



15-181

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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, June 25, 2015

***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, June 26, 2015.**

Current rates as of:

**Thursday, June 25, 2015.**

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
<b>Outright Rates</b>								
<b>CRUDE OIL - Outright Rates</b>								
<b>EUROPE DATED BRENT FUT (UB)</b>								
UB	Spec	Mths 7+	Decrease	USD	5,390	4,900	4,840	4,400
UB	Hedge/Member	Mths 7+	Decrease	USD	4,900	4,900	4,400	4,400
UB	Spec	Mths 1 - 6	Decrease	USD	5,720	5,200	5,115	4,650
UB	Hedge/Member	Mths 1 - 6	Decrease	USD	5,200	5,200	4,650	4,650
<b>LOOP CRUDE OIL STORAGE FUTURES (LPS)</b>								
LPS	Spec	Mth 1	Decrease	USD	385	350	330	300
LPS	Hedge/Member	Mth 1	Decrease	USD	350	350	300	300
LPS	Spec	Mths 2-3	Decrease	USD	275	250	220	200
LPS	Hedge/Member	Mths 2-3	Decrease	USD	250	250	200	200
<b>MINI DATED BRENT (PLATTS) FINANCIAL (MDB)</b>								
MDB	Spec	Mths 7+	Decrease	USD	539	490	484	440
MDB	Hedge/Member	Mths 7+	Decrease	USD	490	490	440	440
MDB	Spec	Mths 1 - 6	Decrease	USD	572	520	512	465
MDB	Hedge/Member	Mths 1 - 6	Decrease	USD	520	520	465	465
<b>CRUDE OIL SPREADS - Outright Rates</b>								
<b>CANADIAN HEAVYCRUDE(NET ENRGY) FUT (WCC)</b>								
WCC	Spec	Mnths 1-2	Decrease	USD	1,375	1,250	1,100	1,000
WCC	Hedge/Member	Mnths 1-2	Decrease	USD	1,250	1,250	1,000	1,000
WCC	Spec	Mnths 3-6	Decrease	USD	1,100	1,000	935	850
WCC	Hedge/Member	Mnths 3-6	Decrease	USD	1,000	1,000	850	850
WCC	Spec	Mnths 7+	Decrease	USD	770	700	715	650
WCC	Hedge/Member	Mnths 7+	Decrease	USD	700	700	650	650
<b>CANADIAN LIGHT SWEET OIL (CIL)</b>								
CIL	Spec	Mnths 1-2	Decrease	USD	1,925	1,750	1,430	1,300
CIL	Hedge/Member	Mnths 1-2	Decrease	USD	1,750	1,750	1,300	1,300
<b>MARS (ARGUS) V WTI TRD MTH FUT (YV)</b>								
YV	Spec	Mnths 1-3	Decrease	USD	3,080	2,800	2,530	2,300
YV	Hedge/Member	Mnths 1-3	Decrease	USD	2,800	2,800	2,300	2,300
YV	Spec	Mnths 4+	Decrease	USD	1,870	1,700	1,540	1,400
YV	Hedge/Member	Mnths 4+	Decrease	USD	1,700	1,700	1,400	1,400
<b>WTI MIDLAND(ARGUS) VS WTI FINCL FUT (FF)</b>								
FF	Spec	Mnth1	Decrease	USD	3,300	3,000	2,200	2,000
FF	Hedge/Member	Mnth1	Decrease	USD	3,000	3,000	2,000	2,000
FF	Spec	Mnth 2	Decrease	USD	2,200	2,000	1,650	1,500

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Outright Rates</b>								
FF	Hedge/Member	Mnth 2	Decrease	USD	2,000	2,000	1,500	1,500
FF	Spec	Mnths 3+	Decrease	USD	1,375	1,250	990	900
FF	Hedge/Member	Mnths 3+	Decrease	USD	1,250	1,250	900	900
<b>WTS (ARGUS) V WTI TRD MTH FUT (FH)</b>								
FH	Spec	Mnth 1	Decrease	USD	2,475	2,250	1,650	1,500
FH	Hedge/Member	Mnth 1	Decrease	USD	2,250	2,250	1,500	1,500
FH	Spec	Mnths 2-3	Decrease	USD	1,925	1,750	1,375	1,250
FH	Hedge/Member	Mnths 2-3	Decrease	USD	1,750	1,750	1,250	1,250
FH	Spec	Mnths 4-7	Decrease	USD	1,100	1,000	825	750
FH	Hedge/Member	Mnths 4-7	Decrease	USD	1,000	1,000	750	750
FH	Spec	Mnths 8+	Decrease	USD	825	750	660	600
FH	Hedge/Member	Mnths 8+	Decrease	USD	750	750	600	600
<b>METALS - Outright Rates</b>								
<b>GOLD KILO FUTURES (GCK)</b>								
GCK	Spec	Mths 1-4	Decrease	USD	1,815	1,650	1,331	1,210
GCK	Hedge/Member	Mths 1-4	Decrease	USD	1,650	1,650	1,210	1,210
GCK	Spec	Mths 5-6	Decrease	USD	1,815	1,650	1,331	1,210
GCK	Hedge/Member	Mths 5-6	Decrease	USD	1,650	1,650	1,210	1,210
GCK	Spec	Mths 7-12	Decrease	USD	1,815	1,650	1,331	1,210
GCK	Hedge/Member	Mths 7-12	Decrease	USD	1,650	1,650	1,210	1,210
GCK	Spec	Mths 13-16	Decrease	USD	1,815	1,650	1,331	1,210
GCK	Hedge/Member	Mths 13-16	Decrease	USD	1,650	1,650	1,210	1,210
GCK	Spec	Mths 17+	Decrease	USD	1,815	1,650	1,331	1,210
GCK	Hedge/Member	Mths 17+	Decrease	USD	1,650	1,650	1,210	1,210
<b>ZINC FUTURES (ZNC)</b>								
ZNC	Spec	Mths 1-4	New	USD			2,420	2,200
ZNC	Hedge/Member	Mths 1-4	New	USD			2,200	2,200
ZNC	Spec	Mths 5-6	New	USD			2,420	2,200
ZNC	Hedge/Member	Mths 5-6	New	USD			2,200	2,200
ZNC	Spec	Mths 7-12	New	USD			2,420	2,200
ZNC	Hedge/Member	Mths 7-12	New	USD			2,200	2,200
ZNC	Spec	Mths 13+	New	USD			2,420	2,200
ZNC	Hedge/Member	Mths 13+	New	USD			2,200	2,200

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

#### **NATURAL GAS - Outright Rates**

#### **NGPL MIDCONTINENT BASIS FUT (NL)**

NL	Spec	Mnths 7-12	Increase	USD	99	90	132	120
NL	Hedge/Member	Mnths 7-12	Increase	USD	90	90	120	120
NL	Spec	Mnths 13+	Increase	USD	143	130	154	140
NL	Hedge/Member	Mnths 13+	Increase	USD	130	130	140	140

## 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**

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Intra Spreads</b>								
<b>CRUDE OIL - Intra Spreads</b>								
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2015, Dec 2016, Dec 2017 (BRENT CRUDE TAM LONDON)</b>								
BZL	Spec		New	USD			220	200
BZL	Hedge/Member		New	USD			200	200
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2015, Dec 2016, Dec 2017 (BRENT CRUDE TAM SINGAPORE)</b>								
BZS	Spec		New	USD			220	200
BZS	Hedge/Member		New	USD			200	200
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2015, Dec 2016, Dec 2017 (BRENT LAST DAY CONTRACT)</b>								
BZ	Spec		New	USD			220	200
BZ	Hedge/Member		New	USD			200	200
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2015, Dec 2016, Dec 2017 (BRENT LAST DAYTRADE AT SETTLEMENT)</b>								
BZT	Spec		New	USD			220	200
BZT	Hedge/Member		New	USD			200	200
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2016, Dec 2017, Dec 2018 (BRENT CRUDE TAM LONDON)</b>								
BZL	Spec		New	USD			605	550
BZL	Hedge/Member		New	USD			550	550
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2016, Dec 2017, Dec 2018 (BRENT CRUDE TAM SINGAPORE)</b>								
BZS	Spec		New	USD			605	550
BZS	Hedge/Member		New	USD			550	550
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2016, Dec 2017, Dec 2018 (BRENT LAST DAY CONTRACT)</b>								
BZ	Spec		New	USD			605	550
BZ	Hedge/Member		New	USD			550	550
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2016, Dec 2017, Dec 2018 (BRENT LAST DAYTRADE AT SETTLEMENT)</b>								
BZT	Spec		New	USD			605	550
BZT	Hedge/Member		New	USD			550	550
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2017 Dec 2018, Dec 2019 (BRENT CRUDE TAM LONDON)</b>								
BZL	Spec		New	USD			550	500
BZL	Hedge/Member		New	USD			500	500
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2017 Dec 2018, Dec 2019 (BRENT CRUDE TAM SINGAPORE)</b>								
BZS	Spec		New	USD			550	500
BZS	Hedge/Member		New	USD			500	500
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2017 Dec 2018, Dec 2019 (BRENT LAST DAY CONTRACT)</b>								
BZ	Spec		New	USD			550	500
BZ	Hedge/Member		New	USD			500	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>Brent Crude Oil (BZ) - Annual Butterfly Dec 2017 Dec 2018, Dec 2019 (BRENT LAST DAYTRADE AT SETTLEMENT)</b>								
BZT	Spec		New	USD			550	500
BZT	Hedge/Member		New	USD			500	500
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2018, Dec 2019, Dec 2020 (BRENT CRUDE TAM LONDON)</b>								
BZL	Spec		New	USD			495	450
BZL	Hedge/Member		New	USD			450	450
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2018, Dec 2019, Dec 2020 (BRENT CRUDE TAM SINGAPORE)</b>								
BZS	Spec		New	USD			495	450
BZS	Hedge/Member		New	USD			450	450
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2018, Dec 2019, Dec 2020 (BRENT LAST DAY CONTRACT)</b>								
BZ	Spec		New	USD			495	450
BZ	Hedge/Member		New	USD			450	450
<b>Brent Crude Oil (BZ) - Annual Butterfly Dec 2018, Dec 2019, Dec 2020 (BRENT LAST DAYTRADE AT SETTLEMENT)</b>								
BZT	Spec		New	USD			495	450
BZT	Hedge/Member		New	USD			450	450
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2015, Dec 2016, Dec 2017 (CRUDE OIL FUTURE NYMEX)</b>								
CL	Spec		Increase	USD	440	400	660	600
CL	Hedge/Member		Increase	USD	400	400	600	600
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2015, Dec 2016, Dec 2017 (CRUDE OIL TRADE AT MARKER LONDON)</b>								
CLL	Spec		Increase	USD	440	400	660	600
CLL	Hedge/Member		Increase	USD	400	400	600	600
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2015, Dec 2016, Dec 2017 (CRUDE OIL TRADE AT MARKER SINGAPORE)</b>								
CLS	Spec		Increase	USD	440	400	660	600
CLS	Hedge/Member		Increase	USD	400	400	600	600
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2015, Dec 2016, Dec 2017 (CRUDE OIL TRADE AT SETTLEMENT)</b>								
CLT	Spec		Increase	USD	440	400	660	600
CLT	Hedge/Member		Increase	USD	400	400	600	600
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2016, Dec 2017, Dec 2018 (CRUDE OIL FUTURE NYMEX)</b>								
CL	Spec		Decrease	USD	440	400	330	300
CL	Hedge/Member		Decrease	USD	400	400	300	300
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2016, Dec 2017, Dec 2018 (CRUDE OIL TRADE AT MARKER LONDON)</b>								
CLL	Spec		Decrease	USD	440	400	330	300
CLL	Hedge/Member		Decrease	USD	400	400	300	300

