



17-285

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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Friday, July 21, 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

**Monday, July 24, 2017.**

Current rates as of:

**Friday, July 21, 2017.**

# SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

## COAL - Outright Rates

### AUSTRALIAN COKING (PLATTS) LOW VOL (ALW)

ALW	Spec	Mnth 1	Decrease	USD	33,000	30,000	27,500	25,000
ALW	Hedge/Member	Mnth 1	Decrease	USD	30,000	30,000	25,000	25,000
ALW	Spec	Mnth 2	Decrease	USD	33,000	30,000	27,500	25,000
ALW	Hedge/Member	Mnth 2	Decrease	USD	30,000	30,000	25,000	25,000
ALW	Spec	Mnths 3-4	Decrease	USD	33,000	30,000	27,500	25,000
ALW	Hedge/Member	Mnths 3-4	Decrease	USD	30,000	30,000	25,000	25,000
ALW	Spec	Mnths 5-11	Decrease	USD	33,000	30,000	27,500	25,000
ALW	Hedge/Member	Mnths 5-11	Decrease	USD	30,000	30,000	25,000	25,000
ALW	Spec	Mnths 12-14	Decrease	USD	26,400	24,000	20,900	19,000
ALW	Hedge/Member	Mnths 12-14	Decrease	USD	24,000	24,000	19,000	19,000
ALW	Spec	Mnths 15+	Decrease	USD	22,000	20,000	16,500	15,000
ALW	Hedge/Member	Mnths 15+	Decrease	USD	20,000	20,000	15,000	15,000

### EASTERN RAIL DELIVERY CSX COAL FUT (QX)

QX	Spec	Mths 1	Decrease	USD	3,850	3,500	3,025	2,750
QX	Hedge/Member	Mths 1	Decrease	USD	3,500	3,500	2,750	2,750
QX	Spec	Mths 2-3	Decrease	USD	3,575	3,250	2,750	2,500
QX	Hedge/Member	Mths 2-3	Decrease	USD	3,250	3,250	2,500	2,500
QX	Spec	Mths 4-6	Decrease	USD	3,575	3,250	2,750	2,500
QX	Hedge/Member	Mths 4-6	Decrease	USD	3,250	3,250	2,500	2,500
QX	Spec	Mnths 7-11	Decrease	USD	3,080	2,800	2,200	2,000
QX	Hedge/Member	Mnths 7-11	Decrease	USD	2,800	2,800	2,000	2,000
QX	Spec	Mnths 12+	Decrease	USD	3,080	2,800	2,200	2,000
QX	Hedge/Member	Mnths 12+	Decrease	USD	2,800	2,800	2,000	2,000

### WESTERN RAIL DELIVERY PRB COAL FUT (QP)

QP	Spec	Mnth 1	Decrease	USD	715	650	605	550
QP	Hedge/Member	Mnth 1	Decrease	USD	650	650	550	550
QP	Spec	Mnth 2	Decrease	USD	550	500	440	400
QP	Hedge/Member	Mnth 2	Decrease	USD	500	500	400	400
QP	Spec	Mnths 3-6	Decrease	USD	440	400	330	300
QP	Hedge/Member	Mnths 3-6	Decrease	USD	400	400	300	300
QP	Spec	Mnth 7+	Decrease	USD	440	400	330	300
QP	Hedge/Member	Mnth 7+	Decrease	USD	400	400	300	300

## 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

#### ENVIRONMENTAL - Outright Rates

##### IN DELIVERY MONTH EUA FUTURES (6T)

6T	Spec	Mth 1	Decrease	EUR	858	780	660	600
6T	Hedge/Member	Mth 1	Decrease	EUR	780	780	600	600
6T	Spec	Mths 2+	Decrease	EUR	858	780	660	600
6T	Hedge/Member	Mths 2+	Decrease	EUR	780	780	600	600

#### ETHANOL - Outright Rates

##### CHICAGO ETHANOL FUT (CU)

CU	Spec	Mth 1	Decrease	USD	3,300	3,000	2,860	2,600
CU	Hedge/Member	Mth 1	Decrease	USD	3,000	3,000	2,600	2,600
CU	Spec	Mths 2	Decrease	USD	2,860	2,600	2,530	2,300
CU	Hedge/Member	Mths 2	Decrease	USD	2,600	2,600	2,300	2,300
CU	Spec	Mth 3-7	Decrease	USD	2,420	2,200	2,310	2,100
CU	Hedge/Member	Mth 3-7	Decrease	USD	2,200	2,200	2,100	2,100
CU	Spec	Mnth 8+	Decrease	USD	1,980	1,800	1,870	1,700
CU	Hedge/Member	Mnth 8+	Decrease	USD	1,800	1,800	1,700	1,700

