



22-181

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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, May 5, 2022

***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. Please email any questions to [Clearing.RiskManagement@cmegroup.com](mailto:Clearing.RiskManagement@cmegroup.com).

The rates will be effective after the close of business on

**Friday, May 6, 2022.**

Current rates as of:

**Thursday, May 5, 2022.**

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Outright Rates</b>								
<b>AGRICULTURE - Outright Rates</b>								
<b>BLOOMBERG COMDITY INDEX FUT MARKER (AWI)</b>								
AWI	Non-HRP		Decrease	USD	800	800	700	700
AWI	HRP		Decrease	USD	880	800	770	700
<b>BLOOMBERG COMMODITY INDEX FUTURES (70)</b>								
70	Non-HRP		Decrease	USD	800	800	700	700
70	HRP		Decrease	USD	880	800	770	700
<b>BLOOMBERG ROLL SELECT COMM MARKER (DRI)</b>								
DRI	Non-HRP		Decrease	USD	2,100	2,100	1,850	1,850
DRI	HRP		Decrease	USD	2,310	2,100	2,035	1,850
<b>BLOOMBERG ROLL SELECT COMMDTY INDEX (DRS)</b>								
DRS	Non-HRP		Decrease	USD	2,100	2,100	1,850	1,850
DRS	HRP		Decrease	USD	2,310	2,100	2,035	1,850
<b>BTIC ON BLOOMBERG COMDITY INDEX FUT (AWT)</b>								
AWT	Non-HRP		Decrease	USD	800	800	700	700
AWT	HRP		Decrease	USD	880	800	770	700
<b>BTIC ON BLOOMBERG ROLL SELECT INDEX (DRT)</b>								
DRT	Non-HRP		Decrease	USD	2,100	2,100	1,850	1,850
DRT	HRP		Decrease	USD	2,310	2,100	2,035	1,850
<b>BTIC ON S&amp;P-GSCI COMMODITY INDEX (GDT)</b>								
GDT	Non-HRP		Decrease	USD	14,000	14,000	12,000	12,000
GDT	HRP		Decrease	USD	15,400	14,000	13,200	12,000
<b>BTIC ON S&amp;P-GSCI EXCESS RETURN INDE (GIT)</b>								
GIT	Non-HRP		Decrease	USD	3,200	3,200	2,600	2,600
GIT	HRP		Decrease	USD	3,520	3,200	2,860	2,600
<b>GSCI ER FUTURES (GA)</b>								
GA	Non-HRP		Decrease	USD	3,200	3,200	2,600	2,600
GA	HRP		Decrease	USD	3,520	3,200	2,860	2,600
<b>S&amp;P-GSCI COMMODITY INDEX FUTURE (GI)</b>								
GI	Non-HRP		Decrease	USD	14,000	14,000	12,000	12,000
GI	HRP		Decrease	USD	15,400	14,000	13,200	12,000
<b>S&amp;P-GSCI COMMODITY INDEX MARKER (GDM)</b>								
GDM	Non-HRP		Decrease	USD	14,000	14,000	12,000	12,000
GDM	HRP		Decrease	USD	15,400	14,000	13,200	12,000
<b>S&amp;P-GSCI EXCESS RETURN INDEX FUTURE (GII)</b>								

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Outright Rates</b>								
GII	Non-HRP		Decrease	USD	3,200	3,200	2,600	2,600
GII	HRP		Decrease	USD	3,520	3,200	2,860	2,600
<b>CRUDE OIL SPREADS - Outright Rates</b>								
<b>ICE BRENT DUBAI FUT (DB)</b>								
DB	Non-HRP	Mnth 1	Increase	USD	1,000	1,000	1,100	1,100
DB	HRP	Mnth 1	Increase	USD	1,100	1,000	1,210	1,100
<b>DME Products - Outright Rates</b>								
<b>BRENT CRUDE VS DUBAI CRUDE (DBI)</b>								
DBI	Non-HRP	Mnth 1	Increase	USD	1,000	1,000	1,100	1,100
DBI	HRP	Mnth 1	Increase	USD	1,100	1,000	1,210	1,100