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<b>Intra Spreads</b>								
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2016, Dec 2017, Dec 2018 (CRUDE OIL TRADE AT MARKER SINGAPORE)</b>								
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CLS	Hedge/Member		Decrease	USD	400	400	300	300
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2016, Dec 2017, Dec 2018 (CRUDE OIL TRADE AT SETTLEMENT)</b>								
CLT	Spec		Decrease	USD	440	400	330	300
CLT	Hedge/Member		Decrease	USD	400	400	300	300
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2017, Dec 2018, Dec 2019 (CRUDE OIL FUTURE NYMEX)</b>								
CL	Spec		Decrease	USD	440	400	330	300
CL	Hedge/Member		Decrease	USD	400	400	300	300
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2017, Dec 2018, Dec 2019 (CRUDE OIL TRADE AT MARKER LONDON)</b>								
CLL	Spec		Decrease	USD	440	400	330	300
CLL	Hedge/Member		Decrease	USD	400	400	300	300
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2017, Dec 2018, Dec 2019 (CRUDE OIL TRADE AT MARKER SINGAPORE)</b>								
CLS	Spec		Decrease	USD	440	400	330	300
CLS	Hedge/Member		Decrease	USD	400	400	300	300
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2017, Dec 2018, Dec 2019 (CRUDE OIL TRADE AT SETTLEMENT)</b>								
CLT	Spec		Decrease	USD	440	400	330	300
CLT	Hedge/Member		Decrease	USD	400	400	300	300
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2018, Dec 2019, Dec 2020 (CRUDE OIL FUTURE NYMEX)</b>								
CL	Spec		Decrease	USD	440	400	330	300
CL	Hedge/Member		Decrease	USD	400	400	300	300
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2018, Dec 2019, Dec 2020 (CRUDE OIL TRADE AT MARKER LONDON)</b>								
CLL	Spec		Decrease	USD	440	400	330	300
CLL	Hedge/Member		Decrease	USD	400	400	300	300
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2018, Dec 2019, Dec 2020 (CRUDE OIL TRADE AT MARKER SINGAPORE)</b>								
CLS	Spec		Decrease	USD	440	400	330	300
CLS	Hedge/Member		Decrease	USD	400	400	300	300
<b>Light Sweet Crude Oil (CL) - Annual Butterfly Dec 2018, Dec 2019, Dec 2020 (CRUDE OIL TRADE AT SETTLEMENT)</b>								
CLT	Spec		Decrease	USD	440	400	330	300
CLT	Hedge/Member		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
<b>Intra Spreads</b>								
<b>Light Sweet Crude Oil (CL) - Quarterly Butterfly - Dec 2016, Mar 2017, Jun 2017 (CRUDE OIL FUTURE NYMEX)</b>								
CL	Spec		Increase	USD	110	100	220	200
CL	Hedge/Member		Increase	USD	100	100	200	200
<b>Light Sweet Crude Oil (CL) - Quarterly Butterfly - Dec 2016, Mar 2017, Jun 2017 (CRUDE OIL TRADE AT MARKER LONDON)</b>								
CLL	Spec		Increase	USD	110	100	220	200
CLL	Hedge/Member		Increase	USD	100	100	200	200
<b>Light Sweet Crude Oil (CL) - Quarterly Butterfly - Dec 2016, Mar 2017, Jun 2017 (CRUDE OIL TRADE AT MARKER SINGAPORE)</b>								
CLS	Spec		Increase	USD	110	100	220	200
CLS	Hedge/Member		Increase	USD	100	100	200	200
<b>Light Sweet Crude Oil (CL) - Quarterly Butterfly - Dec 2016, Mar 2017, Jun 2017 (CRUDE OIL TRADE AT SETTLEMENT)</b>								
CLT	Spec		Increase	USD	110	100	220	200
CLT	Hedge/Member		Increase	USD	100	100	200	200
<b>Light Sweet Crude Oil (CL) - Quarterly Butterfly Sep 2015, Dec 2015, Mar 2016 (CRUDE OIL FUTURE NYMEX)</b>								
CL	Spec		Increase	USD	110	100	275	250
CL	Hedge/Member		Increase	USD	100	100	250	250
<b>Light Sweet Crude Oil (CL) - Quarterly Butterfly Sep 2015, Dec 2015, Mar 2016 (CRUDE OIL TRADE AT MARKER LONDON)</b>								
CLL	Spec		Increase	USD	110	100	275	250
CLL	Hedge/Member		Increase	USD	100	100	250	250
<b>Light Sweet Crude Oil (CL) - Quarterly Butterfly Sep 2015, Dec 2015, Mar 2016 (CRUDE OIL TRADE AT MARKER SINGAPORE)</b>								
CLS	Spec		Increase	USD	110	100	275	250
CLS	Hedge/Member		Increase	USD	100	100	250	250
<b>Light Sweet Crude Oil (CL) - Quarterly Butterfly Sep 2015, Dec 2015, Mar 2016 (CRUDE OIL TRADE AT SETTLEMENT)</b>								
CLT	Spec		Increase	USD	110	100	275	250
CLT	Hedge/Member		Increase	USD	100	100	250	250
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2015, Jun 2016, Dec 2016 (CRUDE OIL FUTURE NYMEX)</b>								
CL	Spec		Decrease	USD	440	400	385	350
CL	Hedge/Member		Decrease	USD	400	400	350	350
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2015, Jun 2016, Dec 2016 (CRUDE OIL TRADE AT MARKER LONDON)</b>								
CLL	Spec		Decrease	USD	440	400	385	350
CLL	Hedge/Member		Decrease	USD	400	400	350	350

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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<b>Intra Spreads</b>								
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2015, Jun 2016, Dec 2016 (CRUDE OIL TRADE AT MARKER SINGAPORE)</b>								
CLS	Spec		Decrease	USD	440	400	385	350
CLS	Hedge/Member		Decrease	USD	400	400	350	350
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2015, Jun 2016, Dec 2016 (CRUDE OIL TRADE AT SETTLEMENT)</b>								
CLT	Spec		Decrease	USD	440	400	385	350
CLT	Hedge/Member		Decrease	USD	400	400	350	350
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2016, Jun 2017, Dec 2017 (CRUDE OIL FUTURE NYMEX)</b>								
CL	Spec		Increase	USD	275	250	330	300
CL	Hedge/Member		Increase	USD	250	250	300	300
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2016, Jun 2017, Dec 2017 (CRUDE OIL TRADE AT MARKER LONDON)</b>								
CLL	Spec		Increase	USD	275	250	330	300
CLL	Hedge/Member		Increase	USD	250	250	300	300
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2016, Jun 2017, Dec 2017 (CRUDE OIL TRADE AT MARKER SINGAPORE)</b>								
CLS	Spec		Increase	USD	275	250	330	300
CLS	Hedge/Member		Increase	USD	250	250	300	300
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2016, Jun 2017, Dec 2017 (CRUDE OIL TRADE AT SETTLEMENT)</b>								
CLT	Spec		Increase	USD	275	250	330	300
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<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2017, Jun 2018, Dec 2018 (CRUDE OIL FUTURE NYMEX)</b>								
CL	Spec		Increase	USD	275	250	330	300
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<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2017, Jun 2018, Dec 2018 (CRUDE OIL TRADE AT MARKER LONDON)</b>								
CLL	Spec		Increase	USD	275	250	330	300
CLL	Hedge/Member		Increase	USD	250	250	300	300
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2017, Jun 2018, Dec 2018 (CRUDE OIL TRADE AT MARKER SINGAPORE)</b>								
CLS	Spec		Increase	USD	275	250	330	300
CLS	Hedge/Member		Increase	USD	250	250	300	300
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Dec 2017, Jun 2018, Dec 2018 (CRUDE OIL TRADE AT SETTLEMENT)</b>								
CLT	Spec		Increase	USD	275	250	330	300
CLT	Hedge/Member		Increase	USD	250	250	300	300