##### NEW YORK ETHANOL FUT (EZ)

EZ	Spec	Mth 1	Decrease	USD	3,520	3,200	2,970	2,700
EZ	Hedge/Member	Mth 1	Decrease	USD	3,200	3,200	2,700	2,700
EZ	Spec	Mth 2	Decrease	USD	3,080	2,800	2,750	2,500
EZ	Hedge/Member	Mth 2	Decrease	USD	2,800	2,800	2,500	2,500
EZ	Spec	Mths 3-7	Decrease	USD	2,970	2,700	2,640	2,400
EZ	Hedge/Member	Mths 3-7	Decrease	USD	2,700	2,700	2,400	2,400
EZ	Spec	Mnths 8+	Decrease	USD	2,970	2,700	2,640	2,400
EZ	Hedge/Member	Mnths 8+	Decrease	USD	2,700	2,700	2,400	2,400

#### NATURAL GAS - Outright Rates

##### HOUSTON SHIP CHANNEL BASIS FUT (NH)

NH	Spec	Mnth 2	Increase	USD	39	35	55	50
NH	Hedge/Member	Mnth 2	Increase	USD	35	35	50	50
NH	Spec	Mnths 3-6	Increase	USD	39	35	55	50
NH	Hedge/Member	Mnths 3-6	Increase	USD	35	35	50	50
NH	Spec	Mnths 7-12	Increase	USD	39	35	55	50
NH	Hedge/Member	Mnths 7-12	Increase	USD	35	35	50	50
NH	Spec	Mnths 13-21	Increase	USD	39	35	55	50
NH	Hedge/Member	Mnths 13-21	Increase	USD	35	35	50	50

## **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**

#### **PETROLEUM CRACKS AND SPREADS - Outright Rates**

##### **SINGAPORE GASOIL VS ICE (GA)**

GA	Spec	Mnths 3-6	Increase	USD	275	250	358	325
GA	Hedge/Member	Mnths 3-6	Increase	USD	250	250	325	325
GA	Spec	Mnths 7+	Increase	USD	413	375	495	450
GA	Hedge/Member	Mnths 7+	Increase	USD	375	375	450	450

#### **REFINED PRODUCTS - Outright Rates**

##### **GULF COAST ULSD CALENDAR FUT (LY)**

LY	Spec	Mnth 1	Decrease	USD	3,135	2,850	2,750	2,500
LY	Hedge/Member	Mnth 1	Decrease	USD	2,850	2,850	2,500	2,500
LY	Spec	Mnths 2-6	Decrease	USD	3,135	2,850	2,750	2,500
LY	Hedge/Member	Mnths 2-6	Decrease	USD	2,850	2,850	2,500	2,500
LY	Spec	Mnths 7-12	Decrease	USD	2,860	2,600	2,530	2,300
LY	Hedge/Member	Mnths 7-12	Decrease	USD	2,600	2,600	2,300	2,300
LY	Spec	Mnths 13+	Decrease	USD	2,750	2,500	2,420	2,200
LY	Hedge/Member	Mnths 13+	Decrease	USD	2,500	2,500	2,200	2,200

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Intra Spreads</b>								
<b>ETHANOL - Intra Spreads</b>								
<b>Ethanol (Platts) T2 FOB Rotterdam Including Duty Swap - Mnth 1 vs. All Months (ETHANOL(PL) T2 FOB RTRDM INCL)</b>								
Z1	Spec		Decrease	EUR	3,850	3,500	2,750	2,500
Z1	Hedge/Member		Decrease	EUR	3,500	3,500	2,500	2,500
<b>Ethanol (Platts) T2 FOB Rotterdam Including Duty Swap - Mnth 2+ All Months (ETHANOL(PL) T2 FOB RTRDM INCL)</b>								
Z1	Spec		Decrease	EUR	2,530	2,300	1,980	1,800
Z1	Hedge/Member		Decrease	EUR	2,300	2,300	1,800	1,800