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Outright Rates</b>								
<b>ELECTRICITY - Outright Rates</b>								
<b>PJM AD HUB 5MW REAL TIME O PK (V3)</b>								
V3	Non-HRP	Mnth 1	Increase	USD	70	70	80	80
V3	HRP	Mnth 1	Increase	USD	77	70	88	80
V3	Non-HRP	Mnth 2	Increase	USD	65	65	75	75
V3	HRP	Mnth 2	Increase	USD	72	65	83	75
V3	Non-HRP	Mnths 3-4	Increase	USD	60	60	70	70
V3	HRP	Mnths 3-4	Increase	USD	66	60	77	70
<b>PJM AD HUB 5MW REAL TIME PK (Z9)</b>								
Z9	Non-HRP	Mnth 1	Increase	USD	1,510	1,510	1,700	1,700
Z9	HRP	Mnth 1	Increase	USD	1,661	1,510	1,870	1,700
Z9	Non-HRP	Mnth 2	Increase	USD	1,505	1,505	1,650	1,650
Z9	HRP	Mnth 2	Increase	USD	1,656	1,505	1,815	1,650
Z9	Non-HRP	Mnths 3-4	Increase	USD	1,500	1,500	1,600	1,600
Z9	HRP	Mnths 3-4	Increase	USD	1,650	1,500	1,760	1,600
<b>PJM AEP-DAYTON HUB RT PK CALDAY 5MW (VD)</b>								
VD	Non-HRP	Days 7-15	Increase	USD	2,500	2,500	3,000	3,000
VD	HRP	Days 7-15	Increase	USD	2,750	2,500	3,300	3,000
<b>PJM DAILY (JD)</b>								
JD	Non-HRP	Days 7-14	Increase	USD	3,800	3,800	4,500	4,500
JD	HRP	Days 7-14	Increase	USD	4,180	3,800	4,950	4,500
<b>PJM DAYTON DA OFF-PEAK (R7)</b>								
R7	Non-HRP	Mnth 1	Increase	USD	71	71	81	81
R7	HRP	Mnth 1	Increase	USD	78	71	89	81
R7	Non-HRP	Mnth 2	Increase	USD	66	66	76	76
R7	HRP	Mnth 2	Increase	USD	73	66	84	76
R7	Non-HRP	Mnths 3-4	Increase	USD	61	61	71	71
R7	HRP	Mnths 3-4	Increase	USD	67	61	78	71
<b>PJM DAYTON DA PEAK (D7)</b>								
D7	Non-HRP	Mnth 1	Increase	USD	1,525	1,525	1,715	1,715
D7	HRP	Mnth 1	Increase	USD	1,678	1,525	1,887	1,715
D7	Non-HRP	Mnth 2	Increase	USD	1,540	1,540	1,685	1,685
D7	HRP	Mnth 2	Increase	USD	1,694	1,540	1,854	1,685
D7	Non-HRP	Mnths 3-4	Increase	USD	1,510	1,510	1,610	1,610
D7	HRP	Mnths 3-4	Increase	USD	1,661	1,510	1,771	1,610

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Outright Rates</b>								
<b>PJM WES HUB PEAK CAL MON REAL TIME (L1)</b>								
L1	Non-HRP	Mth 1	Increase	USD	1,600	1,600	1,800	1,800
L1	HRP	Mth 1	Increase	USD	1,760	1,600	1,980	1,800
L1	Non-HRP	Mnth 2	Increase	USD	1,550	1,550	1,750	1,750
L1	HRP	Mnth 2	Increase	USD	1,705	1,550	1,925	1,750
L1	Non-HRP	Mnths 3-5	Increase	USD	1,500	1,500	1,700	1,700
L1	HRP	Mnths 3-5	Increase	USD	1,650	1,500	1,870	1,700
L1	Non-HRP	Mnths 6-11	Increase	USD	1,300	1,300	1,450	1,450
L1	HRP	Mnths 6-11	Increase	USD	1,430	1,300	1,595	1,450
L1	Non-HRP	Mnths 12	Increase	USD	550	550	650	650
L1	HRP	Mnths 12	Increase	USD	605	550	715	650
<b>PJM WES HUB PEAK LMP 50 MW (4S)</b>								
4S	Non-HRP	Mth 1	Increase	USD	16,000	16,000	18,000	18,000
4S	HRP	Mth 1	Increase	USD	17,600	16,000	19,800	18,000
4S	Non-HRP	Mnth 2	Increase	USD	15,500	15,500	17,500	17,500
4S	HRP	Mnth 2	Increase	USD	17,050	15,500	19,250	17,500
4S	Non-HRP	Mnths 3-5	Increase	USD	15,000	15,000	17,000	17,000
4S	HRP	Mnths 3-5	Increase	USD	16,500	15,000	18,700	17,000
4S	Non-HRP	Mnths 6-11	Increase	USD	13,000	13,000	14,500	14,500
4S	HRP	Mnths 6-11	Increase	USD	14,300	13,000	15,950	14,500
4S	Non-HRP	Mnths 12	Increase	USD	5,500	5,500	6,500	6,500
4S	HRP	Mnths 12	Increase	USD	6,050	5,500	7,150	6,500
<b>PJM WESTH DA OFF-PEAK (E4)</b>								
E4	Non-HRP	Mnth 1	Increase	USD	81	81	96	96
E4	HRP	Mnth 1	Increase	USD	89	81	106	96
E4	Non-HRP	Mnths 5-11	Increase	USD	46	46	56	56
E4	HRP	Mnths 5-11	Increase	USD	51	46	62	56
<b>PJM WESTH RT OFF-PEAK (N9)</b>								
N9	Non-HRP	Mnth 1	Increase	USD	80	80	95	95
N9	HRP	Mnth 1	Increase	USD	88	80	105	95
N9	Non-HRP	Mnths 5-11	Increase	USD	45	45	55	55
N9	HRP	Mnths 5-11	Increase	USD	50	45	61	55

