



17-474

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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, December 07, 2017

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, December 08, 2017.

Current rates as of:

Thursday, December 07, 2017.

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 - Outright Rates								
LOOP CRUDE OIL STORAGE FUTURES (LPS)								
LPS	Spec	Mnths 4+	Increase	USD	66	60	88	80
LPS	Hedge/Member	Mnths 4+	Increase	USD	60	60	80	80
CRUDE OIL SPREADS - Outright Rates								
BRENT CRUDE VS DUBAI CRUDE (DBI)								
DBI	Spec	Mnths 4-8	Increase	USD	275	250	303	275
DBI	Hedge/Member	Mnths 4-8	Increase	USD	250	250	275	275
DBI	Spec	Mnths 9+	Increase	USD	275	250	303	275
DBI	Hedge/Member	Mnths 9+	Increase	USD	250	250	275	275
CANADIAN HEAVYCRUDE(NET ENRGY) FUT (WCC)								
WCC	Spec	Mnths 4+	Increase	USD	770	700	880	800
WCC	Hedge/Member	Mnths 4+	Increase	USD	700	700	800	800
CANADIAN LIGHT SWEET OIL (CIL)								
CIL	Spec	Mnths 1-2	Increase	USD	990	900	1,100	1,000
CIL	Hedge/Member	Mnths 1-2	Increase	USD	900	900	1,000	1,000
CIL	Spec	Mnths 3-6	Increase	USD	990	900	1,100	1,000
CIL	Hedge/Member	Mnths 3-6	Increase	USD	900	900	1,000	1,000
ICE BRENT DUBAI FUT (DB)								
DB	Spec	Mnths 4-8	Increase	USD	275	250	303	275
DB	Hedge/Member	Mnths 4-8	Increase	USD	250	250	275	275
DB	Spec	Mnths 9+	Increase	USD	220	200	303	275
DB	Hedge/Member	Mnths 9+	Increase	USD	200	200	275	275
LIGHT SWEET OIL NET ENERGY MONTHLY (LSW)								
LSW	Spec	Mnths 1-2	Increase	USD	990	900	1,100	1,000
LSW	Hedge/Member	Mnths 1-2	Increase	USD	900	900	1,000	1,000
LSW	Spec	Mnths 3-6	Increase	USD	990	900	1,100	1,000
LSW	Hedge/Member	Mnths 3-6	Increase	USD	900	900	1,000	1,000
WESTERN CANADIAN SELECT OIL MONTHLY (WCW)								
WCW	Spec	Mnths 4+	Increase	USD	770	700	880	800
WCW	Hedge/Member	Mnths 4+	Increase	USD	700	700	800	800

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
FX - Outright Rates								
AD/JY FUTURES (AJ)								
AJ	Spec		Decrease	JPY	522,500	475,000	440,000	400,000
AJ	Hedge/Member		Decrease	JPY	475,000	475,000	400,000	400,000
AD/NE CROSS RATE FUTURES (AN)								
AN	Spec		Decrease	NZD	3,630	3,300	3,300	3,000
AN	Hedge/Member		Decrease	NZD	3,300	3,300	3,000	3,000
BPSF FUTURE (BF)								
BF	Spec		Increase	CHF	4,070	3,700	4,620	4,200
BF	Hedge/Member		Increase	CHF	3,700	3,700	4,200	4,200
EC/NKR FUTURES (CN)								
CN	Spec		Increase	NOK	16,500	15,000	18,975	17,250
CN	Hedge/Member		Increase	NOK	15,000	15,000	17,250	17,250
EC/SKR CROSS RATE FUTURES (KE)								
KE	Spec		Increase	SEK	15,400	14,000	17,930	16,300
KE	Hedge/Member		Increase	SEK	14,000	14,000	16,300	16,300
EURO FX/BP FUTURE (RP)								
RP	Spec		Decrease	GBP	2,640	2,400	2,420	2,200
RP	Hedge/Member		Decrease	GBP	2,400	2,400	2,200	2,200
EURO FX/JY FUTURE (RY)								
RY	Spec		Decrease	JPY	467,500	425,000	412,500	375,000
RY	Hedge/Member		Decrease	JPY	425,000	425,000	375,000	375,000
EURO FX/SF FUTURES (RF)								
RF	Spec		Increase	CHF	2,310	2,100	2,695	2,450
RF	Hedge/Member		Increase	CHF	2,100	2,100	2,450	2,450
EURO/TURKISH LIRA FUTURES (TRE)								
TRE	Spec		Increase	TRY	18,150	16,500	21,450	19,500
TRE	Hedge/Member		Increase	TRY	16,500	16,500	19,500	19,500
SFJY FUTURES (SJ)								
SJ	Spec		Decrease	JPY	902,000	820,000	770,000	700,000
SJ	Hedge/Member		Decrease	JPY	820,000	820,000	700,000	700,000