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Intra Spreads</b>								
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Jun 2014, Dec 2014, Jun 2015 (CRUDE OIL FUTURE NYMEX)</b>								
CL	Spec		Decrease	USD	330	300	275	250
CL	Hedge/Member		Decrease	USD	300	300	250	250
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Jun 2014, Dec 2014, Jun 2015 (CRUDE OIL TRADE AT MARKER LONDON)</b>								
CLL	Spec		Decrease	USD	330	300	275	250
CLL	Hedge/Member		Decrease	USD	300	300	250	250
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Jun 2014, Dec 2014, Jun 2015 (CRUDE OIL TRADE AT MARKER SINGAPORE)</b>								
CLS	Spec		Decrease	USD	330	300	275	250
CLS	Hedge/Member		Decrease	USD	300	300	250	250
<b>Light Sweet Crude Oil (CL) - Semi-Annual Butterfly Jun 2014, Dec 2014, Jun 2015 (CRUDE OIL TRADE AT SETTLEMENT)</b>								
CLT	Spec		Decrease	USD	330	300	275	250
CLT	Hedge/Member		Decrease	USD	300	300	250	250

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Intra Spreads</b>								
<b>EQUITY INDEX - Intra Spreads</b>								
<b>(CONSUMER STAPLES SECTOR TIC)</b>								
XPT	Spec		Increase	USD	88	80	165	150
XPT	Hedge/Member		Increase	USD	80	80	150	150
<b>(EMINI SP 500 CONS STAPLES SECTOR IX)</b>								
XAP	Spec		Increase	USD	88	80	165	150
XAP	Hedge/Member		Increase	USD	80	80	150	150
<b>(EMINI SP 500 ENERGY SECTOR INDEX)</b>								
XAE	Spec		Increase	USD	88	80	165	150
XAE	Hedge/Member		Increase	USD	80	80	150	150
<b>(EMINI SP500 - FINANCIAL SECT INDEX)</b>								
XAF	Spec		Increase	USD	88	80	165	150
XAF	Hedge/Member		Increase	USD	80	80	150	150
<b>(EMINI SP500- HEALTH CARE SECT INDEX)</b>								
XAV	Spec		Increase	USD	88	80	165	150
XAV	Hedge/Member		Increase	USD	80	80	150	150
<b>(EMINI SP500 MATERIALS SECTOR INDEX)</b>								
XAB	Spec		Increase	USD	88	80	165	150
XAB	Hedge/Member		Increase	USD	80	80	150	150
<b>(EMINI SP500-INDUSTRIAL SECTOR INDEX)</b>								
XAI	Spec		Increase	USD	44	40	88	80
XAI	Hedge/Member		Increase	USD	40	40	80	80
<b>(EMINI SP500-TECHNOLOGY SECTOR INDEX)</b>								
XAK	Spec		Increase	USD	44	40	88	80
XAK	Hedge/Member		Increase	USD	40	40	80	80
<b>(EMINI SP500-UTILITIES SECTOR INDEX)</b>								
XAU	Spec		Increase	USD	44	40	88	80
XAU	Hedge/Member		Increase	USD	40	40	80	80
<b>(SP 500 - CONS STAPLES SYNTHETIC)</b>								
1PT	Spec		Increase	USD	88	80	165	150
1PT	Hedge/Member		Increase	USD	80	80	150	150
<b>(SP 500 - INDUSTRIAL SEL SECTOR SYNT)</b>								
1IT	Spec		Increase	USD	44	40	88	80
1IT	Hedge/Member		Increase	USD	40	40	80	80

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Intra Spreads</b>								
<b>(SP 500 ENERGY SELECT SECTOR TIC)</b>								
XET	Spec		Increase	USD	88	80	165	150
XET	Hedge/Member		Increase	USD	80	80	150	150
<b>(SP 500 ENERGY SLCT SEC SYNTHETIC)</b>								
1ET	Spec		Increase	USD	88	80	165	150
1ET	Hedge/Member		Increase	USD	80	80	150	150
<b>(SP 500 FINANCIAL SECTOR TIC)</b>								
XFT	Spec		Increase	USD	88	80	165	150
XFT	Hedge/Member		Increase	USD	80	80	150	150
<b>(SP 500 FINANCIAL SLCT SEC SYNT)</b>								
1FT	Spec		Increase	USD	88	80	165	150
1FT	Hedge/Member		Increase	USD	80	80	150	150
<b>(SP 500 HEALTH CARE SECTOR SYNTHETIC)</b>								
1VT	Spec		Increase	USD	88	80	165	150
1VT	Hedge/Member		Increase	USD	80	80	150	150
<b>(SP 500 HEALTH CARE SECTOR TIC)</b>								
XVT	Spec		Increase	USD	88	80	165	150
XVT	Hedge/Member		Increase	USD	80	80	150	150
<b>(SP 500 INDUSTRIAL SECTOR TIC)</b>								
XIT	Spec		Increase	USD	44	40	88	80
XIT	Hedge/Member		Increase	USD	40	40	80	80
<b>(SP 500 MATERIALS SEL SECTOR SYNTH)</b>								
1BT	Spec		Increase	USD	88	80	165	150
1BT	Hedge/Member		Increase	USD	80	80	150	150
<b>(SP 500 MATERIALS SEL SECTOR TIC)</b>								
XBT	Spec		Increase	USD	88	80	165	150
XBT	Hedge/Member		Increase	USD	80	80	150	150
<b>(SP 500 TECHNOLOGY SECTOR SYNTH)</b>								
1KT	Spec		Increase	USD	44	40	88	80
1KT	Hedge/Member		Increase	USD	40	40	80	80
<b>(SP 500 TECHNOLOGY SECTOR TIC)</b>								
XKT	Spec		Increase	USD	44	40	88	80
XKT	Hedge/Member		Increase	USD	40	40	80	80

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Intra Spreads</b>								
<b>(SP 500 UTILITIES SEL SECTOR SYNTH)</b>								
1UT	Spec		Increase	USD	44	40	88	80
1UT	Hedge/Member		Increase	USD	40	40	80	80
<b>(SP 500 UTILITIES SEL SECTOR TIC)</b>								
XUT	Spec		Increase	USD	44	40	88	80
XUT	Hedge/Member		Increase	USD	40	40	80	80
<b>CBOT Dow Jones Real Estate Index (JR) - All Months (DJ US REAL ESTATE BTIC)</b>								
REX	Spec		Increase	USD	110	100	330	300
REX	Hedge/Member		Increase	USD	100	100	300	300
<b>CBOT Dow Jones Real Estate Index (JR) - All Months (DJ US REAL ESTATE INDEX)</b>								
JR	Spec		Increase	USD	110	100	330	300
JR	Hedge/Member		Increase	USD	100	100	300	300
<b>CBOT Dow Jones Real Estate Index (JR) - All Months (DJ US REAL ESTATE SYNTHIC)</b>								
DJR	Spec		Increase	USD	110	100	330	300
DJR	Hedge/Member		Increase	USD	100	100	300	300
<b>E-Mini Nasdaq Biotechnology Index Futures (BQ) - All Months (BTIC E-MINI NASDAQ BIOTECHNOLOGY)</b>								
BIT	Spec		Increase	USD	303	275	440	400
BIT	Hedge/Member		Increase	USD	275	275	400	400
<b>E-Mini Nasdaq Biotechnology Index Futures (BQ) - All Months (E-MINI NASDAQ BIOTECH SYNT MARKER)</b>								
BTT	Spec		Increase	USD	303	275	440	400
BTT	Hedge/Member		Increase	USD	275	275	400	400
<b>E-Mini Nasdaq Biotechnology Index Futures (BQ) - All Months (E-MINI NASDAQ BIOTECHNOLOGY FUTURES)</b>								
BQ	Spec		Increase	USD	303	275	440	400
BQ	Hedge/Member		Increase	USD	275	275	400	400
<b>ETHANOL - Intra Spreads</b>								
<b>Ethanol (Platts) T2 FOB Rotterdam Including Duty Swap - All Months (ETHANOL(PL) T2 FOB RTRDM INCL)</b>								
Z1	Spec		Increase	EUR	2,035	1,850	2,200	2,000
Z1	Hedge/Member		Increase	EUR	1,850	1,850	2,000	2,000

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Intra Spreads</b>								
<b>INTEREST RATES - Intra Spreads</b>								
<b>Eurodollar (ED) - Tier 3 vs. Tier 10 [mth 09-12 vs. mth 37-40 ] (EURODOLLAR FUTURES)</b>								
ED	Spec		Increase	USD	275	250	330	300
ED	Hedge/Member		Increase	USD	250	250	300	300
<b>Eurodollar (ED) - Tier 3 vs. Tier 11 [mth 09-12 vs. mth 41-44 ] (EURODOLLAR FUTURES)</b>								
ED	Spec		Increase	USD	275	250	330	300
ED	Hedge/Member		Increase	USD	250	250	300	300
<b>Eurodollar (ED) - Tier 3 vs. Tier 6 [mth 09-12 vs. mth 21-24 ] (EURODOLLAR FUTURES)</b>								
ED	Spec		Increase	USD	275	250	330	300
ED	Hedge/Member		Increase	USD	250	250	300	300
<b>Eurodollar (ED) - Tier 3 vs. Tier 7 [mth 09-12 vs. mth 25-28 ] (EURODOLLAR FUTURES)</b>								
ED	Spec		Increase	USD	275	250	330	300
ED	Hedge/Member		Increase	USD	250	250	300	300
<b>Eurodollar (ED) - Tier 3 vs. Tier 8 [mth 09-12 vs. mth 29-32 ] (EURODOLLAR FUTURES)</b>								
ED	Spec		Increase	USD	275	250	330	300
ED	Hedge/Member		Increase	USD	250	250	300	300
<b>Eurodollar (ED) - Tier 3 vs. Tier 9 [mth 09-12 vs. mth 33-36 ] (EURODOLLAR FUTURES)</b>								
ED	Spec		Increase	USD	275	250	330	300
ED	Hedge/Member		Increase	USD	250	250	300	300
<b>Fed Funds (CBOT) (41) - Tier 1 vs. Tier 2 [mth 1 vs. mth 2-4 ] (30 DAY FED FUND FUTURES)</b>								
41	Spec		Increase	USD	330	300	358	325
41	Hedge/Member		Increase	USD	300	300	325	325
<b>Fed Funds (CBOT) (41) - Tier 1 vs. Tier 4 [mth 1 vs. mth 13-24] (30 DAY FED FUND FUTURES)</b>								
41	Spec		Increase	USD	132	120	165	150
41	Hedge/Member		Increase	USD	120	120	150	150
<b>Fed Funds (CBOT) (41) - Tier 1 vs. Tier 5 [mth 1 vs. mth 25+] (30 DAY FED FUND FUTURES)</b>								
41	Spec		Increase	USD	198	180	248	225
41	Hedge/Member		Increase	USD	180	180	225	225
<b>U.S. Treasury Bond (17) - Month 1 vs. Month 2 (30 YR U.S. TREASURY BOND FUTURES)</b>								
17	Spec		Decrease	USD	550	500	413	375
17	Hedge/Member		Decrease	USD	500	500	375	375
<b>U.S. Treasury Bond (17) - Month 2+ vs. Month 2+ (30 YR U.S. TREASURY BOND FUTURES)</b>								
17	Spec		Decrease	USD	550	500	413	375
17	Hedge/Member		Decrease	USD	500	500	375	375