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>CRUDE OIL - Inter-commodity Spread Rates</b>						
<b>ARGUS PROPANE FAR EAST INDEX SWAP FUTURES (NY-7E - CME) vs DATED BRENT (PLATTS) CALENDAR SWAP FUTURES (NY-UB - CME)</b>						
Spread Credit Rate	Decrease	+1:-12	60%	60%	50%	50%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs CRUDE OIL FINANCIAL FUTURES (NY-WS - CME)</b>						
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>BRENT CRUDE OIL BULLET SWAP FINANCIAL (NYM-BB, BZ, CY) vs HEATING OIL (NYM-HO, BH, MP)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	91%	91%	90%	90%
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
Spread Credit Rate	Decrease	+1:-1	70%	70%	62%	62%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
<b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
<b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	91%	91%	90%	90%
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%
<b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	91%	91%	90%	90%
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%
<b>CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	91%	91%	90%	90%
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%
<b>CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)</b>						
Spread Credit Rate	New	+1:-1			81%	81%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
<b>CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	62%	62%	59%	59%
<b>CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	63%	63%	58%	58%
Spread Credit Rate	Decrease	+1:-1	62%	62%	59%	59%
<b>CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME) vs BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME)</b>						
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%
<b>CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	91%	91%	90%	90%
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%
<b>CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	91%	91%	90%	90%
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>EUROPEAN NAPHTHA (PLATTS) CALENDAR SWAP FUTURES (NY-UN - CME) vs DATED BRENT (PLATTS) CALENDAR SWAP FUTURES (NY-UB - CME)</b>						
Spread Credit Rate	Decrease	+1:-9	84%	84%	80%	80%
<b>EUROPEAN PROPANE CIF ARA (ARGUS) SWAP FUTURES (NY-PS - CME) vs DATED BRENT (PLATTS) CALENDAR SWAP FUTURES (NY-UB - CME)</b>						
Spread Credit Rate	Decrease	+1:-12	55%	55%	50%	50%
<b>HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL FINANCIAL FUTURES (NY-WS - CME)</b>						
Spread Credit Rate	New	+1:-1			81%	81%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
<b>HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME)</b>						
Spread Credit Rate	New	+1:-1			81%	81%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
<b>HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	New	+1:-1			81%	81%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
<b>HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs WTI CALENDAR SWAP FUTURES (NY-CS - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
<b>LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
<b>LIGHT, SWEET CRUDE OIL FUTURES (NYM-CL, CS, WS) vs HEATING OIL FINANCIAL FUTURES (NYM-HO, BH, MP)</b>						
Spread Credit Rate	New	+1:-1			81%	81%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
<b>NY HARBOR RBOB GASOLINE (NYM-RB, RL, RT) vs LIGHT, SWEET CRUDE OIL FUTURES (NYM-CL, CS, WS)</b>						
Spread Credit Rate	Decrease	+1:-1	63%	63%	58%	58%
Spread Credit Rate	Decrease	+1:-1	62%	62%	59%	59%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	70%	70%	62%	62%
<b>RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	70%	70%	62%	62%
<b>RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs WTI CALENDAR SWAP FUTURES (NY-CS - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	63%	63%	58%	58%
<b>RBOB GASOLINE FUTURES (NY-RB - CME) vs WTI CALENDAR SWAP FUTURES (NY-CS - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	62%	62%	59%	59%
<b>RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME) vs BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%
<b>WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)</b>						
Spread Credit Rate	Increase	+1:-1	91%	91%	93%	93%
<b>WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	84%	84%	81%	81%
<b>WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
<b>CRUDE OIL SPREADS - Inter-commodity Spread Rates</b>						
<b>CANADIAN LIGHT SWEET OIL (NET ENERGY) INDEX FUTURES (NY-CIL - CME) vs CANADIAN HEAVY CRUDE OIL (NET ENERGY) INDEX FUTURES (NY-WCC - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	40%	40%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>EQUITY INDEX - Inter-commodity Spread Rates</b>						
<b>E-MINI RUSSELL 2000 INDEX FUTURES (RTY - CME) vs E-MINI REAL ESTATE SELECT SECTOR FUTURES (XAR - CME)</b>						
Spread Credit Rate	New	+1:-2			55%	55%