## 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

#### PJM WESTHDA PEAK (J4)

J4	Non-HRP	Mnth 1	Increase	USD	1,630	1,630	1,830	1,830
J4	HRP	Mnth 1	Increase	USD	1,793	1,630	2,013	1,830
J4	Non-HRP	Mnth 2	Increase	USD	1,565	1,565	1,765	1,765
J4	HRP	Mnth 2	Increase	USD	1,722	1,565	1,942	1,765
J4	Non-HRP	Mnths 3-5	Increase	USD	1,510	1,510	1,710	1,710
J4	HRP	Mnths 3-5	Increase	USD	1,661	1,510	1,881	1,710
J4	Non-HRP	Mnths 6-11	Increase	USD	1,310	1,310	1,460	1,460
J4	HRP	Mnths 6-11	Increase	USD	1,441	1,310	1,606	1,460
J4	Non-HRP	Mnths 12+	Increase	USD	560	560	660	660
J4	HRP	Mnths 12+	Increase	USD	616	560	726	660

#### INTEREST RATES - Outright Rates

#### 20-YEAR U.S. TREASURY BOND FUTURES (TWE)

TWE	Non-HRP		Increase	USD	4,270	4,270	4,800	4,800
TWE	HRP		Increase	USD	4,697	4,270	5,280	4,800

#### 30 YR U.S. TREASURY BOND FUTURES (17)

17	Non-HRP	Month 1	Increase	USD	3,500	3,500	3,800	3,800
17	HRP	Month 1	Increase	USD	3,850	3,500	4,180	3,800
17	Non-HRP	Month 2+	Increase	USD	3,500	3,500	3,800	3,800
17	HRP	Month 2+	Increase	USD	3,850	3,500	4,180	3,800

#### U.S. TREA BOND TAS FUT (ZBT)

ZBT	Non-HRP	Month 1	Increase	USD	3,500	3,500	3,800	3,800
ZBT	HRP	Month 1	Increase	USD	3,850	3,500	4,180	3,800
ZBT	Non-HRP	Month 2+	Increase	USD	3,500	3,500	3,800	3,800
ZBT	HRP	Month 2+	Increase	USD	3,850	3,500	4,180	3,800

## 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

#### AGRICULTURE - Intra Spreads

##### Consecutive Spread Months 4+ (BLOCK CHEESE FUTURES)

BLK	Non-HRP		Increase	USD	700	700	850	850
BLK	HRP		Increase	USD	770	700	935	850

##### Month 1 vs Months 2-5 (BLOCK CHEESE FUTURES)

BLK	Non-HRP		Increase	USD	1,200	1,200	1,400	1,400
BLK	HRP		Increase	USD	1,320	1,200	1,540	1,400

##### Month 1 vs Months 6+ (BLOCK CHEESE FUTURES)

BLK	Non-HRP		Increase	USD	1,400	1,400	1,600	1,600
BLK	HRP		Increase	USD	1,540	1,400	1,760	1,600

##### Months 2-5 vs Months 2-5 (BLOCK CHEESE FUTURES)

BLK	Non-HRP		Increase	USD	1,500	1,500	1,750	1,750
BLK	HRP		Increase	USD	1,650	1,500	1,925	1,750

##### Months 2-5 vs Months 6+ (BLOCK CHEESE FUTURES)

BLK	Non-HRP		Increase	USD	900	900	1,050	1,050
BLK	HRP		Increase	USD	990	900	1,155	1,050