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Intra Spreads</b>								
<b>METALS - Intra Spreads</b>								
<b>All Months (ZINC FUTURES)</b>								
ZNC	Spec		New	USD			363	330
ZNC	Hedge/Member		New	USD			330	330
<b>U.S. Midwest Domestic Hot-Rolled Coil Steel - All Months (NYMEX HOT ROLLED STEEL FUTURES)</b>								
HR	Spec		Increase	USD	418	380	550	500
HR	Hedge/Member		Increase	USD	380	380	500	500
<b>PETROLEUM CRACKS AND SPREADS - Intra Spreads</b>								
<b>NY 3.0% Fuel Oil vs. Gulf Coast No. 6 Fuel Oil 3.0% (Platts) Swap Futures - All Months (NY 3% FUEL OIL V GULF COAST NO6 3%)</b>								
FOC	Spec		Increase	USD	990	900	1,210	1,100
FOC	Hedge/Member		Increase	USD	900	900	1,100	1,100
<b>REFINED PRODUCTS - Intra Spreads</b>								
<b>FAME 0 (ARGUS) BIODIESEL FOB RDAM (RED COMPLIANT) SWAP FUTURE - ALL MONTHS (FAME 0 ARGUS BIODIESEL FOB RDA RED)</b>								
FBD	Spec		Increase	USD	1,650	1,500	2,200	2,000
FBD	Hedge/Member		Increase	USD	1,500	1,500	2,000	2,000



## 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

#### COAL - Inter-commodity Spread Rates

##### **CENTRAL APPALACHIAN COAL FUTURES (NY-QL - CME) vs CSX COAL (PLATTS OTC BROKER INDEX) SWAP FUTURES (NY-QX - CME)**

Spread Credit Rate	Decrease	+2:-3	60%	60%	35%	35%
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##### **COAL (API 4) FOB RICHARDS BAY (ARGUS/MCCLOSKEY) SWAP FUTURES (NY-MFF - CME) vs CSX COAL (PLATTS OTC BROKER INDEX) SWAP FUTURES (NY-QX - CME)**

Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
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##### **ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME)**

Spread Credit Rate	Decrease	+1:-600	20%	20%	0%	0%
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##### **ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME)**

Spread Credit Rate	Decrease	+1:-600	20%	20%	0%	0%
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##### **ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO CINERGY HUB OFF-PEAK LMP SWAP FUTURES (NY-EJ - CME)**

Spread Credit Rate	Decrease	+1:-3	15%	15%	0%	0%
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##### **ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO ILLINOIS HUB OFF-PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-OJ - CME)**

Spread Credit Rate	Decrease	+1:-600	30%	30%	0%	0%
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##### **ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO INDIANA HUB 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-FDM - CME)**

Spread Credit Rate	Decrease	+1:-600	20%	20%	0%	0%
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##### **ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO INDIANA HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME SWAP FUTURES (NY-FTM - CME)**

Spread Credit Rate	Decrease	+1:-600	15%	15%	0%	0%
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#### CRUDE OIL - Inter-commodity Spread Rates

##### **DUBAI CRUDE OIL (PLATTS) CALENDAR SWAP FUTURES (NY-DC - CME) vs SINGAPORE MOGAS 95 UNLEADED (PLATTS) SWAP FUTURES (NY-V0 - CME)**

Spread Credit Rate	Decrease	+1:-1	80%	80%	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>ELECTRICITY - Inter-commodity Spread Rates</b>						
<b>AEP DAYTON HUB PEAK MONTHLY (NYM-VM - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	30%	30%
<b>CINERGY HUB OFF-PEAK CALENDAR-MONTH LMP SWAP (NYM-EJ - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Increase	+1:-1	30%	30%	40%	40%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND CONNECTICUT ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P3 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	45%	45%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND CONNECTICUT ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P2 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	55%	55%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND INTERNAL HUB 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-H2 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	55%	55%	40%	40%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NEW HAMPSHIRE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U3 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	60%	60%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NORTH EAST MASSACHUSETTS ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P8 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	55%	55%	40%	40%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NORTH EAST MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P7 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	55%	55%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND RHODE ISLAND ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U5 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND SOUTH EAST MASSACHUSETTS ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P5 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	55%	55%	40%	40%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND SOUTH EAST MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	60%	60%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MID-COLUMBIA DAY-AHEAD OFF-PEAK CALENDAR-MONTH 5 MW FUTURES (NY-OMC - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	30%	30%	0%	0%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MID-COLUMBIA DAY-AHEAD PEAK CALENDAR-MONTH 5 MW FUTURES (NY-MDC - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	30%	30%	0%	0%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>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)</b>						
Spread Credit Rate	Decrease	+1:-194	50%	50%	35%	35%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE C 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-A3 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	50%	50%	35%	35%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE E 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-58 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE G 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-D2 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	35%	35%	0%	0%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE J 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-D4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	35%	35%	0%	0%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ONTARIO PEAK CALENDAR-MONTH SWAP FUTURES (NY-OPM - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PALO VERDE DAY-AHEAD OFF-PEAK CALENDAR-MONTH 5 MW FUTURES (NY-OVD - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	40%	40%	0%	0%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PALO VERDE DAY-AHEAD PEAK CALENDAR-MONTH 5 MW FUTURES (NY-PVD - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	50%	50%	0%	0%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AECO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Y1 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	45%	45%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R7 - CME)</b>						
Spread Credit Rate	Increase	+1:-194	40%	40%	50%	50%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-VM - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-S4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	65%	65%	30%	30%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R3 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	65%	65%	35%	35%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E3 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	60%	60%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM COMED ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D9 - CME)</b>						
Spread Credit Rate	Increase	+1:-194	35%	35%	50%	50%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM COMED ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D8 - CME)</b>						
Spread Credit Rate	Increase	+1:-11	40%	40%	50%	50%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-F2 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	50%	50%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-46 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME)</b>						
Spread Credit Rate	Increase	+1:-194	35%	35%	50%	50%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME)</b>						
Spread Credit Rate	Increase	+1:-194	35%	35%	50%	50%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK LMP SWAP FUTURES (NY-UO - CME)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	45%	45%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4P - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	60%	60%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-F5 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	60%	60%	35%	35%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L5 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	40%	40%	30%	30%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	60%	60%	40%	40%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-N9 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	60%	60%	40%	40%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	45%	45%	30%	30%
<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	45%	45%	30%	30%
<b>ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-600	20%	20%	0%	0%
<b>ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME)</b>						
Spread Credit Rate	Decrease	+1:-600	20%	20%	0%	0%
<b>ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO CINERGY HUB OFF-PEAK LMP SWAP FUTURES (NY-EJ - CME)</b>						
Spread Credit Rate	Decrease	+1:-3	15%	15%	0%	0%
<b>ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO ILLINOIS HUB OFF-PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-OJ - CME)</b>						
Spread Credit Rate	Decrease	+1:-600	30%	30%	0%	0%
<b>ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO INDIANA HUB 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-FDM - CME)</b>						
Spread Credit Rate	Decrease	+1:-600	20%	20%	0%	0%
<b>ILLINOIS BASIN COAL FUTURES CONTRACT SPECS (NY-ILB - CME) vs MIDWEST ISO INDIANA HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME SWAP FUTURES (NY-FTM - CME)</b>						
Spread Credit Rate	Decrease	+1:-600	15%	15%	0%	0%
<b>ISO NEW ENGLAND INTERNAL HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U6 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Decrease	+11:-1	55%	55%	30%	30%
<b>MIDWEST ISO CINERGY HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-EM - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	+1:-1	45%	45%	55%	55%
<b>MIDWEST ISO INDIANA HUB 5 MW OFF-PEAK CAL REAL-TIME SWAP FUT (NY-FTM- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-UM- CME)</b>						
Spread Credit Rate	Decrease	+168:-1	55%	55%	30%	30%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>NEPOOL INTERNAL HUB 5 MW OFF-PEAK CALENDAR-MONTH DAY -AHEAD SWAP (NYM-H2 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Decrease	+194:-1	55%	55%	40%	40%
<b>NORTHERN ILLINOIS HUB PEAK MONTHLY SWAP (NYM-UM - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	45%	45%
<b>PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	+194:-1	35%	35%	50%	50%
<b>PJM NORTHERN ILLINOIS HUB OFF-PEAK LMP SWAP FUTURES (NY-UO - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	45%	45%
<b>PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-UM- CME) vs MIDWEST ISO CINERGY HUB OFF-PEAK LMP SWAP FUT (NY-EJ- CME)</b>						
Spread Credit Rate	Decrease	+1:-1	55%	55%	30%	30%
<b>PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-UM - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	45%	45%
<b>PJM OFF-PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JP - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	+1:-1	25%	25%	35%	35%
<b>PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-W6 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Decrease	-194:+1	60%	60%	30%	30%
<b>PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-E4 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Decrease	+194:-1	60%	60%	40%	40%
<b>PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP (NYM-N9 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Decrease	+194:-1	60%	60%	40%	40%
<b>PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J4 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Decrease	-11:+1	45%	45%	30%	30%
<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	45%	45%	30%	30%