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

METALS - Outright Rates

PALLADIUM FUTURES NYMEX (PA)

PA	Spec	Mnth 1	Decrease	USD	13,420	12,200	11,000	10,000
PA	Hedge/Member	Mnth 1	Decrease	USD	12,200	12,200	10,000	10,000
PA	Spec	Mnth 2	Decrease	USD	10,450	9,500	8,800	8,000
PA	Hedge/Member	Mnth 2	Decrease	USD	9,500	9,500	8,000	8,000
PA	Spec	Mnth 3	Decrease	USD	8,800	8,000	7,480	6,800
PA	Hedge/Member	Mnth 3	Decrease	USD	8,000	8,000	6,800	6,800
PA	Spec	Mnth 4+	Decrease	USD	7,700	7,000	6,380	5,800
PA	Hedge/Member	Mnth 4+	Decrease	USD	7,000	7,000	5,800	5,800

URANIUM FUTURES (UX)

UX	Spec		Increase	USD	660	600	825	750
UX	Hedge/Member		Increase	USD	600	600	750	750

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

ANR OKLAHOMA (NE)

NE	Spec	Mnths 8-14	Increase	USD	105	95	149	135
NE	Hedge/Member	Mnths 8-14	Increase	USD	95	95	135	135
NE	Spec	Mnths 15+	Increase	USD	105	95	149	135
NE	Hedge/Member	Mnths 15+	Increase	USD	95	95	135	135

ENABLE NAT GAS BASIS FUT (PW)

PW	Spec	Mnths 2-2	Increase	USD	77	70	88	80
PW	Hedge/Member	Mnths 2-2	Increase	USD	70	70	80	80
PW	Spec	Mnths 3-6	Increase	USD	77	70	88	80
PW	Hedge/Member	Mnths 3-6	Increase	USD	70	70	80	80
PW	Spec	Mnths 7-19	Increase	USD	77	70	88	80
PW	Hedge/Member	Mnths 7-19	Increase	USD	70	70	80	80
PW	Spec	Mnths 20+	Increase	USD	77	70	88	80
PW	Hedge/Member	Mnths 20+	Increase	USD	70	70	80	80

NGPL MIDCONTINENT BASIS FUT (NL)

NL	Spec	Mnth 2	Increase	USD	99	90	121	110
NL	Hedge/Member	Mnth 2	Increase	USD	90	90	110	110
NL	Spec	Mnths 3-6	Increase	USD	99	90	121	110
NL	Hedge/Member	Mnths 3-6	Increase	USD	90	90	110	110
NL	Spec	Mnths 7-12	Increase	USD	99	90	121	110
NL	Hedge/Member	Mnths 7-12	Increase	USD	90	90	110	110
NL	Spec	Mnths 13-25	Increase	USD	110	100	143	130
NL	Hedge/Member	Mnths 13-25	Increase	USD	100	100	130	130
NL	Spec	Mnths 26-49	Increase	USD	110	100	143	130
NL	Hedge/Member	Mnths 26-49	Increase	USD	100	100	130	130
NL	Spec	Mnths 50+	Increase	USD	110	100	143	130
NL	Hedge/Member	Mnths 50+	Increase	USD	100	100	130	130