##### Months 6+ vs Months 6+ (BLOCK CHEESE FUTURES)

BLK	Non-HRP		Increase	USD	900	900	1,050	1,050
BLK	HRP		Increase	USD	990	900	1,155	1,050

#### CRUDE OIL SPREADS - Intra Spreads

##### Dubai Brent Swap - Mnth 1 vs Mnths 2 (ICE BRENT DUBAI FUT)

DB	Non-HRP		Decrease	USD	690	690	490	490
DB	HRP		Decrease	USD	759	690	539	490

##### Dubai Brent Swap - Mnth 1 vs Mnths 3-8 (ICE BRENT DUBAI FUT)

DB	Non-HRP		Decrease	USD	460	460	360	360
DB	HRP		Decrease	USD	506	460	396	360

##### Dubai Brent Swap - Mnth 1 vs Mnths 9+ (ICE BRENT DUBAI FUT)

DB	Non-HRP		Decrease	USD	275	275	200	200
DB	HRP		Decrease	USD	303	275	220	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>ELECTRICITY - Intra Spreads</b>								
<b>PJM AD HUB 5MW REAL TIME OFF PEAK - All Months (PJM AD HUB 5MW REAL TIME O PK)</b>								
V3	Non-HRP		Increase	USD	25	25	35	35
V3	HRP		Increase	USD	28	25	39	35
<b>PJM AD HUB 5MW REAL TIME PEAK - All Months (PJM AD HUB 5MW REAL TIME PK)</b>								
Z9	Non-HRP		Increase	USD	450	450	700	700
Z9	HRP		Increase	USD	495	450	770	700
<b>PJM Western Hub Off-Peak Calendar-Month Real-Time LMP - All Months (PJM WESTH RT OFF-PEAK)</b>								
N9	Non-HRP		Increase	USD	25	25	40	40
N9	HRP		Increase	USD	28	25	44	40
<b>PJM Western Hub Peak Calendar-Month Real-Time LMP - All Months (PJM WES HUB PEAK CAL MON REAL TIME)</b>								
L1	Non-HRP		Increase	USD	650	650	900	900
L1	HRP		Increase	USD	715	650	990	900
<b>PJM Western Hub Peak Calendar-Month Real-Time LMP - All Months (PJM WES HUB PEAK LMP 50 MW)</b>								
4S	Non-HRP		Increase	USD	6,500	6,500	9,000	9,000
4S	HRP		Increase	USD	7,150	6,500	9,900	9,000

## 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>Chicago Ethanol (Platts) Swap, Mths 3-7 vs. Mths 3-7 (CHICAGO ETHANOL FUT)</b>								
CU	Non-HRP		Decrease	USD	3,000	3,000	2,500	2,500
CU	HRP		Decrease	USD	3,300	3,000	2,750	2,500
<b>Chicago Ethanol (Platts) Swap, Mths 3-7 vs. Mths 8+ (CHICAGO ETHANOL FUT)</b>								
CU	Non-HRP		Decrease	USD	3,380	3,380	2,800	2,800
CU	HRP		Decrease	USD	3,718	3,380	3,080	2,800
<b>Chicago Ethanol (Platts) Swap, Mths 8+ vs Mths 8+ (CHICAGO ETHANOL FUT)</b>								
CU	Non-HRP		Decrease	USD	3,000	3,000	2,800	2,800
CU	HRP		Decrease	USD	3,300	3,000	3,080	2,800
<b>Consecutive Spreads Month 2+ (CHICAGO ETHANOL FUT)</b>								
CU	Non-HRP		Decrease	USD	2,900	2,900	2,400	2,400
CU	HRP		Decrease	USD	3,190	2,900	2,640	2,400
<b>New York Ethanol (Platts) Swap - Consecutive Months (not including front month) (NEW YORK ETHANOL FUT)</b>								
EZ	Non-HRP		Increase	USD	950	950	1,100	1,100
EZ	HRP		Increase	USD	1,045	950	1,210	1,100
<b>New York Ethanol (Platts) Swap, Tier 1 vs. Tier 3 (NEW YORK ETHANOL FUT)</b>								
EZ	Non-HRP		Increase	USD	4,300	4,300	4,900	4,900
EZ	HRP		Increase	USD	4,730	4,300	5,390	4,900
<b>New York Ethanol (Platts) Swap, Tier 2 vs. Tier 3 (NEW YORK ETHANOL FUT)</b>								
EZ	Non-HRP		Increase	USD	2,200	2,200	2,500	2,500
EZ	HRP		Increase	USD	2,420	2,200	2,750	2,500
<b>New York Ethanol (Platts) Swap, Tier 2 vs. Tier 4 (NEW YORK ETHANOL FUT)</b>								
EZ	Non-HRP		Increase	USD	2,200	2,200	2,500	2,500
EZ	HRP		Increase	USD	2,420	2,200	2,750	2,500
<b>New York Ethanol (Platts) Swap, Tier 3 vs. Tier 3 (NEW YORK ETHANOL FUT)</b>								
EZ	Non-HRP		Increase	USD	2,200	2,200	2,500	2,500
EZ	HRP		Increase	USD	2,420	2,200	2,750	2,500
<b>New York Ethanol (Platts) Swap, Tier 3 vs. Tier 4 (NEW YORK ETHANOL FUT)</b>								
EZ	Non-HRP		Increase	USD	2,200	2,200	2,500	2,500
EZ	HRP		Increase	USD	2,420	2,200	2,750	2,500