<b>E-MINI RUSSELL 2000 INDEX FUTURES (RTY - CME) vs S&amp;P SELECT SECTOR - CONSUMER DISCRETIONARY (XAY - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>E-MINI RUSSELL 2000 INDEX FUTURES (RTY - CME) vs S&amp;P SELECT SECTOR - CONSUMER STAPLES (XAP - CME)</b>						
Spread Credit Rate	New	+1:-1			55%	55%
<b>E-MINI RUSSELL 2000 INDEX FUTURES (RTY - CME) vs S&amp;P SELECT SECTOR - ENERGY (XAE - CME)</b>						
Spread Credit Rate	New	+1:-1			55%	55%
<b>E-MINI RUSSELL 2000 INDEX FUTURES (RTY - CME) vs S&amp;P SELECT SECTOR - FINANCIAL (XAF - CME)</b>						
Spread Credit Rate	New	+1:-1			55%	55%
<b>E-MINI RUSSELL 2000 INDEX FUTURES (RTY - CME) vs S&amp;P SELECT SECTOR - HEALTH CARE (XAV - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>E-MINI RUSSELL 2000 INDEX FUTURES (RTY - CME) vs S&amp;P SELECT SECTOR - INDUSTRIAL (XAI - CME)</b>						
Spread Credit Rate	New	+1:-1			65%	65%
<b>E-MINI RUSSELL 2000 INDEX FUTURES (RTY - CME) vs S&amp;P SELECT SECTOR - MATERIALS (XAB - CME)</b>						
Spread Credit Rate	New	+1:-1			65%	65%
<b>E-MINI RUSSELL 2000 INDEX FUTURES (RTY - CME) vs S&amp;P SELECT SECTOR - TECHNOLOGY (XAK - CME)</b>						
Spread Credit Rate	New	+1:-1			65%	65%
<b>NGL/PETROCHEMICALS - Inter-commodity Spread Rates</b>						
<b>ARGUS PROPANE FAR EAST INDEX SWAP FUTURES (NY-7E - CME) vs DATED BRENT (PLATTS) CALENDAR SWAP FUTURES (NY-UB - CME)</b>						
Spread Credit Rate	Decrease	+1:-12	60%	60%	50%	50%
<b>EUROPEAN PROPANE CIF ARA (ARGUS) SWAP FUTURES (NY-PS - CME) vs DATED BRENT (PLATTS) CALENDAR SWAP FUTURES (NY-UB - CME)</b>						
Spread Credit Rate	Decrease	+1:-12	55%	55%	50%	50%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>REFINED PRODUCTS - Inter-commodity Spread Rates</b>						
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
<b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>BRENT CRUDE OIL BULLET SWAP FINANCIAL (NYM-BB, BZ, CY) vs HEATING OIL (NYM-HO, BH, MP)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
Spread Credit Rate	Decrease	+1:-1	70%	70%	62%	62%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
<b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
<b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	87%	87%	85%	85%
Spread Credit Rate	Decrease	+1:-1	86%	86%	84%	84%
Spread Credit Rate	Decrease	+1:-1	83%	83%	81%	81%
<b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)</b>						
Spread Credit Rate	New	+1:-1			81%	81%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
<b>CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	62%	62%	59%	59%
<b>CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	63%	63%	58%	58%
Spread Credit Rate	Decrease	+1:-1	62%	62%	59%	59%
<b>EUROPEAN NAPHTHA (PLATTS) CALENDAR SWAP FUTURES (NY-UN - CME) vs DATED BRENT (PLATTS) CALENDAR SWAP FUTURES (NY-UB - CME)</b>						
Spread Credit Rate	Decrease	+1:-9	84%	84%	80%	80%
<b>HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL FINANCIAL FUTURES (NY-WS - CME)</b>						
Spread Credit Rate	New	+1:-1			81%	81%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
<b>HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME)</b>						
Spread Credit Rate	New	+1:-1			81%	81%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
<b>HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	New	+1:-1			81%	81%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
<b>HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs WTI CALENDAR SWAP FUTURES (NY-CS - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
<b>LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>LIGHT, SWEET CRUDE OIL FUTURES (NYM-CL, CS, WS) vs HEATING OIL FINANCIAL FUTURES (NYM-HO, BH, MP)</b>						
Spread Credit Rate	New	+1:-1			81%	81%
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	84%	84%	82%	82%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%
<b>NY HARBOR RBOB GASOLINE (NYM-RB, RL, RT) vs LIGHT, SWEET CRUDE OIL FUTURES (NYM-CL, CS, WS)</b>						
Spread Credit Rate	Decrease	+1:-1	63%	63%	58%	58%
Spread Credit Rate	Decrease	+1:-1	62%	62%	59%	59%
<b>RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	70%	70%	62%	62%
<b>RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	70%	70%	62%	62%
<b>RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs WTI CALENDAR SWAP FUTURES (NY-CS - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	63%	63%	58%	58%
<b>RBOB GASOLINE FUTURES (NY-RB - CME) vs WTI CALENDAR SWAP FUTURES (NY-CS - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	62%	62%	59%	59%
<b>RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME) vs BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	67%	67%	62%	62%
<b>WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	84%	84%	81%	81%
<b>WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	83%	83%
Spread Credit Rate	Decrease	+1:-1	79%	79%	77%	77%