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
PANHANDLE BASIS FUT (PH)								
PH	Spec	Mnth 2	Increase	USD	132	120	176	160
PH	Hedge/Member	Mnth 2	Increase	USD	120	120	160	160
PH	Spec	Winter 2016/2017	Increase	USD	132	120	176	160
PH	Hedge/Member	Winter 2016/2017	Increase	USD	120	120	160	160
PH	Spec	Winter 2017-2018	Increase	USD	132	120	176	160
PH	Hedge/Member	Winter 2017-2018	Increase	USD	120	120	160	160
PH	Spec	APR 2018+	Increase	USD	132	120	176	160
PH	Hedge/Member	APR 2018+	Increase	USD	120	120	160	160
PETROLEUM CRACKS AND SPREADS - Outright Rates								
CHI ULSD (PLATTS) VS. NY HRBR ULSD (5C)								
5C	Spec	Mnth 2-3	Increase	USD	1,100	1,000	1,595	1,450
5C	Hedge/Member	Mnth 2-3	Increase	USD	1,000	1,000	1,450	1,450
5C	Spec	Mnth 4+	Increase	USD	825	750	1,100	1,000
5C	Hedge/Member	Mnth 4+	Increase	USD	750	750	1,000	1,000
GLFCST JET PLATTS UP/DN FUT (ME)								
ME	Spec	Mnth 1	Decrease	USD	2,200	2,000	1,815	1,650
ME	Hedge/Member	Mnth 1	Decrease	USD	2,000	2,000	1,650	1,650
ME	Spec	Mnth 2	Decrease	USD	1,650	1,500	1,375	1,250
ME	Hedge/Member	Mnth 2	Decrease	USD	1,500	1,500	1,250	1,250
GULF COAST CBOB GAS A2 VS RBOB SRRD (CRB)								
CRB	Spec	Mnth 1	Decrease	USD	2,640	2,400	2,200	2,000
CRB	Hedge/Member	Mnth 1	Decrease	USD	2,400	2,400	2,000	2,000
CRB	Spec	Mnth 2	Decrease	USD	1,650	1,500	1,375	1,250
CRB	Hedge/Member	Mnth 2	Decrease	USD	1,500	1,500	1,250	1,250
CRB	Spec	Mnth 3+	Decrease	USD	1,210	1,100	1,045	950
CRB	Hedge/Member	Mnth 3+	Decrease	USD	1,100	1,100	950	950
JET AVIA FUEL(PLTT) FOB V. ICE (1V)								
1V	Spec	Mnth 2-4	Increase	USD	3,465	3,150	3,850	3,500
1V	Hedge/Member	Mnth 2-4	Increase	USD	3,150	3,150	3,500	3,500
1V	Spec	Mnth 5+	Increase	USD	2,640	2,400	2,970	2,700
1V	Hedge/Member	Mnth 5+	Increase	USD	2,400	2,400	2,700	2,700

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
AGRICULTURE - Intra Spreads								
Month 1 vs Months 6+ (FEEDER CATTLE FUTURES)								
FC	Spec		Increase	USD	1,540	1,400	1,705	1,550
FC	Hedge/Member		Increase	USD	1,400	1,400	1,550	1,550
Month 1 vs Months 6+ (FEEDER CATTLE TRADE AT SETTLE)								
GFT	Spec		Increase	USD	1,540	1,400	1,705	1,550
GFT	Hedge/Member		Increase	USD	1,400	1,400	1,550	1,550
Month 2 vs Months 6+ (FEEDER CATTLE FUTURES)								
FC	Spec		Increase	USD	1,430	1,300	1,870	1,700
FC	Hedge/Member		Increase	USD	1,300	1,300	1,700	1,700
Month 2 vs Months 6+ (FEEDER CATTLE TRADE AT SETTLE)								
GFT	Spec		Increase	USD	1,430	1,300	1,870	1,700
GFT	Hedge/Member		Increase	USD	1,300	1,300	1,700	1,700
Month 3 vs Months 6+ (FEEDER CATTLE FUTURES)								
FC	Spec		Increase	USD	1,430	1,300	1,870	1,700
FC	Hedge/Member		Increase	USD	1,300	1,300	1,700	1,700
Month 3 vs Months 6+ (FEEDER CATTLE TRADE AT SETTLE)								
GFT	Spec		Increase	USD	1,430	1,300	1,870	1,700
GFT	Hedge/Member		Increase	USD	1,300	1,300	1,700	1,700
Month 4 vs Months 6+ (FEEDER CATTLE FUTURES)								
FC	Spec		Increase	USD	990	900	1,210	1,100
FC	Hedge/Member		Increase	USD	900	900	1,100	1,100
Month 4 vs Months 6+ (FEEDER CATTLE TRADE AT SETTLE)								
GFT	Spec		Increase	USD	990	900	1,210	1,100
GFT	Hedge/Member		Increase	USD	900	900	1,100	1,100
NATURAL GAS - Intra Spreads								
Panhandle Basis Swap - All Months (PANHANDLE BASIS FUT)								
PH	Spec		Increase	USD	132	120	176	160
PH	Hedge/Member		Increase	USD	120	120	160	160