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Intra Spreads</b>								
<b>PETROLEUM CRACKS AND SPREADS - Intra Spreads</b>								
<b>Consecutives 2v3+ (JET CIF NWE VS ICE)</b>								
JC	Non-HRP		New	USD			6,500	6,500
JC	HRP		New	USD			7,150	6,500
<b>Consecutives 2v3+ (MIN JETKERO CRGOS CIF NWE VS GASOIL)</b>								
MJC	Non-HRP		New	USD			650	650
MJC	HRP		New	USD			715	650
<b>European Jet CIF NWE v. Gasoil Futures Swap - 1-3 vs 1-3 (JET CIF NWE VS ICE)</b>								
JC	Non-HRP		Increase	USD	7,500	7,500	10,500	10,500
JC	HRP		Increase	USD	8,250	7,500	11,550	10,500
<b>European Jet CIF NWE v. Gasoil Futures Swap - 1-3 vs 1-3 (MIN JETKERO CRGOS CIF NWE VS GASOIL)</b>								
MJC	Non-HRP		Increase	USD	750	750	1,050	1,050
MJC	HRP		Increase	USD	825	750	1,155	1,050
<b>European Jet CIF NWE v. Gasoil Futures Swap - 1-3 vs 4+ (JET CIF NWE VS ICE)</b>								
JC	Non-HRP		Increase	USD	7,750	7,750	11,000	11,000
JC	HRP		Increase	USD	8,525	7,750	12,100	11,000
<b>European Jet CIF NWE v. Gasoil Futures Swap - 1-3 vs 4+ (MIN JETKERO CRGOS CIF NWE VS GASOIL)</b>								
MJC	Non-HRP		Increase	USD	775	775	1,100	1,100
MJC	HRP		Increase	USD	853	775	1,210	1,100
<b>SINGAPORE GASOIL (PLATTS) VS. ICE GASOIL SWAP FUTURES - Tiers 1v1 (SINGAPORE GASOIL VS ICE)</b>								
GA	Non-HRP		Increase	USD	2,275	2,275	2,650	2,650
GA	HRP		Increase	USD	2,503	2,275	2,915	2,650

## 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>						
Spread Credit Rate	Decrease	+1:-1	76%	76%	70%	70%
<b>1% FUEL OIL (PLATTS) CARGOES CIF MED SWAP FUTURES (NY-1W - CME) vs DUBAI CRUDE OIL (PLATTS) CALENDAR SWAP FUTURES (NY-DC - CME)</b>						
Spread Credit Rate	Increase	+3:-19	77%	77%	82%	82%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs JAPAN C&amp;F NAPHTHA (PLATTS) SWAP FUTURES (NY-JA - CME)</b>						
Spread Credit Rate	New	+9:-1			86%	86%
Spread Credit Rate	New	+9:-1			85%	85%
Spread Credit Rate	Decrease	+9:-1	88%	88%	84%	84%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs NEW YORK HARBOR 1.0% FUEL OIL (PLATTS) BALMO SWAP FUTURES (NY-VK - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM - CME)</b>						
Spread Credit Rate	New	+1:-1			78%	78%
<b>GASOLINE EURO-BOB OXY (ARGUS) NWE BARGES SWAP FUTURES (NY-7H - CME) vs DUBAI CRUDE OIL (PLATTS) CALENDAR SWAP FUTURES (NY-DC - CME)</b>						
Spread Credit Rate	Increase	+3:-25	75%	75%	80%	80%
<b>GROUP THREE ULSD (PLATTS) SWAP FUTURES (NY-A7 - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	New	+1:-1			72%	72%
Spread Credit Rate	Decrease	+1:-1	80%	80%	74%	74%
Spread Credit Rate	Decrease	+1:-1	85%	85%	81%	81%
<b>GROUP THREE ULSD (PLATTS) SWAP FUTURES (NY-A7 - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	New	+1:-1			70%	70%
Spread Credit Rate	Decrease	+1:-1	77%	77%	71%	71%
<b>GULF COAST JET FUEL (PLATTS) CALENDAR SWAP FUTURES (NY-GE - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	81%	81%	75%	75%
Spread Credit Rate	New	+1:-1			68%	68%
Spread Credit Rate	Decrease	+1:-1	74%	74%	66%	66%
<b>GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	76%	76%	73%	73%
<b>GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME) vs DUBAI CRUDE OIL (PLATTS) CALENDAR SWAP FUTURES (NY-DC - CME)</b>						