## 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>Dow Jones (CBOT) (11) vs. S&amp;P 500 Stock Index (SP)</b>						
Spread Credit Rate	Decrease	+3:-1	90%	90%	85%	85%
<b>EMINI SP500 MATERIALS SECTOR INDEX (XAB) vs EMINI SP500-TECHNOLOGY SECTOR INDEX (XAK)</b>						
Spread Credit Rate	Increase	+3:-2	50%	50%	60%	60%
<b>NIKKEI 225 DOLLAR-BASED (NK - CME) vs JAPANESE YEN (JY - CME)</b>						
Spread Credit Rate	Decrease	+1:+1	55%	55%	50%	50%
<b>NIKKEI 225 Stock Index (NK) vs. S&amp;P 500 Stock Index (SP)</b>						
Spread Credit Rate	Decrease	+1:-1	65%	65%	40%	40%
<b>Yen-based Nikkei (N1) vs. S&amp;P 500 Stock Index (SP)</b>						
Spread Credit Rate	Decrease	+1:-1	65%	65%	40%	40%
<b>FX - Inter-commodity Spread Rates</b>						
<b>NIKKEI 225 DOLLAR-BASED (NK - CME) vs JAPANESE YEN (JY - CME)</b>						
Spread Credit Rate	Decrease	+1:+1	55%	55%	50%	50%
<b>METALS - Inter-commodity Spread Rates</b>						
<b>ALUMINUM FUTURES (CX-ALI - CME) vs ALUMINUM MW US TRANSACTION PREMIUM PLATTS (25MT) SWAP FUTURES (CX-AUP - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	30%	30%
<b>CLEARED OTC LONDON GOLD FORWARDS (COLLATERAL MARGIN) (CX-GB - CME) vs COPPER FUTURES (CX-HG - CME)</b>						
Spread Credit Rate	Decrease	+50:-1	40%	40%	30%	30%
<b>COMEX COPPER (CMX-HG - CME) vs COMEX SILVER (CMX-SI - CME)</b>						
Spread Credit Rate	Decrease	+2:-1	50%	50%	40%	40%
<b>CX-GC vs. CX-GCK</b>						
Spread Credit Rate	New	+1:-3			98%	98%
<b>ZINC FUTURES (CX-ZNC - CME) vs ALUMINUM MW US TRANSACTION PREMIUM PLATTS (25MT) SWAP FUTURES (CX-AUP - CME)</b>						
Spread Credit Rate	New	+1:-1			55%	55%
<b>ZINC FUTURES (CX-ZNC - CME) vs COPPER FUTURES (CX-HG - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>ZINC FUTURES (CX-ZNC - CME) vs GOLD FUTURES (CX-GC - CME)</b>						
Spread Credit Rate	New	+1:-1			30%	30%
<b>ZINC FUTURES (CX-ZNC - CME) vs SILVER FUTURES (CX-SI - CME)</b>						
Spread Credit Rate	New	+1:-1			30%	30%



## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>NATURAL GAS - Inter-commodity Spread Rates</b>						
<b>AEP DAYTON HUB PEAK MONTHLY (NYM-VM - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	30%	30%
<b>ANR LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-ND - CME) vs CENTERPOINT NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-PW - CME)</b>						
Spread Credit Rate	New	+1:-1			35%	35%
<b>ANR LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-ND - CME) vs TENNESSEE 800 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-6Z - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>ANR LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-ND - CME) vs TETCO STX BASIS SWAP (PLATTS IFERC) FUTURES (NY-TX - CME)</b>						
Spread Credit Rate	New	+1:-1			55%	55%
<b>ANR LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-ND - CME) vs TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	35%	35%	20%	20%
<b>ANR LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-ND - CME) vs TRANSCO ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8E - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>ANR LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-ND - CME) vs TRUNKLINE, LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NU - CME)</b>						
Spread Credit Rate	Increase	+1:-1	20%	20%	30%	30%
<b>ANR OK BASIS SWAP (PLATTS IFERC) FUTURES (NY-NE - CME) vs MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	25%	25%	0%	0%
<b>ANR OK BASIS SWAP (PLATTS IFERC) FUTURES (NY-NE - CME) vs SOUTHERN STAR TX.-OKLA.-KAN. BASIS SWAP (PLATTS IFERC) FUTURES (NY-8Z - CME)</b>						
Spread Credit Rate	Increase	+1:-1	30%	30%	55%	55%
<b>ANR OK BASIS SWAP (PLATTS IFERC) FUTURES (NY-NE - CME) vs WAHA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NW - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>CENTERPOINT NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-VX - CME) vs NORTHERN ROCKIES PIPE SWAP (NY-XR - CME)</b>						
Spread Credit Rate	New	+1:-1			65%	65%
<b>CENTERPOINT NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-VX - CME) vs TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME)</b>						
Spread Credit Rate	New	+1:-1			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>CHICAGO BASIS SWAP (PLATTS IFERC) FUTURES (NY-NB - CME) vs MICHCON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NF - CME)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	45%	45%
<b>CHICAGO BASIS SWAP (PLATTS IFERC) FUTURES (NY-NB - CME) vs ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	20%	20%
<b>CHICAGO BASIS SWAP (PLATTS IFERC) FUTURES (NY-NB - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	35%	35%	0%	0%
<b>CHICAGO BASIS SWAP (PLATTS IFERC) FUTURES (NY-NB - CME) vs VENTURA BASIS SWAP (PLATTS IFERC) FUTURES (NY-PF - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	70%	70%
<b>CHICAGO CITY GATE PIPE SWAP (NY-XO - CME) vs NORTHERN ROCKIES PIPE SWAP (NY-XR - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	70%	70%	0%	0%
<b>CHICAGO CITY GATE PIPE SWAP (NY-XO - CME) vs TRANSCO ZONE 6 PIPE SWAP (NY-XZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	55%	55%	0%	0%
<b>CIG ROCKIES BASIS SWAP (PLATTS IFERC) FUTURES (NY-CI - CME) vs MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	65%	65%	0%	0%
<b>CIG ROCKIES BASIS SWAP (PLATTS IFERC) FUTURES (NY-CI - CME) vs ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	35%	35%
<b>CIG ROCKIES BASIS SWAP (PLATTS IFERC) FUTURES (NY-CI - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	70%	70%	0%	0%
<b>CIG ROCKY MOUNTAIN BASIS SWAP (PLATTS IFERC) (NYM-CI - CME) vs NORTHWEST PIPELINE, ROCKIES BASIS SWAP (PLATTS IFE (NYM-NR - CME)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	60%	60%
<b>CIG ROCKY MOUNTAIN BASIS SWAP (PLATTS IFERC) (NYM-CI - CME) vs PACIFIC GAS &amp; ELECTRIC (PG&amp;E) CITYGATE BASIS SWAP (NYM-PC - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	35%	35%	0%	0%
<b>CIG ROCKY MOUNTAIN BASIS SWAP (PLATTS IFERC) (NYM-CI - CME) vs SUMAS BASIS SWAP (PLATTS IFERC) (NYM-NK - CME)</b>						
Spread Credit Rate	Increase	+1:-1	30%	30%	40%	40%
<b>CINERGY HUB OFF-PEAK CALENDAR-MONTH LMP SWAP (NYM-EJ - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Increase	+1:-1	30%	30%	40%	40%
<b>COLUMBIA GULF LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-GL - CME) vs DEMARC BASIS SWAP (PLATTS IFERC) FUTURES (NY-PE - CME)</b>						
Spread Credit Rate	New	+1:-1			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>COLUMBIA GULF LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-GL - CME) vs FLORIDA ZONE 2 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8A - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>COLUMBIA GULF LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-GL - CME) vs NGPL STX NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-T5 - CME)</b>						
Spread Credit Rate	Increase	+1:-1	45%	45%	60%	60%
<b>COLUMBIA GULF LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-GL - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	New	+1:-1			55%	55%
<b>COLUMBIA GULF LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-GL - CME) vs TENNESSEE 500 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-NM - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>COLUMBIA GULF LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-GL - CME) vs TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	60%	60%
<b>COLUMBIA GULF LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-GL - CME) vs TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	65%	65%
<b>COLUMBIA GULF LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-GL - CME) vs TEXAS GAS ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-9F - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>COLUMBIA GULF LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-GL - CME) vs TRANSCO ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8E - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	0%	0%
<b>COLUMBIA GULF MAINLINE BASIS SWAP (PLATTS IFERC) FUTURES (NY-5Z - CME) vs TENNESSEE 800 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-6Z - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>DEMARC BASIS SWAP (PLATTS IFERC) FUTURES (NY-PE - CME) vs NGPL STX NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-T5 - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>DEMARC BASIS SWAP (PLATTS IFERC) FUTURES (NY-PE - CME) vs ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	60%	60%	20%	20%
<b>DEMARC BASIS SWAP (PLATTS IFERC) FUTURES (NY-PE - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>DEMARC BASIS SWAP (PLATTS IFERC) FUTURES (NY-PE - CME) vs TETCO ELA BASIS SWAP (PLATTS IFERC) FUTURES (NY-TE - CME)</b>						
Spread Credit Rate	New	+1:-1			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>DEMARCO BASIS SWAP (PLATTS IFERC) FUTURES (NY-PE - CME) vs TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME)</b>						
Spread Credit Rate	New	+1:+1			50%	50%
<b>EL PASO NATURAL GAS CO. PERMIAN BASIN BASIS SWAP ( NYM-PM - CME) vs MALIN BASIS SWAP (NGI) (NYM-PB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	55%	55%	0%	0%
<b>EL PASO NATURAL GAS CO. PERMIAN BASIN BASIS SWAP ( NYM-PM - CME) vs NATURAL GAS PIPELINE CO. OF AMERICA (NGPL) TEXOK B (NYM-PD)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>EL PASO NATURAL GAS CO. PERMIAN BASIN BASIS SWAP ( NYM-PM - CME) vs NORTHWEST PIPELINE, ROCKIES BASIS SWAP (PLATTS IFE (NYM-NR)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	55%	55%
<b>EL PASO NATURAL GAS CO. PERMIAN BASIN BASIS SWAP ( NYM-PM - CME) vs PACIFIC GAS &amp; ELECTRIC (PG&amp;E) CITYGATE BASIS SWAP (NYM-PC -</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	0%	0%
<b>EL PASO NATURAL GAS CO. PERMIAN BASIN BASIS SWAP ( NYM-PM - CME) vs SUMAS BASIS SWAP (PLATTS IFERC) (NYM-NK - CME)</b>						
Spread Credit Rate	Increase	+1:-1	30%	30%	40%	40%
<b>FGT ZONE 3 BASIS SWAP (PLATTS IFERC) FUTURES (NY-FP - CME) vs SONAT BASIS SWAP (PLATTS IFERC) FUTURES (NY-SZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	25%	25%	0%	0%
<b>FGT ZONE 3 BASIS SWAP (PLATTS IFERC) FUTURES (NY-FP - CME) vs TENNESSEE 800 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-6Z - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	25%	25%	0%	0%
<b>HENRY HUB BASIS SWAP (PLATTS IFERC) FUTURES (NY-HB - CME) vs FLORIDA ZONE 2 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8A - CME)</b>						
Spread Credit Rate	Increase	+1:-1	60%	60%	70%	70%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ALGONQUIN NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XAC - CME)</b>						
Spread Credit Rate	Decrease	+1:-4	60%	60%	35%	35%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND CONNECTICUT ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P3 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	45%	45%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND CONNECTICUT ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P2 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	55%	55%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND INTERNAL HUB 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-H2 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	55%	55%	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>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NEW HAMPSHIRE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U3 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	60%	60%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NORTH EAST MASSACHUSETTS ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P8 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	55%	55%	40%	40%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NORTH EAST MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P7 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	55%	55%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND RHODE ISLAND ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U5 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND SOUTH EAST MASSACHUSETTS ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P5 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	55%	55%	40%	40%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND SOUTH EAST MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	60%	60%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MID-COLUMBIA DAY-AHEAD OFF-PEAK CALENDAR-MONTH 5 MW FUTURES (NY-OMC - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	30%	30%	0%	0%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MID-COLUMBIA DAY-AHEAD PEAK CALENDAR-MONTH 5 MW FUTURES (NY-MDC - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	30%	30%	0%	0%
<b>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)</b>						
Spread Credit Rate	Decrease	+1:-194	50%	50%	35%	35%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE C 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-A3 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	50%	50%	35%	35%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE E 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-58 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE G 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-D2 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	35%	35%	0%	0%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE J 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-D4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	35%	35%	0%	0%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ONTARIO PEAK CALENDAR-MONTH SWAP FUTURES (NY-OPM - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PALO VERDE DAY-AHEAD OFF-PEAK CALENDAR-MONTH 5 MW FUTURES (NY-OVD - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	40%	40%	0%	0%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PALO VERDE DAY-AHEAD PEAK CALENDAR-MONTH 5 MW FUTURES (NY-PVD - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	50%	50%	0%	0%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AECO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Y1 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	45%	45%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R7 - CME)</b>						
Spread Credit Rate	Increase	+1:-194	40%	40%	50%	50%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-VM - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-S4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	65%	65%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R3 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	65%	65%	35%	35%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E3 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	60%	60%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM COMED ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D9 - CME)</b>						
Spread Credit Rate	Increase	+1:-194	35%	35%	50%	50%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM COMED ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D8 - CME)</b>						
Spread Credit Rate	Increase	+1:-11	40%	40%	50%	50%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-F2 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	50%	50%	30%	30%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-46 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME)</b>						
Spread Credit Rate	Increase	+1:-194	35%	35%	50%	50%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME)</b>						
Spread Credit Rate	Increase	+1:-194	35%	35%	50%	50%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK LMP SWAP FUTURES (NY-UO - CME)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	45%	45%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4P - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	60%	60%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-F5 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	60%	60%	35%	35%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L5 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	40%	40%	30%	30%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	60%	60%	40%	40%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-N9 - CME)</b>						
Spread Credit Rate	Decrease	+1:-194	60%	60%	40%	40%
<b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J4 - CME)</b>						
Spread Credit Rate	Decrease	+1:-11	45%	45%	30%	30%
<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	45%	45%	30%	30%
<b>HOUSTON SHIP CHANNEL BASIS SWAP (PLATTS IFERC) (NYM-NH - CME) vs EL PASO NATURAL GAS CO. PERMIAN BASIN BASIS SWAP ( NYM-PM - CM</b>						
Spread Credit Rate	Decrease	+1:-1	60%	60%	30%	30%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>HOUSTON SHIP CHANNEL BASIS SWAP (PLATTS IFERC) FUTURES (NY-NH - CME) vs PG&amp;E CITYGATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-PC - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>HOUSTON SHIP CHANNEL BASIS SWAP (PLATTS IFERC) FUTURES (NY-NH - CME) vs SAN JUAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-NJ - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	55%	55%
<b>ISO NEW ENGLAND INTERNAL HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U6 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Decrease	+11:-1	55%	55%	30%	30%
<b>KERN RIVER BASIS SWAP (PLATTS IFERC) FUTURES (NY-NV - CME) vs MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	75%	75%
<b>KERN RIVER BASIS SWAP (PLATTS IFERC) FUTURES (NY-NV - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	New	+1:-1			30%	30%
<b>KERN RIVER BASIS SWAP (PLATTS IFERC) FUTURES (NY-NV - CME) vs TEXAS GAS ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-9F - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	20%	20%	0%	0%
<b>MALIN BASIS SWAP (NGI) (NYM-PB - CME) vs SAN JUAN BASIS SWAP (PLATTS IFERC) (NYM-NJ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>MALIN BASIS SWAP (NGI) (NYM-PB - CME) vs SUMAS BASIS SWAP (PLATTS IFERC) (NYM-NK - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	0%	0%
<b>MALIN BASIS SWAP (NGI) (NYM-PB - CME) vs WAHA BASIS SWAP (PLATTS IFERC) (NYM-NW - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	55%	55%	0%	0%
<b>MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME) vs DEMARC BASIS SWAP (PLATTS IFERC) FUTURES (NY-PE - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME) vs NGPL STX NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-T5 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME) vs ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME) vs TETCO ELA BASIS SWAP (PLATTS IFERC) FUTURES (NY-TE - CME)</b>						
Spread Credit Rate	New	+1:-1			35%	35%
<b>MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME) vs TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME)</b>						
Spread Credit Rate	New	+1:-1			35%	35%



## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>MICHCON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NF - CME) vs DAWN NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-DW - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>MICHCON(PLATTS IFERC) FIXED PRICE SWAP FUTURES (NY-MFS - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	-4:+1	65%	65%	85%	85%
<b>MIDWEST ISO CINERGY HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-EM - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	+1:-1	45%	45%	55%	55%
<b>NEPOOL INTERNAL HUB 5 MW OFF-PEAK CALENDAR-MONTH DAY -AHEAD SWAP (NYM-H2 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Decrease	+194:-1	55%	55%	40%	40%
<b>NGPL MID-CON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NL - CME) vs CENTERPOINT NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-PW - CME)</b>						
Spread Credit Rate	Increase	+1:-1	25%	25%	40%	40%
<b>NGPL MID-CON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NL - CME) vs MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	55%	55%	0%	0%
<b>NGPL MID-CON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NL - CME) vs PG&amp;E CITYGATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-PC - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	35%	35%	0%	0%
<b>NGPL MID-CON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NL - CME) vs ROCKIES BASIS SWAP (PLATTS IFERC) FUTURES (NY-NR - CME)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
<b>NGPL MID-CON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NL - CME) vs SOCIAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>NGPL STX NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-T5 - CME) vs SOCIAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>NGPL STX NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-T5 - CME) vs TENNESSEE 800 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-6Z - CME)</b>						
Spread Credit Rate	New	+1:-1			20%	20%
<b>NGPL STX NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-T5 - CME) vs TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	60%	60%
<b>NGPL TEXOK BASIS SWAP (PLATTS IFERC) FUTURES (NY-PD - CME) vs SOUTHERN STAR TX.-OKLA.-KAN. BASIS SWAP (PLATTS IFERC) FUTURES (NY-8Z - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	25%	25%	0%	0%



## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>NORTHERN ILLINOIS HUB PEAK MONTHLY SWAP (NYM-UM - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	45%	45%
<b>NORTHERN NATURAL GAS DEMARCATION BASIS SWAP (PLATT (NYM-PE - CME) vs NATURAL GAS PIPELINE CO. OF AMERICA (NGPL) MID-CON (NYM-NL</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs ANR OK NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-SQ - CME)</b>						
Spread Credit Rate	New	+1:-1			70%	70%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs CIG ROCKIES NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-U8 - CME)</b>						
Spread Credit Rate	New	+1:-1			65%	65%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs COLUMBIA GULF, MAINLINE NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-X2 - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs FLORIDA GAS, ZONE 2 NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-X5 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs MALIN NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-W9 - CME)</b>						
Spread Credit Rate	New	+1:-1			70%	70%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs NGPL STX NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-Q7 - CME)</b>						
Spread Credit Rate	New	+1:-1			70%	70%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs NGPL TEXOK NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-OX - CME)</b>						
Spread Credit Rate	New	+1:-1			70%	70%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs ONEOK ,OKLAHOMA NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-M3 - CME)</b>						
Spread Credit Rate	New	+1:-1			70%	70%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs SAN JUAN PIPE SWAP (NY-XX - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	75%	75%	0%	0%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs SOCIAL CITY-GATE NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-T9 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs SOUTHERN STAR, TX.-OKLA.-KAN. NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-M4 - CME)</b>						
Spread Credit Rate	New	+1:-1			65%	65%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs SUMAS NATURAL GAS SWING SWAP (PLATTS GAS DAILY FUTURES (NY-SU - CME)</b>						
Spread Credit Rate	New	+1:-1			35%	35%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs TENNESSEE 500 LEG NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-T7 - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs TENNESSEE ZONE 0 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-T4 - CME)</b>						
Spread Credit Rate	New	+1:-1			70%	70%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs TENNESSEE, 800 LEG NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-W5 - CME)</b>						
Spread Credit Rate	New	+1:-1			65%	65%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs TETCO STX NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-T2 - CME)</b>						
Spread Credit Rate	New	+1:-1			70%	70%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs TEXAS EASTERN, WLA NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-X8 - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs TEXAS GAS, ZONE 1 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-Y9 - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs TRANSCO ZONE 1 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-X4 - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs TRANSCO ZONE 3 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-T6 - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>NORTHERN ROCKIES PIPE SWAP (NY-XR - CME) vs TRANSCO ZONE 6 PIPE SWAP (NY-XZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	70%	70%	0%	0%
<b>NORTHWEST PIPELINE, ROCKIES BASIS SWAP (PLATTS IFE (NYM-NR - CME) vs KERN RIVER, WYOMING BASIS SWAP (PLATTS IFERC) (NYM-NV - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	60%	60%	0%	0%
<b>ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME) vs SOUTHERN STAR TX.-OKLA.-KAN. BASIS SWAP (PLATTS IFERC) FUTURES (NY-8Z - CME)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	40%	40%
<b>ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME) vs TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>PACIFIC GAS &amp; ELECTRIC (PG&amp;E) CITYGATE BASIS SWAP (NYM-PC - CME) vs MALIN BASIS SWAP (NGI) (NYM-PB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	0%	0%
<b>PACIFIC GAS &amp; ELECTRIC (PG&amp;E) CITYGATE BASIS SWAP (NYM-PC - CME) vs WAHA BASIS SWAP (PLATTS IFERC) (NYM-NW - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	60%	60%	0%	0%
<b>PANHANDLE BASIS SWAP (PLATTS IFERC) (NYM-PH - CME) vs ANR OK BASIS SWAP (PLATTS IFERC) (NYM-NE - CME)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	40%	40%
<b>PANHANDLE BASIS SWAP (PLATTS IFERC) (NYM-PH - CME) vs MALIN BASIS SWAP (NGI) (NYM-PB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	0%	0%
<b>PANHANDLE BASIS SWAP (PLATTS IFERC) (NYM-PH - CME) vs NORTHWEST PIPELINE, ROCKIES BASIS SWAP (PLATTS IFE (NYM-NR - CME)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	40%	40%
<b>PANHANDLE BASIS SWAP (PLATTS IFERC) (NYM-PH - CME) vs ONEOK OKLAHOMA NG BASIS (NYM-8X - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	77%	77%	60%	60%
<b>PANHANDLE BASIS SWAP (PLATTS IFERC) (NYM-PH - CME) vs SOCAL BASIS SWAP (NGI) (NYM-NS - CME)</b>						
Spread Credit Rate	Increase	+1:-1	40%	40%	45%	45%
<b>PANHANDLE BASIS SWAP (PLATTS IFERC) (NYM-PH - CME) vs SOUTH STAR TEXAS OKLAHOMA KANSAS NG BASIS (NYM-8Z - CME)</b>						
Spread Credit Rate	Increase	+1:-1	15%	15%	40%	40%
<b>PANHANDLE PIPE SWAP (NY-XH - CME) vs CHICAGO CITY GATE PIPE SWAP (NY-XO - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	75%	75%
<b>PANHANDLE PIPE SWAP (NY-XH - CME) vs HOUSTON SHIP CHANNEL PIPE SWAP (NY-XJ - CME)</b>						
Spread Credit Rate	Increase	+1:-1	70%	70%	85%	85%
<b>PANHANDLE PIPE SWAP (NY-XH - CME) vs NORTHERN ROCKIES PIPE SWAP (NY-XR - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	65%	65%	0%	0%
<b>PANHANDLE PIPE SWAP (NY-XH - CME) vs PGE CITYGATE PIPE SWAP (NY-XQ - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	75%	75%
<b>PANHANDLE PIPE SWAP (NY-XH - CME) vs SOCAL PIPE SWAP (NY-XN - CME)</b>						
Spread Credit Rate	Increase	+1:-1	65%	65%	80%	80%
<b>PANHANDLE PIPE SWAP (NY-XH - CME) vs TRANSCO ZONE 6 PIPE SWAP (NY-XZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>PERMIAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PM - CME) vs CENTERPOINT NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-PW - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	55%	55%	30%	30%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>PERMIAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PM - CME) vs ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	30%	30%
<b>PG&amp;E CITYGATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-PC - CME) vs CENTERPOINT NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-PW - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	25%	25%	0%	0%
<b>PG&amp;E CITYGATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-PC - CME) vs DAWN NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-DW - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>PG&amp;E CITYGATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-PC - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	0%	0%
<b>PGE CITYGATE PIPE SWAP (NY-XQ - CME) vs NORTHERN ROCKIES PIPE SWAP (NY-XR - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	70%	70%	0%	0%
<b>PGE CITYGATE PIPE SWAP (NY-XQ - CME) vs SAN JUAN PIPE SWAP (NY-XX - CME)</b>						
Spread Credit Rate	Increase	+1:-1	60%	60%	85%	85%
<b>PGE CITYGATE PIPE SWAP (NY-XQ - CME) vs TRANSCO ZONE 6 PIPE SWAP (NY-XZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	0%	0%
<b>PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	+194:-1	35%	35%	50%	50%
<b>PJM NORTHERN ILLINOIS HUB OFF-PEAK LMP SWAP FUTURES (NY-UO - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	45%	45%
<b>PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-UM - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	45%	45%
<b>PJM OFF-PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JP - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Increase	+1:-1	25%	25%	35%	35%
<b>PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-W6 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Decrease	-194:+1	60%	60%	30%	30%
<b>PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-E4 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Decrease	+194:-1	60%	60%	40%	40%
<b>PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP (NYM-N9 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)</b>						
Spread Credit Rate	Decrease	+194:-1	60%	60%	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>PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J4 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)</b>						
Spread Credit Rate	Decrease	-11:+1	45%	45%	30%	30%
<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	45%	45%	30%	30%
<b>ROCKIES BASIS SWAP (PLATTS IFERC) FUTURES (NY-NR - CME) vs ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	40%	40%
<b>SAN JUAN BASIS SWAP (PLATTS IFERC) (NYM-NJ - CME) vs NORTHWEST PIPELINE, ROCKIES BASIS SWAP (PLATTS IFE (NYM-NR - CME)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	60%	60%
<b>SAN JUAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-NJ - CME) vs CENTERPOINT NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-PW - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	30%	30%
<b>SAN JUAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-NJ - CME) vs NGPL MID-CON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NL - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	60%	60%	50%	50%
<b>SAN JUAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-NJ - CME) vs NGPL TEXOK BASIS SWAP (PLATTS IFERC) FUTURES (NY-PD - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>SAN JUAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-NJ - CME) vs ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	30%	30%
<b>SAN JUAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-NJ - CME) vs PG&amp;E CITYGATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-PC - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>SAN JUAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-NJ - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	60%	60%	20%	20%
<b>SAN JUAN PIPE SWAP (NY-XX - CME) vs TRANSCO ZONE 6 PIPE SWAP (NY-XZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>SOCAL BASIS SWAP (NGI) (NYM-NS - CME) vs NORTHWEST PIPELINE, ROCKIES BASIS SWAP (PLATTS IFE (NYM-NR - CME)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	50%	50%
<b>SOCAL BASIS SWAP (PLATTS IFERC) FUTURES (NY-NS - CME) vs CENTERPOINT NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-PW - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	0%	0%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>SOCAL BASIS SWAP (PLATTS IFERC) FUTURES (NY-NS - CME) vs MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	70%	70%	0%	0%
<b>SOCAL BASIS SWAP (PLATTS IFERC) FUTURES (NY-NS - CME) vs NGPL TEXOK BASIS SWAP (PLATTS IFERC) FUTURES (NY-PD - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	25%	25%	0%	0%
<b>SOCAL BASIS SWAP (PLATTS IFERC) FUTURES (NY-NS - CME) vs PG&amp;E CITYGATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-PC - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	60%	60%	0%	0%
<b>SOCAL BASIS SWAP (PLATTS IFERC) FUTURES (NY-NS - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	85%	85%	20%	20%
<b>SOCAL PIPE SWAP (NY-XN - CME) vs NORTHERN ROCKIES PIPE SWAP (NY-XR - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	80%	80%	0%	0%
<b>SOCAL PIPE SWAP (NY-XN - CME) vs TRANSCO ZONE 6 PIPE SWAP (NY-XZ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	55%	55%	0%	0%
<b>SUMAS BASIS SWAP (PLATTS IFERC) (NYM-NK - CME) vs NORTHWEST PIPELINE, ROCKIES BASIS SWAP (PLATTS IFE (NYM-NR - CME)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
<b>SUMAS BASIS SWAP (PLATTS IFERC) (NYM-NK - CME) vs SAN JUAN BASIS SWAP (PLATTS IFERC) (NYM-NJ - CME)</b>						
Spread Credit Rate	Increase	+1:-1	35%	35%	40%	40%
<b>SUMAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-NK - CME) vs PG&amp;E CITYGATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-PC - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>TENNESSEE 500 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-NM - CME) vs NGPL STX NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-T5 - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>TENNESSEE 500 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-NM - CME) vs TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>TENNESSEE 500 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-NM - CME) vs TETCO ELA BASIS SWAP (PLATTS IFERC) FUTURES (NY-TE - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>TENNESSEE 500 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-NM - CME) vs TEXAS GAS ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-9F - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	0%	0%
<b>TENNESSEE 500 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-NM - CME) vs TRANSCO ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8E - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	0%	0%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME) vs DEMARC BASIS SWAP (PLATTS IFERC) FUTURES (NY-PE - CME)</b>						
Spread Credit Rate	New	+1:-1			45%	45%
<b>TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME) vs MALIN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PB - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME) vs NGPL STX NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-T5 - CME)</b>						
Spread Credit Rate	Increase	+1:-1	60%	60%	80%	80%
<b>TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME) vs TETCO ELA BASIS SWAP (PLATTS IFERC) FUTURES (NY-TE - CME)</b>						
Spread Credit Rate	Increase	+1:-1	45%	45%	70%	70%
<b>TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME) vs TETCO STX BASIS SWAP (PLATTS IFERC) FUTURES (NY-TX - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	30%	30%
<b>TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME) vs TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME)</b>						
Spread Credit Rate	Increase	+1:-1	45%	45%	70%	70%
<b>TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME) vs TRANSCO ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8E - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>TENNESSEE ZONE 0 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NQ - CME) vs TRUNKLINE, LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NU - CME)</b>						
Spread Credit Rate	Increase	+1:-1	20%	20%	65%	65%
<b>TETCO ELA BASIS SWAP (PLATTS IFERC) FUTURES (NY-TE - CME) vs FLORIDA ZONE 2 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8A - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>TETCO ELA BASIS SWAP (PLATTS IFERC) FUTURES (NY-TE - CME) vs NGPL STX NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-T5 - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	70%	70%
<b>TETCO ELA BASIS SWAP (PLATTS IFERC) FUTURES (NY-TE - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	New	+1:-1			65%	65%
<b>TETCO ELA BASIS SWAP (PLATTS IFERC) FUTURES (NY-TE - CME) vs TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME)</b>						
Spread Credit Rate	New	+1:-1			65%	65%



## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Inter-commodity Spread Rates</b>						
<b>TETCO ELA BASIS SWAP (PLATTS IFERC) FUTURES (NY-TE - CME) vs TEXAS GAS ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-9F - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	0%	0%
<b>TETCO ELA BASIS SWAP (PLATTS IFERC) FUTURES (NY-TE - CME) vs TRANSCO ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8E - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	0%	0%
<b>TETCO SOUTH TEXAS BASIS SWAP (PLATTS IFERC) (NYM-TX - CME) vs HOUSTON SHIP CHANNEL BASIS SWAP (PLATTS IFERC) (NYM-NH - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	25%	25%	0%	0%
<b>TETCO STX BASIS SWAP (PLATTS IFERC) FUTURES (NY-TX - CME) vs TENNESSEE 800 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-6Z - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>TETCO STX BASIS SWAP (PLATTS IFERC) FUTURES (NY-TX - CME) vs TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME)</b>						
Spread Credit Rate	New	+1:-1			20%	20%
<b>TETCO STX BASIS SWAP (PLATTS IFERC) FUTURES (NY-TX - CME) vs TEXAS GAS ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-9F - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>TEXAS EASTERN ZONE M-3 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NX - CME) vs COLUMBIA GAS TCO BASIS SWAP (PLATTS IFERC) FUTURES (NY-TC - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	0%	0%
<b>TEXAS EASTERN ZONE M-3 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NX - CME) vs VENTURA BASIS SWAP (PLATTS IFERC) FUTURES (NY-PF - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	25%	25%	0%	0%
<b>TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME) vs FLORIDA ZONE 2 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8A - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	New	+1:-1			60%	60%
<b>TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME) vs TEXAS GAS ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-9F - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	65%	65%	0%	0%
<b>TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME) vs TRANSCO ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8E - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>TRANSCO ZONE 3 BASIS SWAP (PLATTS IFERC) FUTURES (NY-CZ - CME) vs ANR LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-ND - CME)</b>						
Spread Credit Rate	New	+1:-1			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>TRANSCO ZONE 3 BASIS SWAP (PLATTS IFERC) FUTURES (NY-CZ - CME) vs TENNESSEE 800 LEG BASIS SWAP (PLATTS IFERC) FUTURES (NY-6Z - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 3 BASIS SWAP (PLATTS IFERC) FUTURES (NY-CZ - CME) vs TETCO STX BASIS SWAP (PLATTS IFERC) FUTURES (NY-TX - CME)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	40%	40%
<b>TRANSCO ZONE 3 BASIS SWAP (PLATTS IFERC) FUTURES (NY-CZ - CME) vs TEXAS EASTERN ZONE M-3 BASIS SWAP (PLATTS IFERC) FUTURES (NY-NX - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs ANR OK NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-SQ - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs ANR, LOUISIANA NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-K6 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs CIG ROCKIES NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-U8 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs COLUMBIA GULF, LOUISIANA NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-J6 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs COLUMBIA GULF, MAINLINE NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-X2 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs DEMARC NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-DT - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs FLORIDA GAS, ZONE 2 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-X5 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs FLORIDA GAS, ZONE 3 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-J8 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs MALIN NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-W9 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs NGPL STX NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-Q7 - CME)</b>						
Spread Credit Rate	New	+1:-1			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>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs NGPL TEXOK NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-OX - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs ONEOK ,OKLAHOMA NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-M3 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs SOUTHERN NATURAL, LA. NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-K8 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs SOUTHERN STAR, TX.-OKLA.-KAN. NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-M4 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs SUMAS NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-SU - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TCO NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-A1 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TENNESSEE 500 LEG NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-T7 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TENNESSEE ZONE 0 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-T4 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TENNESSEE, 800 LEG NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-W5 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TETCO STX NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-T2 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TEXAS EASTERN, WLA NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-X8 - CME)</b>						
Spread Credit Rate	New	+1:-1			35%	35%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TEXAS GAS, ZONE 1 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-Y9 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TRANSCO ZONE 1 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-X4 - CME)</b>						
Spread Credit Rate	New	+1:-1			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>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TRANSCO ZONE 3 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-T6 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TRANSCO ZONE 4 NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-J3 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRANSCO ZONE 6 NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XZ - CME) vs TRUNKLINE ELA NATURAL GAS SWING SWAP (PLATTS GAS DAILY) FUTURES (NY-K7 - CME)</b>						
Spread Credit Rate	New	+1:-1			40%	40%
<b>TRUNKLINE, LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NU - CME) vs DEMARC BASIS SWAP (PLATTS IFERC) FUTURES (NY-PE - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>TRUNKLINE, LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NU - CME) vs FLORIDA ZONE 2 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8A - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
<b>TRUNKLINE, LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NU - CME) vs NGPL STX NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-T5 - CME)</b>						
Spread Credit Rate	Increase	+1:-1	50%	50%	65%	65%
<b>TRUNKLINE, LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NU - CME) vs SOCAL CITY-GATE BASIS SWAP (PLATTS IFERC) FUTURES (NY-9A - CME)</b>						
Spread Credit Rate	New	+1:-1			50%	50%
<b>TRUNKLINE, LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NU - CME) vs TETCO STX BASIS SWAP (PLATTS IFERC) FUTURES (NY-TX - CME)</b>						
Spread Credit Rate	New	+1:-1			30%	30%
<b>TRUNKLINE, LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NU - CME) vs TEXAS EASTERN, WLA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8B - CME)</b>						
Spread Credit Rate	Increase	+1:-1	45%	45%	65%	65%
<b>TRUNKLINE, LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NU - CME) vs TEXAS GAS ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-9F - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>TRUNKLINE, LOUISIANA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NU - CME) vs TRANSCO ZONE 1 BASIS SWAP (PLATTS IFERC) FUTURES (NY-8E - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	50%	50%	0%	0%
<b>VENTURA BASIS SWAP (PLATTS IFERC) FUTURES (NY-PF - CME) vs CHICAGO NATURAL GAS (PLATTS IFERC) FIXED PRICE FUTURES (NY-XO - CME)</b>						
Spread Credit Rate	New	+1:-1			30%	30%
<b>WAHA BASIS SWAP (PLATTS IFERC) (NYM-NW - CME) vs NORTHWEST PIPELINE, ROCKIES BASIS SWAP (PLATTS IFE (NYM-NR - CME)</b>						
Spread Credit Rate	Increase	+1:-1	0%	0%	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>WAHA BASIS SWAP (PLATTS IFERC) (NYM-NW - CME) vs SUMAS BASIS SWAP (PLATTS IFERC) (NYM-NK - CME)</b>						
Spread Credit Rate	Increase	+1:-1	30%	30%	40%	40%
<b>WAHA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NW - CME) vs NGPL TEXOK BASIS SWAP (PLATTS IFERC) FUTURES (NY-PD - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	45%	45%	0%	0%
<b>WAHA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NW - CME) vs ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	40%	40%	20%	20%
<b>REFINED PRODUCTS - Inter-commodity Spread Rates</b>						
<b>DUBAI CRUDE OIL (PLATTS) CALENDAR SWAP FUTURES (NY-DC - CME) vs SINGAPORE MOGAS 95 UNLEADED (PLATTS) SWAP FUTURES (NY-V0 - CME)</b>						
Spread Credit Rate	Decrease	+1:-1	80%	80%	70%	70%

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	<u>Tier Description</u>	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
<b>Short Option Minimum (SOM) Rate</b>						
<b>CRUDE OIL SPREADS - Short Option Minimum (SOM) Rate</b>						
<b>WTI CRUDE OIL 1 MONTH CSO (7A, A2) - SOM</b>						
Clearing Member Rate		Increase	25.300	23.000	27.500	25.000
<b>METALS - Short Option Minimum (SOM) Rate</b>						
<b>ZINC FUTURES (ZNC) - SOM</b>						
Clearing Member Rate		New			24.200	22.000

# SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

### METALS - Volatility Scan (volScan) Rate

#### ZINC FUTURES (ZNC) - volScan

Clearing Member Rate	Mths 1-4	New				0.070
Clearing Member Rate	Mths 5-6	New				0.040
Clearing Member Rate	Mths 7-12	New				0.030
Clearing Member Rate	Mths 13+	New				0.020