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						
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL BULLET SWAP FINANCIAL (NYM-BB, BZ, CY) vs HEATING OIL (NYM-HO, BH, MP)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Decrease	+1:-1	79%	79%	75%	75%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)						

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%
CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME) vs BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME)						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL FINANCIAL FUTURES (NY-WS - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs WTI CALENDAR SWAP FUTURES (NY-CS - CME)						
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%
LIGHT, SWEET CRUDE OIL FUTURES (NYM-CL, CS, WS) vs HEATING OIL FINANCIAL FUTURES (NYM-HO, BH, MP)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%
ELECTRICITY - Inter-commodity Spread Rates						
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE A 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-K4 - CME)						
Spread Credit Rate	Decrease	+1:-194	50%	50%	40%	40%
MISO Michigan Hub 5 MW Off-Peak Calendar-Month Day-Ahead Futures (NY-HMO-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak Calendar-Month 2.5 MW Futures (NY-EM-CME)						
Spread Credit Rate	Decrease	+184:-1	55%	55%	45%	45%
MISO Michigan Hub 5 MW Peak Calendar-Month Day-Ahead Futures (NY-HMW-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak Calendar-Month 2.5 MW Futures (NY-EM-CME)						
Spread Credit Rate	Decrease	+12:-1	75%	75%	60%	60%
PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUT (NY-JM-CME)						
Spread Credit Rate	Decrease	+188:-1	75%	75%	65%	65%
PJM Off-Peak Calendar-Month LMP Futures (NY-JP-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak Calendar-Month 2.5 MW Futures (NY-EM-CME)						
Spread Credit Rate	Decrease	+1:-1	60%	60%	50%	50%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)						
Spread Credit Rate	Decrease	+168:-1	73%	73%	60%	60%
ETHANOL - Inter-commodity Spread Rates						
CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME) vs NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	89%	89%
ETHANOL (EH - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)						
Spread Credit Rate	Increase	+7:-5	85%	85%	89%	89%
NATURAL GAS - Inter-commodity Spread Rates						
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE A 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-K4 - CME)						
Spread Credit Rate	Decrease	+1:-194	50%	50%	40%	40%
PANHANDLE BASIS SWAP (PLATTS IFERC) (NYM-PH - CME) vs NORTHWEST PIPELINE, ROCKIES BASIS SWAP (PLATTS IFE (NYM-NR - CME)						
Spread Credit Rate	Decrease	+1:-1	67%	67%	60%	60%

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						
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL BULLET SWAP FINANCIAL (NYM-BB, BZ, CY) vs HEATING OIL (NYM-HO, BH, MP)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Decrease	+1:-1	79%	79%	75%	75%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL FINANCIAL FUTURES (NY-WS - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs RBOB GASOLINE FINANCIAL FUTURES (NY-RT - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs WTI CALENDAR SWAP FUTURES (NY-CS - CME)						
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%
LIGHT, SWEET CRUDE OIL FUTURES (NYM-CL, CS, WS) vs HEATING OIL FINANCIAL FUTURES (NYM-HO, BH, MP)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
NY HARBOR RBOB GASOLINE (NYM-RB, RL, RT) vs HEATING OIL FINANCIAL FUTURES (NYM-HO, BH, MP)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Decrease	+1:-1	77%	77%	75%	75%
WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	67%	67%
WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Decrease	+1:-1	73%	73%	71%	71%

Rate Type	<u>Tier Description</u>	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
Volatility Scan (volScan) Rate						
EQUITY INDEX - Volatility Scan (volScan) Rate						
E-MINI DOW (\$5) FUTURES (11, 11, DO, EYM, EZD, YM, YM, YMI, YMT) - volScan						
Clearing Member Rate		Increase		0.035		0.040