## 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	80%	80%	77%	77%
<b>GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	81%	81%
Spread Credit Rate	Decrease	+1:-1	78%	78%	73%	73%
Spread Credit Rate	Decrease	+1:-1	78%	78%	75%	75%
<b>LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME) vs NEW YORK HARBOR 1.0% FUEL OIL (PLATTS) BALMO SWAP FUTURES (NY-VK - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM - CME)</b>						
Spread Credit Rate	New	+1:-1			71%	71%
<b>LIGHT SWEET CRUDE OIL FUTURES (NY-CL, CS, WS) vs NY ULSD (ARGUS) SWAP FUTURES (NY-5Y - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	60%	60%	52%	52%
<b>PREMIUM UNLEADED GASOLINE 10 PPM (PLATTS) FOB MED SWAP FUTURES (NY-3G - CME) vs DUBAI CRUDE OIL (PLATTS) CALENDAR SWAP FUTURES (NY-DC - CME)</b>						
Spread Credit Rate	Increase	+3:-25	75%	75%	82%	82%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>ELECTRICITY - Inter-commodity Spread Rates</b>						
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	80%	80%	70%	70%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	85%	85%	75%	75%
<b>ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME) vs ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-U6-CME)</b>						
Spread Credit Rate	Decrease	+16:-1	80%	80%	70%	70%
<b>PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Decrease	-11:+1	80%	80%	70%	70%
<b>PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME) vs PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME)</b>						
Spread Credit Rate	Decrease	+16:-1	85%	85%	80%	80%
<b>PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME) vs PJM WESTERN HUB PEAK CAL REAL-TIME LMP SWAP FUT (NY-L1- CME)</b>						
Spread Credit Rate	Decrease	+16:-1	85%	85%	80%	80%
<b>PJM WESTERN HUB OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-N9- CME) vs PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME)</b>						
Spread Credit Rate	Decrease	+16:-1	90%	90%	75%	75%
<b>PJM WESTERN HUB OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-N9- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	80%	80%
<b>PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Decrease	-11:+1	85%	85%	75%	75%
<b>PJM WESTERN HUB PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-L1-CME) vs NYISO ZONE G PEAK LBMP SWAP FUT (NY-KG-CME)</b>						
Spread Credit Rate	Decrease	+1:-1	80%	80%	65%	65%
<b>PJM Western Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-N9-CME) vs PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (NY-L1-CME)</b>						
Spread Credit Rate	Decrease	+16:-1	90%	90%	75%	75%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

#### NATURAL GAS - Inter-commodity Spread Rates

##### **HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME)**

Spread Credit Rate	Decrease	+1:-11	80%	80%	70%	70%
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##### **HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME)**

Spread Credit Rate	Decrease	+1:-11	85%	85%	75%	75%
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##### **PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)**

Spread Credit Rate	Decrease	-11:+1	80%	80%	70%	70%
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##### **PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)**

Spread Credit Rate	Decrease	-11:+1	85%	85%	75%	75%
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#### NGL/PETROCHEMICALS - Inter-commodity Spread Rates

##### **CONWAY NATURAL GASOLINE (OPIS) SWAP FUTURES (NY-8L - CME) vs GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME)**

Spread Credit Rate	Increase	+1:-1	50%	50%	55%	55%
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##### **CONWAY NORMAL BUTANE (OPIS) SWAP FUTURES (NY-8M - CME) vs GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME)**

