FUT (E7, HH, HHT, NN, NNT) - volScan						
Clearing Member Rate	Mnth1	Increase		21.000%		23.000%
Clearing Member Rate	Mnth2	Increase		9.000%		11.000%
Clearing Member Rate	Mnth3	Increase		9.000%		11.000%
Clearing Member Rate	Mnth4	Increase		8.000%		10.000%
Clearing Member Rate	Mnth5	Increase		8.000%		10.000%