Spread Credit Rate	Increase	+1:-1	40%	40%	50%	50%
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##### **GASOLINE EURO-BOB OXY (ARGUS) NWE BARGES SWAP FUTURES (NY-7H) vs. MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0)**

Spread Credit Rate	Decrease	+3:-25	70%	70%	65%	65%
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Spread Credit Rate	Decrease	+3:-25	70%	70%	64%	64%
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##### **GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME) vs MONT BELVIEU NATURAL GASOLINE 5 DECIMALS (OPIS) SWAP FUTURES (NY-7Q - CME)**

Spread Credit Rate	Decrease	+1:-1	73%	73%	70%	70%
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## 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>						
Spread Credit Rate	Decrease	+1:-1	76%	76%	70%	70%
<b>1% FUEL OIL (PLATTS) CARGOES CIF MED SWAP FUTURES (NY-1W - CME) vs DUBAI CRUDE OIL (PLATTS) CALENDAR SWAP FUTURES (NY-DC - CME)</b>						
Spread Credit Rate	Increase	+3:-19	77%	77%	82%	82%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs JAPAN C&amp;F NAPHTHA (PLATTS) SWAP FUTURES (NY-JA - CME)</b>						
Spread Credit Rate	New	+9:-1			86%	86%
Spread Credit Rate	New	+9:-1			85%	85%
Spread Credit Rate	Decrease	+9:-1	88%	88%	84%	84%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs NEW YORK HARBOR 1.0% FUEL OIL (PLATTS) BALMO SWAP FUTURES (NY-VK - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM - CME)</b>						
Spread Credit Rate	New	+1:-1			78%	78%
<b>CONWAY NATURAL GASOLINE (OPIS) SWAP FUTURES (NY-8L - CME) vs GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	55%	55%
<b>CONWAY NORMAL BUTANE (OPIS) SWAP FUTURES (NY-8M - CME) vs GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME)</b>						
Spread Credit Rate	Increase	+1:-1	40%	40%	50%	50%
<b>EUROPEAN FOB RDAM MARINE FUEL 0.5% BARGES (PLATTS) FUTURES (NY-R5F - CME) vs SINGAPORE GASOIL (PLATTS) SWAP FUTURES (NY-SG - CME)</b>						
Spread Credit Rate	Decrease	+2:-15	60%	60%	53%	53%
<b>EUROPEAN NAPHTHA (PLATTS) CALENDAR SWAP FUTURES (NY-UN - CME) vs GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME)</b>						
Spread Credit Rate	Decrease	+1:-9	78%	78%	74%	74%
<b>GASOLINE EURO-BOB OXY (ARGUS) NWE BARGES SWAP FUTURES (NY-7H - CME) vs DUBAI CRUDE OIL (PLATTS) CALENDAR SWAP FUTURES (NY-DC - CME)</b>						
Spread Credit Rate	Increase	+3:-25	75%	75%	80%	80%
<b>GASOLINE EURO-BOB OXY (ARGUS) NWE BARGES SWAP FUTURES (NY-7H - CME) vs GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME)</b>						
Spread Credit Rate	Decrease	+3:-25	82%	82%	80%	80%
<b>GASOLINE EURO-BOB OXY (ARGUS) NWE BARGES SWAP FUTURES (NY-7H) vs. MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0)</b>						
Spread Credit Rate	Decrease	+3:-25	70%	70%	65%	65%
Spread Credit Rate	Decrease	+3:-25	70%	70%	64%	64%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>GROUP THREE ULSD (PLATTS) SWAP FUTURES (NY-A7 - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	New	+1:-1			72%	72%
Spread Credit Rate	Decrease	+1:-1	80%	80%	74%	74%
Spread Credit Rate	Decrease	+1:-1	85%	85%	81%	81%
<b>GROUP THREE ULSD (PLATTS) SWAP FUTURES (NY-A7 - CME) vs GASOLINE EURO-BOB OXY (ARGUS) NWE BARGES SWAP FUTURES (NY-7H - CME)</b>						
Spread Credit Rate	Decrease	+25:-3	70%	70%	64%	64%
Spread Credit Rate	Decrease	+25:-3	75%	75%	70%	70%
<b>GROUP THREE ULSD (PLATTS) SWAP FUTURES (NY-A7 - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	New	+1:-1			70%	70%
Spread Credit Rate	Decrease	+1:-1	77%	77%	71%	71%
<b>GROUP THREE ULSD (PLATTS) SWAP FUTURES (NY-A7 - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)</b>						
Spread Credit Rate	New	+1:-1			79%	79%
Spread Credit Rate	Decrease	+1:-1	82%	82%	80%	80%
<b>GROUP THREE ULSD (PLATTS) SWAP FUTURES (NY-A7 - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO, MP, BH)</b>						
Spread Credit Rate	Decrease	+1:-1	82%	82%	79%	79%
Spread Credit Rate	Decrease	+1:-1	90%	90%	88%	88%
<b>GULF COAST CBOB GASOLINE A2 (PLATTS) SWAP FUTURES (NY-CRG - CME) vs GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	70%	70%	65%	65%
Spread Credit Rate	Decrease	+1:-1	80%	80%	73%	73%
<b>GULF COAST CBOB GASOLINE A2 (PLATTS) SWAP FUTURES (NY-CRG - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)</b>						
Spread Credit Rate	New	+1:-1			78%	78%
Spread Credit Rate	Decrease	+1:-1	82%	82%	77%	77%
<b>GULF COAST CBOB GASOLINE A2 (PLATTS) SWAP FUTURES (NY-CRG - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	86%	86%	82%	82%
<b>GULF COAST JET FUEL (PLATTS) CALENDAR SWAP FUTURES (NY-GE - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	81%	81%	75%	75%
Spread Credit Rate	New	+1:-1			68%	68%
Spread Credit Rate	Decrease	+1:-1	74%	74%	66%	66%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>GULF COAST JET FUEL (PLATTS) CALENDAR SWAP FUTURES (NY-GE - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	New	+1:-1			72%	72%
Spread Credit Rate	Decrease	+1:-1	78%	78%	73%	73%
<b>GULF COAST JET FUEL (PLATTS) CALENDAR SWAP FUTURES (NY-GE - CME) vs RBOB GASOLINE FUTURES (NY-RB, RL, RT)</b>						
Spread Credit Rate	Decrease	+1:-1	78%	78%	72%	72%
<b>GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	76%	76%	73%	73%
<b>GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME) vs DUBAI CRUDE OIL (PLATTS) CALENDAR SWAP FUTURES (NY-DC - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	80%	80%	77%	77%
<b>GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	81%	81%
Spread Credit Rate	Decrease	+1:-1	78%	78%	73%	73%
Spread Credit Rate	Decrease	+1:-1	78%	78%	75%	75%
<b>GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME) vs MONT BELVIEU NATURAL GASOLINE 5 DECIMALS (OPIS) SWAP FUTURES (NY-7Q - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	73%	73%	70%	70%
<b>GULF COAST ULSD (PLATTS) SWAP FUTURES (NY-LY - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	55%	55%
Spread Credit Rate	Increase	+1:-1	42%	42%	50%	50%
<b>GULF COAST ULSD CALENDAR SWAP (NY-LY) vs NY HARBOR RESIDUAL FUEL 1.0% S (NY-MM)</b>						
Spread Credit Rate	Decrease	+1:-1	76%	76%	73%	73%
<b>LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME) vs NEW YORK HARBOR 1.0% FUEL OIL (PLATTS) BALMO SWAP FUTURES (NY-VK - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM - CME)</b>						
Spread Credit Rate	New	+1:-1			71%	71%
<b>LIGHT SWEET CRUDE OIL FUTURES (NY-CL, CS, WS) vs NY ULSD (ARGUS) SWAP FUTURES (NY-5Y - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	60%	60%	52%	52%
<b>NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME) vs EUROPEAN GASOIL BULLET SWAP FUTURES (NY-BG - CME)</b>						
Spread Credit Rate	New	+15:-2			72%	72%
Spread Credit Rate	Decrease	+15:-2	75%	75%	71%	71%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>NY-3G - PREMIUM UNLD 10P FOB MED SWP vs NY-LY - GULF COAST ULSD CALENDAR SWAP</b>						
Spread Credit Rate	Increase	+3:-25	65%	65%	75%	75%
<b>PREMIUM UNLEADED GASOLINE 10 PPM (PLATTS) FOB MED SWAP FUTURES (NY-3G - CME) vs DUBAI CRUDE OIL (PLATTS) CALENDAR SWAP FUTURES (NY-DC - CME)</b>						
Spread Credit Rate	Increase	+3:-25	75%	75%	82%	82%
<b>SINGAPORE FOB MARINE FUEL 0.5% (PLATTS) FUTURES (NY-S5F - CME) vs SINGAPORE GASOIL (PLATTS) SWAP FUTURES (NY-SG - CME)</b>						
Spread Credit Rate	Decrease	+2:-15	60%	60%	53%	53%